UNITED STATES TARIFF COMMISSION

SUMMARIES OF TRADE AND TARIFF INFORMATION

Prepared in Terms of the Tariff Schedules of the United States (TSUS)

Schedule 1

Animal and Vegetable Products
(In 14 volumes)

VOLUME 8

Edible Fruit

TC Publication 289
Washington, D. C.
1969

SUMMARIES OF TRADE AND TARIFF INFORMATION
BY SCHEDULES

Schedule 1 - Animal and Vegetable Products
(In 14 volumes)
Schedule 2 - Wood and Paper; Printed Matter
(In 5 volumes)
Schedule 3 - Textile Fibers and Textile Products
(In 6 volumes)
Schedule 4 - Chemicals and Related Products
(In 12 volumes)
Schedule 5 - Nonmetallic Minerals and Products
(In 5 volumes)
Schedule 6 - Metals and Metal Products
(In 11 volumes)
Schedule 7 - Specified Products; Miscellaneous and Nonenumerated Products
(In 8 volumes)
Schedule 8 - Special Classification Provisions
(In 1 volume)

Volumes in Schedule 1

1 - Animals and Meats
2 - Fish, Fresh, Chilled, Frozen, or Cured
3 - Fish Products, Shellfish, and Shellfish Products
4 - Dairy Products and Birds' Eggs
5 - Live Plants and Seeds
6 - Cereal Grains, Malts, Starches, and Animal Feeds
7 - Vegetables and Edible Nuts
8 - Edible Fruits and Fruit Products
9 - Sugar, Cocoa, Confectionery, Coffee, Tea, and Spices
10 - Beverages
11 - Tobacco and Tobacco Products
12 - Animal and Vegetable Oils
13 - Hides, Skins, Leather, Feathers, and Miscellaneous Articles of Animal Origin
14 - Edible Preparations, Natural Resins, and Miscellaneous Articles of Vegetable Origin

FOREWORD

In an address delivered in Boston on May 18, 1917, Frank W. Taussig, distinguished first chairman of the Tariff Commission, delineated the responsibility of the newly established Commission to operate as a source of objective, factual information on tariffs and trade. He stated that the Commission was already preparing a catalog of tariff information--

> designed to have on hand, in compact and simple form, all available data on the growth, development and location of industries affected by the tariff, on the extent of domestic production, on the extent of imports, on the conditions of competition between domestic and foreign products.

The first such report was issued in 1920. Subsequently three series of summaries of tariff information on commodities were published--in 1921, 1929, and 1948-50. The current series, entitled Summaries of Trade and Tariff Information, presents the information in terms of the tariff items provided for in the eight tariff schedules of the Tariff Schedules of the United States (abbreviated to TSUS in these volumes), which on August 31, 1963, replaced the 16 schedules of the Tariff Act of 1930.

Through its professional staff of commodity specialists, economists, lawyers, statisticians, and accountants, the Commission follows the movement of thousands of articles in international commodity trade, and during the years of its existence, has built up a reservoir of knowledge and understanding, not only with respect to imports but also regarding products and their uses, techniques of manufacturing and processing, commercial practices, and markets. Accordingly, the Commission believes that, when completed, the current series of summaries will be the most comprehensive publication of its kind and will present benchmark information that will serve many interests. This project, although encyclopedic, attempts to conform with Chairman Taussig's admonition to be "exhaustive in inquiry, and at the same time brief and discriminating in statement."

This series is being published in 62 volumes of summaries, each volume to be issued as soon as completed. Although the order of publication may not follow the numerical sequence of the items in the TSUS, all items are to be covered. As far as practicable, each volume reflects the most recent developments affecting U.S. foreign trade in the commodities included.

SUMMARIES OF TRADE AND TARIFF INFORMATION

SCHEDULE 1

Volume 8

C O N T E N T S

Numerical List of TSUS Items in This Volume

Numerical List of TSUS Items in This Volume

INTRODUCTION

This volume, identified as volume 1:8, covers fresh and processed fruit including melons and glace fruit and vegetable substances classifiable under subparts 9B, 9C, or 9D of schedule 1 of the Tariff Schedules of the United States (TSUS). Subpart 9B of schedule 1 covers fresh and most prepared or preserved fruit; subpart 9C covers fruit flours, peels, pastes, pulps, jellies, jams, marmalades, and butters; and subpart 9D covers glace nuts, fruit, and other vegetable substances. Fruit juices are dealt with in volume 10 of the schedule 1 summaries. The summaries in this volume appear in the numerical order of the TSUS item numbers. Whenever a summary contains more than one TSUS item, the first number of the summary controls the sequence of that summary in the volume.

Appendix A to this volume reproduces segments of the Tariff Schedules of the United States Annotated (TSUSA-1969) relating to the items covered by this volume. It includes the general headnotes to the TSUS, a list of products covered by schedule 1, the headnote to subpart 9B, and the individual product descriptions. The shaded portions of Appendix A denote those provisions not applicable to this volume. Appendix A also shows the rates of duty applicable to the individual TSUS items, including the staged annual rate modifications that resulted from concessions granted by the United States in the sixth (Kennedy) round of trade negotiations under the General Agreement on Tariffs and Trade. Historical notes in the appendix document the changes in the text of the tariff schedules after these schedules went into effect on August 31, 1963.

Appendix B to this volume provides data on the value of U.S. imports in 1967 by TSUS items included in the individual summaries of this volume. Data also show the percentage changes in imports from 1966 and the three principal countries which supplied imports in 1967.

Appendix C to this volume provides data on the value of U.S. imports in 1968 by TSUS items included in the individual summaries of this volume and also shows the percentage changes in imports from 1967 and the three principal countries which supplied imports in 1968.

Subpart 9B, which specifically mentions more than 40 fruit, includes about 20 fruit of major importance in domestic trade. Of the latter, imports supply virtually all of the bananas and about half of the olives consumed domestically. Domestic production supplies the bulk of the others. Subparts 9C and 9D contain only a few items that are traded in large quantities in the United States. These are supplied principally by domestic production, except for fig paste and glace cherries, substantial quantities of which are supplied by imports.

U.S. Department of Agriculture statistics indicate that the farm value of the 78 crops, which account for nearly all domestic crop production, was $22.1 billion in 1967. Domestic fruit crops accounted for $1.7 billion of this total. In addition, considerable value is added by the domestic fruit processing industry which utilizes well over half of all fruit production. Oranges are the largest domestic fruit crop followed by grapes, apples, grapefruit, and peaches. These crops together account for about four-fifths of the total domestic output of fruit (including melons).

Imports of the items included in this volume had a total value of $306 million in 1967. Bananas were by far the leading item accounting for 57 percent of the total followed by pineapples, oranges, strawberries, olives, apples, cantaloupes, and blueberries. In 1967 these eight fruit, imported in their various fresh and processed forms, accounted for 83 percent of the total value of imports covered in this volume.

In 1967 exports of the items included herein had a total value of about $265 million. The leading exports were oranges, grapes, raisins, lemons, prunes, canned fruit cocktail, apples, canned peaches, grapefruit, and canned pineapple. Exports of these 10 items were valued at $222 million or 84 percent of the total. Two special efforts to encourage fruit exports are reflected in the Export Apple and Pear Act (7 U.S.C. 581) and the Export Grape and Plum Act (7 U.S.C. 591). Grading, packing, and labeling requirements pursuant to these acts are intended to eliminate poor quality merchandise from export shipments.

None of the domestic fruit crops receives regular Federal Government price support; however, Government purchases and diversion payments may be made from time to time to bolster prices of fruit in temporary surplus. Such payments are made pursuant to section 32 of the Act of August 24, 1935, as amended (7 U.S.C. 612c).

Many fruit crops sold fresh are marketed under Federal or State marketing orders that regulate quality, conduct promotional programs or, in a few cases, regulate the volume that can be shipped. Imports of a number of the fruit so regulated are limited to those meeting quality requirements comparable to domestic shipments. The Federal programs are operated under the authority of the Agricultural Marketing Agreement Act of 1937, as amended (7 U.S.C. 601).

Fresh fruit and vegetable distribution practices have been regulated since 1927 by the Produce Agency Act (7 U.S.C. 491) and since 1930 by the Perishable Agricultural Commodities Act (7 U.S.C. 499a). These laws, administered by the U.S. Department of Agriculture, deal with contracts, shipping practices, labeling, and other such aspects of marketing. They are intended to facilitate trade in perishable merchandise handled by a large number of individual traders by imposing some uniformity on their business practices.

Fruit from certain parts of the world are denied entry into the United States and others are granted entry only after fumigation or other treatment pursuant to the Plant Quarantine Act of 1912 (7 U.S.C. 151) and related legislation. Such requirements are intended to preclude the introduction of plant pests and diseases not now found in the United States.

Commodity	TSUS item
Apples:	
Fresh	146.10
Prepared or preserved (except dried)	146.14

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969).

U.S. trade position

The United States produces about one-fifth of the world's apples. In recent years U.S. exports of fresh apples have averaged $19 million annually and accounted for about 6 percent of domestic fresh apple sales. Exports and imports of prepared or preserved apples have been negligible. Imports of fresh apples, which come primarily from Canada, have been equal to about one-fourth of exports in recent years.

Description and uses

Apples are grown in temperate climates in both the Northern and Southern Hemispheres. In the United States apples are used chiefly as a fresh fruit although substantial quantities are processed. The principal processed product is canned applesauce. Other important processed products include canned, frozen and dried apple slices, apple juice, sweet apple cider, and apple cider vinegar. Dried apples, item 146.12, are discussed in another summary in this volume. Apple juice (item 165.15 (pt.)) and apple cider (item 167.15 (pt.)) are discussed in summaries in volume 10 of these summaries. Apple cider vinegar (item 182.58 (pt.)) is discussed in volume 14 of these summaries.

Apple varieties differ in their individual characteristics and hence in their uses. In the United States the three generally accepted classes of apple varieties are dessert apples, those best suited for eating out-of-hand; cooking apples, those best suited for applesauce, pies, and other apple products; and dual-purpose apples, those suitable both for eating fresh and for cooking. In Europe some apple varieties are used primarily for producing apple cider, a fermented drink.

U.S. tariff treatment

The column 1 rates of duty applicable to imports (see general headnote 3 in the TSUSA-1969) are as follows:

TSUS item	Commodity	Rate prior to Jan. 1, 1968	U.S. concessions granted in 1964-67 trade conference (Kennedy Round)	
			Second stage, effective Jan. 1, 1969	Final stage, effective Jan. 1, 1972
	Apples:			
146.10	Fresh	0.25¢ per lb.	0.15¢ per lb.	Free
146.14	Prepared or preserved (except dried).	1.07¢ per lb.	0.85¢ per lb.	0.5¢ per lb.

The tabulation above shows the column 1 rates of duty in effect prior to January 1, 1968, and modifications therein as a result of concessions granted by the United States in the sixth round of trade negotiations under the General Agreement on Tariffs and Trade. Only the second (that in effect during 1969) and final (fifth) stages of the annual modifications are shown (see the TSUSA-1969 for the other stages). During the period from August 31, 1963, when the TSUS became effective, to December 31, 1967, the prior rates shown above did not change.

The average ad valorem equivalent of the specific rates of duty in effect on December 31, 1967, based on dutiable imports during 1967, were as follows:

TSUS item	Percent
146.10	3.1
146.14	9.9

U.S. consumption

The average annual U.S. consumption of apples increased from 4,990 million pounds during the early 1950's to 5,650 million pounds during 1963-67. The bulk of such consumption was accounted for by fresh apples, which averaged 3,170 million pounds or about 56 percent of the total in 1963-67 (table 1). During the early 1950's annual fresh apple consumption averaged 3,275 million pounds or about 66

percent of the total. The rest of the apples consumed have been in processed forms. During 1963-67 about 20 percent of the apples consumed were canned, 4 percent were frozen, 3 percent were dried, and 17 percent were in other processed forms such as juice, sweet cider, and wine.

While the annual U.S. consumption of apples has increased since the early 1950's, the per capita consumption has declined reflecting a substantial decrease in the per capita consumption of fresh apples that has more than offset a modest increase in the per capita consumption of processed apples. The decline in the per capita consumption of fresh apples continues a long-term trend.

U.S. producers

The U.S. Census of Agriculture reported that the number of farms on which apples were produced declined from 185,000 in 1959 to 112,000 in 1964; however, the number of farms having 1,000 or more apple trees of bearing age increased from 3,100 in 1959 to 3,600 in 1964. The sizable reduction in the number of smaller farms reflects, in part, the increase in capitalization cost required to operate economically. Apple producers are located in nearly every State but 34 States make up what is reported as the U.S. commercial crop and 6 of these States--Washington, New York, Michigan, California, Virginia, and Pennsylvania--account for nearly three-fourths of the total production.

U.S. production

U.S. apple production increased about 15 percent from 5,020 million pounds annually during the 1950-54 period to 5,800 million pounds annually during the 1963-67 period, whereas annual sales of fresh apples averaged 3,320 million pounds during 1963-67 (table 2)--about the same as during the early 1950's. As a result the utilization of apples for purposes other than fresh sales increased about 45 percent from 1,720 million pounds annually during the early 1950's to 2,480 million pounds annually during 1963-67. The annual production of canned and frozen apples and applesauce during 1963-67 averaged 848 million pounds, processed weight (table 3).

The following tabulation shows the average annual production of apples, by varieties, during 1955-57 and 1965-67 and the increase or decrease in such production:

Use classification and variety	Average annual production		Increase (or decrease) from 1955-57 to 1965-67
	1955-57	1965-67	
	Million pounds	Million pounds	Percent
Dessert:			
Delicious	1,142	1,566	37
McIntosh	648	703	8
Jonathan	366	392	7
Cortland	145	153	6
Dual purpose:			
Golden Delicious	213	600	182
Rome Beauty	354	449	27
Winesap	480	285	(41)
Stayman	254	244	(4)
Cooking (or processing):			
York Imperial	275	256	(7)
Yellow Newton	201	181	(10)
Rhode Island Greening	119	145	22
Northern Spy	114	144	26
All other varieties	918	654	(29)
Total or average	5,229	5,772	11

Source: Compiled from official statistics of the U.S. Department of Agriculture.

As shown above the most rapid growths in average annual production have been achieved by the Delicious and Golden Delicious apple varieties. Both of these varieties are widely accepted in markets throughout the United States and are receiving increased acceptance in world markets.

U.S. apple production is concentrated in a number of geographic areas, the principal ones being the Wenatchee-Yakima areas of Washington; the Appalachian region of Pennsylvania, West Virginia and Virginia; the lake plains areas of New York and Michigan; and Northern California. Production in Washington is largely for fresh market use and consists almost entirely of the Delicious, Winesap, and Golden Delicious varieties. The principal processing areas for canned apples and

applesauce are in the Appalachian region and in New York. Increased plantings in Washington, largely of dwarf trees, have accounted for most of the increased U.S. production in recent years. The use of dwarf trees usually results in greater yields per acre.

U.S. exports

Annual U.S. exports of fresh apples increased about 50 percent from an average of 137 million pounds, valued at $11 million during the late 1950's to 208 million pounds, valued at $19 million, during 1963-67. In recent years, however, such exports have been only about one-third of the volume exported during the early 1930's. In recent years about 6 percent of the domestic sales of fresh apples have been exported. Although exports have gone to more than 50 countries, the chief export markets have been the United Kingdom and Canada. Annual exports to Canada have averaged about 40 million pounds over the past decade, while annual exports to the United Kingdom have increased from an average of 30 million pounds during the late 1950's to about 60 million pounds during 1963-67. Annual exports to the Scandinavian countries of Finland, Norway, and Sweden increased from an average of 12 million pounds in the late 1950's to 36 million pounds in 1963-67. Under the Export Apple and Pear Act, administered by the U.S. Department of Agriculture, fresh apples must meet certain established quality requirements prior to exportation.

Exports of canned apples and applesauce averaged about 3 million pounds annually during 1960-64; this statistical series was discontinued after 1964.

U.S. imports

U.S. imports consist largely of fresh apples that supplement domestic supplies. During 1963-67, imports of fresh apples averaged 57 million pounds annually (table 1). Canada supplied more than 90 percent of the imports entered during that period and most of the remainder came from Southern Hemisphere countries, principally New Zealand.

Imports of prepared or preserved apples (except dried) averaged about 435,000 pounds annually during 1963-67. These imports were nearly all from Japan.

World production and trade

Apples are produced in virtually every country that has a temperate climate. The volume of international trade depends largely on the

size of the apple crops harvested in the apple importing countries of Europe. World production of apples in 1965, excluding Communist countries, is estimated at about 750 million bushels (36 billion pounds) of which about 10 percent entered world trade (table 4). In 1965 U.S. production was 18 percent of the estimated world production and U.S. exports were 7 percent of the reported world exports. In recent years Italy has been the world's largest exporter of apples. In France, production is increasing and exports and imports of table apples each amounted to about 5 million bushels in 1965, the same level as total U.S. exports. West Germany and the United Kingdom are the largest importers of apples, although each of them has significant domestic production. The major apple exporting countries in the Southern Hemisphere--Argentina, Australia, the Republic of South Africa, New Zealand, and Chile--each export a large portion of their annual production and account for about one-third of world trade. In 1965 these countries exported 50 percent of their aggregate production of 52 million bushels, mostly to Europe.

Table 1.--Apples, fresh: U.S. fresh sales, imports for consumption, exports of domestic merchandise, and apparent consumption, 1963-67

Year	U.S. fresh sales	Imports	Exports	Apparent consumption
	Quantity (million pounds)			
1963	3,406	83	147	3,342
1964	3,529	58	216	3,371
1965	3,336	34	252	3,118
1966	3,178	32	246	2,964
1967	3,135	79	179	3,036
	Value (1,000 dollars)			
1963	175,750	5,996	13,690	1/
1964	188,802	4,248	19,084	1/
1965	195,823	3,077	22,523	1/
1966	191,951	2,710	23,317	1/
1967	238,260	6,419	17,931	1/

1/ Not available.

Source: U.S. fresh sales compiled from official statistics of the U.S. Department of Agriculture; imports and exports compiled from official statistics of the U.S. Department of Commerce.

Note.--The ratio of imports to apparent consumption ranged between 1 percent and 2 percent for each of the years shown above.

Table 2.--Apples: U.S. commercial production and utilization, 1963-67

Year	Production 1/	Utilization			
		Fresh sales	Canned and frozen	Dried	Other 2/
	Quantity (million pounds, fresh weight)				
1963	5,720	3,406	1,318	172	824
1964	6,240	3,529	1,509	142	1,060
1965	5,993	3,336	1,527	184	946
1966	5,646	3,178	1,250	254	964
1967	5,395	3,135	1,364	160	736
	Value (1,000 dollars)				
1963	233,031	175,750	36,904	3,156	15,203
1964	241,067	188,802	32,746	2,059	14,310
1965	260,511	195,823	41,840	4,848	14,001
1966	252,080	191,951	36,000	5,867	16,538
1967	306,093	238,260	48,013	4,144	14,969

1/ Commercial production utilized as reported for 34 States. Excludes apples not reported as commercial production and small amounts of the commercial crop not utilized.

2/ Primarily crushed for cider, juice, wine, and vinegar, but also includes farm home use and small quantities of canned, dried, or frozen apples from some States.

Source: Compiled from official statistics of the U.S. Department of Agriculture.

Table 3.--Apples and applesauce, canned and frozen: U.S. production, by product type, 1963-67

(Millions of pounds, processed weight)

Year	Canned 1/		Frozen	Total 2/
	Apples	Applesauce		
1963	146	566	75	787
1964	141	666	87	894
1965	158	694	93	945
1966	125	562	94	781
1967	132	604	98	834

1/ Reported canned production was converted to pounds at the rate of 39 pounds per case of canned apples, and 43.5 pounds per case of canned applesauce (cases of 24, size 2-1/2 cans).

2/ Equivalent to apparent consumption. During 1963-67, annual imports of prepared or preserved apples (except dried) averaged 0.4 million pounds, valued at $44,000. During 1960-64, annual exports averaged 3.1 million pounds, valued at $400,000; since 1964 exports have not been separately reported.

Source: Compiled from official statistics of the National Canners Association and the National Association of Frozen Food Packers.

Table 4.--Apples, fresh: Production and trade in specified countries, 1965

Region and country	Production	Exports		Imports
		Quantity	Ratio of exports to production	
	1,000 bushels	1,000 bushels	Percent	1,000 bushels
North America:				
United States	136,050	5,482	4	747
Canada	22,292	2,871	13	1,327
Other	5,727	-	-	96
Europe, EEC:				
France:				
Table use	48,685	5,113	11	5,324
Cider use 1/	116,798	4,660	4	-
Italy	100,346	21,432	21	50
West Germany	54,380	40	-	30,638
Netherlands	16,534	4,199	25	960
Belgium and Luxembourg	8,038	1,435	18	2,353
Europe, other:				
United Kingdom	26,945	-	-	11,094
Scandinavia 2/	14,716	525	4	5,067
Spain and Greece	28,299	3/	-	3/
Other 4/	29,757	411	1	6,378
Southern Hemisphere:				
Argentina	19,014	11,487	60	-
Australia	16,703	7,263	44	-
Republic of South Africa	9,300	3,892	42	-
New Zealand	4,704	1,944	41	-
Chile	2,618	922	35	-
Other:				
Japan	52,910	940	2	-
Turkey	16,626	-	-	-
Lebanon	5,695	3,667	64	11
Other	3/	513	-	7,549
Total or average	736,137	76,796	10	71,594

1/ Used for producing a fermented drink.
2/ Production for Norway, Sweden, and Denmark; exports and imports for Norway, Sweden, Denmark, and Finland.
3/ Not reported.
4/ Production and trade of Austria, Switzerland, and Yugoslavia.

Source: Compiled from official statistics of the U.S. Department of Agriculture.

March 1969
1:8

Commodity	TSUS item
Dried apples	146.12
Dried apricots	146.22
Dried peaches	148.74
Dried pears	148.83
Mixed dried fruit	150.00(pt.), -.01(pt.)

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969).

U.S. trade position

The United States is the world's largest producer of dried cut fruit and mixed dried fruit. Imports, while increasing in recent years, have been small in relation to domestic production.

Description and uses

Dried apples, apricots, peaches, and pears are referred to collectively in this summary as dried cut fruit; they are the only commercially important dried fruit prepared by cutting. Compared with the domestic production of such dried fruit as raisins or prunes, dried cut fruit are of relatively minor importance individually. As a group, however, they are a significant component of the U.S. dried fruit trade. Mixed dried fruit consists of two or more dried fruit mixed together. Such mixtures are usually mixed and packaged by handlers, usually after receipt of purchase orders. The composition of mixed dried fruit varies, but prunes generally account for about half of the mixture and cut fruit for the remainder. Dried prunes and raisins are discussed in separate summaries in this volume.

In the United States, modern dehydration methods are steadily replacing sun drying for most of the dried cut fruit production. Considerable hand labor is involved in cutting apricots, peaches, and pears in half and in the subsequent drying operations. Before drying, apples are usually peeled, cored, and cut into wedges, rings, or cubes; most of these operations are done mechanically. Virtually all dried apples are dehydrated in forced hot air dehydrators. In the United States the usual practice is to treat cut fruit with sulphur before drying by placing the fruit in a chamber with burning sulphur. The purpose is to retard spoilage and preserve color. Moisture is usually added to soften the dried fruit before it is graded and packaged for distribution, resulting in a dried, processed weight somewhat greater than the dried, natural-condition weight.

Dried cut fruit and mixed dried fruit are eaten out-of-hand and are used in baked goods and in various food dishes. They are often used by outdoorsmen seeking to conserve space and weight. Dried apples are used more extensively by bakers and other institutional users than are the other cut dried fruit.

U.S. tariff treatment

The column 1 rates of duty applicable to imports (see general headnote 3 in the TSUSA-1969) are as follows:

TSUS item	Commodity	Rate prior to Jan. 1, 1968	U.S. concessions granted in 1964-67 trade conference (Kennedy Round)	
			Second stage, effective Jan. 1, 1969	Final stage, effective Jan. 1, 1972
146.12	Dried apples	1¢ per lb.	0.9¢ per lb. 1/	0.75¢ per lb. 2/
146.22	Dried apricots	1¢ per lb.	3/	3/
148.74	Dried peaches	2¢ per lb.	1.6¢ per lb.	1¢ per lb.
148.83	Dried pears	2¢ per lb.	1.8¢ per lb.	1.5¢ per lb. 2/
150.00	Mixtures of two or more fruits, prepared or preserved.	17.5% ad val.	4/	4/
150.01	If products of Cuba	14% ad val.	4/	4/

1/ Rate of duty became effective Jan. 1, 1968, and continues in effect until Jan. 1, 1970.
2/ The final rate for this item becomes effective Jan. 1, 1970.
3/ Rate of duty bound in the trade conference.
4/ Rate of duty not affected by the trade conference.

The tabulation above shows the column 1 rates of duty in effect prior to January 1, 1968, and modifications therein as a result of concessions granted by the United States in the sixth round of trade negotiations under the General Agreement on Tariffs and Trade. Only the current (that in effect during 1969) and final stages of the rate modifications are shown above (see the TSUSA-1969 for other stages).

During the period from August 31, 1963, when the TSUS became effective, to December 31, 1967, the prior rates shown did not change. The rate shown for item 150.01 is the preferential rate for products of Cuba which was suspended May 24, 1962. Imports from Cuba have been prohibited since February 7, 1962.

The average ad valorem equivalents of the specific rates of duty in effect on December 31, 1967, based on dutiable imports entered during 1967, were as follows:

TSUS item	Percent
146.12	3.4
146.22	2.3
148.74	10.2
148.83	11.3

U.S. consumption, producers, and production

U.S. consumption of dried cut fruit averaged 37 million pounds annually during 1963-67 (table 1). Such annual consumption included about 20 million pounds of dried apples, 10 million pounds of dried apricots, 6 million pounds of dried peaches, and less than 1 million pounds of dried pears. About 2 million pounds of the annual consumption of dried cut fruit is estimated to have been in mixtures of dried fruit.

During the 1930's, the domestic consumption of dried cut fruit averaged more than 100 million pounds annually. The substantial decrease in the consumption of such dried cut fruit during the past quarter century was due principally to increased costs of producing dried fruit and to technological improvements in the production of canned and frozen fruits, as well as extended distribution seasons for fresh fruits.

In general, cut dried fruit is not produced from fruit grown especially for drying. Virtually all dried apricots, peaches, and pears are produced in California and the bulk of the dried apples are produced in California and Washington. There were about a dozen producers of dried cut fruit in the United States in 1968. Some of the producers of dried apricots, peaches, and pears are also producers of dried prunes. A few produce only dried apples.

During 1963-67 the annual domestic production of dried cut fruit averaged about 44 million pounds (table 2), a decrease of one-third from the average of 66 million pounds produced during the early 1950's. Compared with the early 1950's, the average annual production of dried apples was essentially unchanged during 1963-67, while the production

of dried apricots was down 40 percent and that of dried peaches and dried pears was down more than 50 percent. The following tabulation shows the 1963-67 average annual production of dried cut fruit in relation to the total domestic crop of these fruit:

Commodity	U.S. production used for drying	Ratio of production used for drying to total fresh production	Dried production
	Million pounds fresh weight	Percent	Million pounds dried weight
Apples	182	3.1	23
Apricots	71	18.3	13
Peaches 1/	57	3.3	8
Pears	9	0.8	1

1/ Freestone peaches only. Such peaches are the only type generally used for drying.

Domestic shipments of mixed dried fruit to all markets in recent years is estimated to have averaged about 10 million pounds annually. Dried prunes and dried cut fruit each probably accounted for about half of the mixed dried fruit shipped.

U.S. exports

Approximately one-quarter of the U.S. production of dried cut fruit is exported (table 1). During 1963-67 annual exports of the four dried cut fruit averaged 7 million pounds and exports of mixed dried fruit averaged 6 million pounds (table 3). Of the exports of the four dried cut fruit, 44 percent were apples, 35 percent were apricots, 15 percent were peaches, and the remaining 6 percent were pears. The proportion of each dried fruit included in the exports of mixed dried fruit varies somewhat from year to year in response to changes in the availability and price of the components.

During 1963-67 about one-half of the exports of dried cut fruit and mixed dried fruit went to Sweden, Finland, Norway, and Denmark; another 25 percent went to the European Economic Community; and the rest went primarily to the United Kingdom and Canada.

U.S. imports

Historically, U.S. annual imports of dried cut fruit have been small relative to domestic consumption but in recent years they have increased as domestic production has declined. During 1963-67 such

imports averaged 2 million pounds and supplied about 5 percent of consumption (table 1). Imports of dried cut fruit during the 1950's averaged 280,000 pounds annually, consisting of dried apples and apricots. During 1963-67, about half of the annual imports of dried cut fruit, or 1 million pounds, were dried apples; 500,000 pounds were dried apricots; and most of the balance consisted of dried peaches but also included some dried pears (table 4). The principal suppliers have been Argentina and Italy for dried apples, Spain and Australia for dried apricots, and the Republic of South Africa and Australia for dried peaches and pears.

U.S. imports of mixed dried fruit are believed to have been nil in recent years.

World production and trade

Reported world production of dried cut fruit, which is believed to account for about 90 percent of the world output of dried cut fruit, has averaged nearly 90 million pounds annually in recent years. About 40 million pounds of the reported world production consisted of apricots, 25 million pounds of apples, 20 million pounds of peaches, and less than 5 million pounds of pears. The United States usually produces more than 80 percent of the world output of apples, nearly half of the peaches and pears, and about one-third of the apricots. Other leading producers are Australia, the Republic of South Africa, Argentina, Chile (peaches), and Spain and Iran (apricots).

About a third of the world production of dried cut fruit is believed to enter international trade.

Table 1.--Apples, apricots, peaches, and pears, dried: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1963-67

(Quantity in thousands of pounds; value in thousands of dollars)

Year	Production 1/	Imports	Exports			Apparent consumption	Ratio (percent) of imports to consumption
			As separate fruit	In mixed dried fruit 2/	Total		
	Quantity						
1963	50,376	1,137	6,205	3,436	9,641	41,872	2.7
1964	43,382	1,434	7,828	2,867	10,695	34,121	4.2
1965	43,378	2,565	8,178	3,763	11,941	34,002	7.5
1966	54,060	1,911	6,921	3,027	9,948	46,023	4.2
1967	31,216	2,906	4,341	2,547	6,888	27,234	10.7
	Value						
1963	15,678	327	2,755	1,345	4,100	3/	3/
1964	10,253	396	2,707	1,093	3,860	3/	3/
1965	11,192	610	3,199	1,379	4,578	3/	3/
1966	15,116	554	2,967	1,215	4,182	3/	3/
1967	9,524	906	2,224	1,126	3,350	3/	3/

1/ Does not include sales (equivalent to production) of mixed dried fruit.

2/ Represents 50 percent of the quantity and 60 percent of the value of the exports of mixed dried fruit; the balances are assumed to have been dried prunes.

3/ Not available.

Source: Production compiled from official statistics of the U.S. Department of Agriculture; imports and exports compiled from official statistics of the U.S. Department of Commerce.

Table 2.--Apples, apricots, peaches, and pears, dried: U.S. production, by types, 1963-67

Year	Dried apples	Dried apricots	Dried peaches	Dried pears	Total
	Quantity (1,000 pounds)				
1963	21,500	17,100	10,896	880	50,376
1964	17,780	13,290	9,612	2,700	43,382
1965	23,020	11,166	8,852	340	43,378
1966	31,800	14,200	5,500	2,560	54,060
1967	19,960	7,854	3,042	360	31,216
	Value (1,000 dollars)				
1963	3,156	9,217	2,942	363	15,678
1964	2,063	5,050	2,384	756	10,253
1965	4,854	4,265	1,903	170	11,192
1966	5,877	6,887	1,430	922	15,116
1967	4,134	4,320	852	218	9,524

Source: Compiled from official statistics of the U.S. Department of Agriculture.

Table 3.--Apples, apricots, peaches, and pears, dried; and mixed dried fruit: U.S. exports of domestic merchandise, by types, 1963-67

Year	Dried apples	Dried apricots	Dried peaches	Dried pears	Mixed dried fruit 1/	Total
	Quantity (1,000 pounds)					
1963	3,184	1,624	914	483	6,871	13,076
1964	4,439	2,100	851	438	5,733	13,561
1965	3,332	3,248	999	599	7,526	15,704
1966	2,261	2,856	1,412	392	6,054	12,975
1967	1,668	1,757	690	226	5,094	9,435
	Value (1,000 dollars)					
1963	1,275	997	302	181	2,241	4,996
1964	1,300	1,097	194	176	1,821	4,588
1965	1,221	1,465	290	223	2,298	5,497
1966	1,030	1,498	274	165	2,025	4,992
1967	784	1,116	223	101	1,877	4,101
	Unit value (cents per pound)					
1963	40	61	33	38	33	38
1964	29	52	23	40	32	34
1965	37	45	29	37	31	35
1966	46	52	19	42	33	38
1967	47	64	32	45	37	44

1/ Includes dried prunes which are assumed to constitute 50 percent of the mixed dried fruit exported.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table 4.--Apples, apricots, peaches, and pears, dried: U.S. imports for consumption, by types, 1963-67

Year	Dried apples	Dried apricots	Dried peaches	Dried pears	Total
	Quantity (1,000 pounds)				
1963	339	596	169	33	1,137
1964	311	619	369	135	1,434
1965	1,477	330	727	31	2,565
1966	1,349	348	130	84	1,911
1967	1,948	577	340	41	2,906
	Value (1,000 dollars)				
1963	72	196	50	9	327
1964	71	186	103	36	396
1965	363	94	140	13	610
1966	387	120	23	24	554
1967	577	255	67	7	906
	Unit value (cents per pound) 1/				
1963	21	33	30	26	29
1964	23	30	28	27	28
1965	25	28	19	43	24
1966	29	34	18	29	29
1967	30	44	20	18	31

1/ Calculated from the unrounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Note.--Imports of mixed dried fruit are believed to be nil.

Commodity	TSUS item
Apricots:	
Fresh or in brine	146.20
Otherwise prepared or preserved (except dried)	146.24

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969).

U.S. trade position

The United States produces about one-fourth of the reported world production of apricots. U.S. exports of canned apricots, the most important utilization for apricots, have accounted for 3 percent of canned production and exports of fresh apricots have accounted for about 10 percent of the quantity marketed in the fresh form. Imports are negligible.

Description and uses

Apricots, the fruit of a deciduous tree, are usually about 2 inches in diameter, light to deep orange in color, with a natural seam dividing two somewhat flattened halves. When the fruit is opened, the pit (see summary on item 175.03) can be easily removed. Apricots grow best in areas having warm dry summers, fairly cold winters, and no late spring frosts. The bulk of the U.S. apricot crop is produced in California with most of the remainder in Washington and Utah.

In recent years about 8 percent of the marketable crop has been sold fresh, 69 percent canned, 18 percent dried, 4 percent frozen, and the remainder has been used on the farm where grown. Dried apricots, item 146.22, are covered in another summary in this volume. Fresh, canned, and dried apricots go primarily into household consumption; however, bakeries use significant quantities of canned apricots and some dried apricots. Frozen apricots are used mainly in the manufacture of apricot preserves.

U.S. tariff treatment

The column 1 rates of duty applicable to imports (see general headnote 3 in the TSUSA-1969) are as follows:

TSUS item	Commodity	Rate prior to Jan. 1, 1968	U.S. concessions granted in 1964-67 trade conference (Kennedy Round)	
			First stage, effective Jan. 1, 1968	Final stage, effective Jan. 1, 1972
	Apricots:			
146.20	Fresh or in brine	0.5¢ per lb.	0.4¢ per lb. 1/	0.2¢ per lb.
146.24	Otherwise prepared or preserved (except dried).	35% ad val.	2/	2/

1/ Rate of duty became effective Jan. 1, 1968 and remains in effect until Jan. 1, 1970.
2/ Rate of duty not affected by the trade conference.

The tabulation above shows the column 1 rates of duty in effect prior to January 1, 1968, and modifications therein as a result of concessions granted by the United States in the sixth round of trade negotiations under the General Agreement on Tariffs and Trade. Only the first and final stages of the rate modifications are shown (see the TSUSA-1969 for the other stages). The rate of duty shown above for item 146.24 is that provided for in the Tariff Act of 1930, as originally enacted. For the period August 31, 1963, when the TSUS became effective, to December 31, 1967, the prior rate shown for item 146.20 did not change.

U.S. consumption

Fresh apricots have never been consumed in substantial quantities far from the producing areas principally because they are quite perishable. Hence, over half of the fresh apricots are ordinarily consumed within the State where produced. U.S. consumption of fresh apricots, which averaged about 28 million pounds annually in the years 1963-67, has been declining for many years.

Since the early 1950's, there has been a slight upward trend in the annual consumption of canned apricots, which averaged 206 million pounds in the years 1963-67 (table 1). During the same period, the

estimated annual consumption of frozen apricots more than doubled. Such consumption averaged 15 million pounds during 1963-67.

U.S. producers

The bulk of the apricot producers are located in California where 39,000 acres were devoted to apricot orchards in 1967. There are also some commercial apricot producers in Washington and Utah and a few in other parts of the Northwest and Rocky Mountain areas.

About a third of the acreage currently devoted to apricots in California is in the Santa Clara Valley, which is in the path of urban development in the area south of San Francisco. Consequently, the acreage is declining in this area and production is shifting to the northern San Joaquin and southern Sacramento Valleys where over 40 percent of the State's total apricot acreage is now located.

There are an estimated 50 firms that can apricots and probably a greater number that pack fresh apricots for local and interstate distribution. In most cases apricots constitute only a part of the total fruit handled by canners and packers.

U.S. production

U.S. apricot production, which averaged 394 million pounds annually during 1963-67 (table 2), has declined slightly since the early 1950's. The amount of such production utilized in the fresh form declined from an average of 58 million pounds annually in the early 1950's to 31 million pounds annually in the years 1963-67. The average annual production of canned apricots (processed weight) increased from 179 million pounds in the early 1950's to 213 million pounds in 1963-67. The average annual production of frozen apricots more than doubled from 6 million pounds in 1950-54 to 15 million pounds in 1963-67.

In recent years, California has accounted for about 96 percent of the reported U.S. production of apricots. Washington accounts for most of the remainder. The slight decline in total production that has occurred since the early 1950's is attributable to the much smaller crops harvested in Washington and Utah in recent years. The annual average production in California was about the same in the years 1963-67 as in the early 1950's. The bulk of the small Washington and Utah production is for fresh market.

The quality of Washington fresh apricots is regulated through the use of a Federal marketing order adopted by producers and handlers.

U.S. exports

U.S. exports of fresh apricots in the years 1963-67 are estimated to have averaged about 3 million pounds annually and to have accounted for about 10 percent of the total quantity marketed in fresh form during those years. There has been considerable fluctuation in annual fresh apricot exports, most of which go to Canada.

Annual exports of canned apricots, which averaged 7 million pounds or 3 percent of canned apricot production in the years 1963-67, have been characterized by considerable year to year fluctuation. Large quantities of canned apricots are usually exported following large domestic crops. Canada is the largest U.S. export market taking about one-fourth of the total U.S. exports of canned apricots in recent years; most of the remainder went to northern European countries.

U.S. imports

Historically, imports of fresh apricots (item 146.20) have been small and erratic, well under 1 percent of annual domestic consumption. In 1964 about 300,000 pounds of fresh apricots were imported, while there were no imports during the years 1965-67. During the past decade most of the imports have been supplied by Canada and nearly all the remainder by the Republic of South Africa.

During 1963-67 annual imports of otherwise prepared or preserved apricots (item 146.24) averaged 635,000 pounds. Such imports were very small when compared with the domestic consumption of canned apricots (table 1). Most of these imports were canned apricots from Spain, principally for use as pie fillings and in certain manufactured food products. The Republic of South Africa and Israel were the next most important suppliers. The imports from Syria, Lebanon, and Hong Kong, which together averaged about 50,000 pounds annually, are believed to have been specialty apricot products rather than canned apricots.

World production

Foreign production of apricots is largely restricted to countries having a fairly dry and warm climate, such as the Mediterranean countries. Next to the United States, which produces one-fourth of the reported world production of apricots, Spain, France, Turkey, and Italy are the largest producers. Small quantities of apricots are produced in Canada, largely in British Colombia and the Niagara Peninsula in Ontario.

Table 1.--Apricots, canned: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1963-67

Year	Production 1/	Imports 2/	Exports	Apparent consumption
	Quantity (1,000 pounds)			
1963	182,295	432	8,648	174,079
1964	233,820	791	5,959	228,652
1965	231,570	796	11,049	221,317
1966	225,810	585	6,506	219,889
1967	189,585	573	3,620	186,538
	Value (1,000 dollars)			
1963	3/	55	1,449	3/
1964	3/	96	1,057	3/
1965	3/	88	1,717	3/
1966	3/	75	1,037	3/
1967	3/	88	666	3/

1/ Cases of 24 No. 2½ cans have been converted to pounds at 45 pounds per case.

2/ Imports of prepared or preserved (except brined or dried) apricots, most of which are believed to have been canned.

3/ Not available.

Source: Production compiled from official statistics of the National Canners Association; imports and exports compiled from official statistics of the U.S. Department of Commerce.

Table 2.--Apricots: U.S. production and utilization, 1963-67

(In thousands of pounds, fresh weight)

Year	Production 1/	Utilization			
		Sold fresh	Canned	Frozen	Dried
1963	397,000	33,060	250,800	14,000	95,800
1964	440,200	38,680	303,520	17,000	74,800
1965	452,000	28,830	312,000	18,000	61,600
1966	387,000	35,300	252,740	17,000	78,000
1967	295,800	21,290	212,540	15,400	44,000

1/ Production includes quantities not used commercially.

Source: Compiled from official statistics of the U.S. Department of Agriculture.

Commodity	TSUS item
Avocados, fresh, or prepared or preserved----------	146.30, -.31

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969).

U.S. trade position

In recent years domestic production, with a farm value of about $17 million annually, has supplied virtually all of the avocados consumed in the United States. Exports and imports have been small.

Description and uses

The avocado, sometimes called the alligator pear, is a single-seeded fruit of a subtropical, broadleafed evergreen tree. The fruit sold in commerce is usually pear shaped and dark green in color; however, its shape may range from round to elongated and its color from yellow green to deep purple. The flesh of the fruit has a smooth buttery consistency and an oil content ranging up to 30 percent. The avocado is marketed principally as a fresh fruit for use mainly in salads. Recent research, however, has given rise to new products such as frozen avocado slices and canned avocado spread.

U.S. tariff treatment and other import requirements

The column 1 rates of duty applicable to imports (see general headnote 3 in the TSUSA-1969) are as follows:

TSUS item	Commodity	Rate of duty
146.30	Avocados (alligator pears), fresh or preserved.	7.5¢ per lb.
146.31	If products of Cuba----------	Free

The United States granted no concessions on avocados in the sixth round of trade negotiations under the General Agreement on Tariffs and Trade. For the period since the TSUS became effective on August 31, 1963, the rates of duty shown above have not changed. The ad valorem equivalent of the 7.5 cent rate of duty, based on dutiable imports in 1967, was 58 percent. The duty-free status for avocados of Cuban origin was suspended on May 24, 1962. Imports from Cuba have been prohibited since February 7, 1962.

Two Federal plant quarantines restrict the importation of avocados into the United States. One prohibits the importation of avocado seed from Mexico and Central America. This in effect prohibits the importation of whole avocados from those countries. The other quarantine prohibits entry of avocados from all except designated sources. At present such designated sources include nearly all Caribbean Islands and parts of Chile.

A Federal marketing order, which was adopted by growers and packers, regulates the quality of avocados shipped from Southern Florida. Under the provisions of section 8e of the Agricultural Marketing Agreement Act of 1937, as amended, imported avocados must meet the same grade and size requirements in effect for domestic fruit shipped under the order.

U.S. consumption, production, producers, and exports

U.S. consumption of avocados is virtually equivalent to U.S. production. During the crop years 1963-67, annual U.S. production averaged 117 million pounds (see table), a 15 percent increase from the 102 million pound average of the late 1950's. Wide annual variations in production are typical for avocados. Such variations are attributable to weather conditions at blossom time and a tendency of some avocado trees towards erratic bearing. About three-fourths of the U.S. production is in Southern California, mostly in San Diego County. The remainder is in Florida, virtually all in Dade County. In California about 70 percent of the crop is harvested during the months of December through May. In Florida almost 90 percent of the crop is harvested during the months September through January.

The 1964 United States Census of Agriculture reported that avocados were grown on about 4,000 farms in California and about 800 farms in Florida, a decline of 40 percent from the more than 8,000 farms reported for the two States in 1959. There are also a few commercial avocado producers in Hawaii and Texas. Avocados were harvested on about 1,300 commercial farms in Puerto Rico in 1964, but production was small. Shipments from Puerto Rico to the United States have been insignificant in recent years.

U.S. exports of avocados, which are not separately reported, are believed to have been small in recent years and to have gone chiefly to Canadian markets.

U.S. imports

Prior to the embargo on products of Cuba in 1962, imports of avocados were virtually all from Cuba and averaged about 7 million pounds annually. About three-quarters of them entered during the months of July and August when domestic supplies were seasonally low. During 1963-67, annual imports of avocados, which were supplied principally by the Dominican Republic, ranged from 10,000 to 617,000 pounds and averaged about 250,000 pounds (see table below).

Avocados: U.S. production and imports for consumption, crop years 1963-67

Crop year 1/	Production		Imports	
	Quantity	Value	Quantity	Value
	1,000 pounds	1,000 dollars	1,000 pounds	1,000 dollars
1963	121,400	14,095	10	1
1964	74,800	14,773	31	2
1965	121,600	16,456	223	31
1966	160,600	16,348	617	87
1967	106,400	22,014	376	49

1/ Crop years beginning June 1 for Florida production and for imports, and crop years beginning Oct. 1 for California production.

Source: Production compiled from official statistics of the U.S. Department of Agriculture; imports compiled from official statistics of the U.S. Department of Commerce.

Commodity	TSUS item
Bananas:	
Fresh	146.40
Dried	146.42
Otherwise prepared or preserved	146.44, -.45
Plantains:	
Fresh	149.10
Prepared or preserved	149.15, -.16
Banana and plantain paste and pulp	152.72

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969).

U.S. trade position

The United States, the world's largest importer of fresh bananas, consumed about 3,600 million pounds in 1967. U.S. production is negligible. Imports and consumption of fresh plantains have averaged about 50 million pounds annually in recent years. Imports and consumption of banana and plantain products, the only dutiable items covered by this summary, are very small in relation to fresh imports.

Description and uses

Bananas are grown only in tropical climates and are used almost wholly as fresh fruit. Plantains are larger and coarser than bananas, and due to a high ratio of starch to sugar when ripe, they are nearly always cooked before being used.

Dried bananas, including banana flakes, are used primarily as a health food, often by infants. Otherwise prepared or preserved bananas consist primarily of canned sliced bananas used in pies and desserts but also include banana chips used for snacks. Banana and plantain paste or pulp consists almost entirely of frozen banana puree and canned mashed bananas used in baby foods, ice creams, pies, cakes, and other baked goods. There is little market in the United States for plantain products.

U.S. tariff treatment

The column 1 rates of duty applicable to imports (see general headnote 3 in the TSUSA-1969) are as follows:

TSUS item	Commodity	Rate prior to Jan. 1, 1968	U.S. concessions granted in 1964-67 trade conference (Kennedy Round)	
			Second stage, effective Jan. 1, 1969	Final stage, effective Jan. 1, 1972
	Bananas:			
146.40	Fresh	Free	1/	1/
146.42	Dried	7.5% ad val.	6% ad val.	3.5% ad val.
146.44	Otherwise prepared or preserved.	15% ad val.	12% ad val.	7.5% ad val.
146.45	If products of Cuba.	10% ad val.	2/	3/
	Plantains:			
149.10	Fresh	Free	1/	1/
149.15	Prepared or preserved	15% ad val.	12% ad val.	7.5% ad val.
149.16	If products of Cuba	10% ad val.	2/	3/
	Fruit pastes and pulps:			
152.72	Banana and plantain. 4/	15% ad val.	12% ad val.	7.5% ad val.

1/ Bound free of duty in the 1964-67 trade conference.
2/ Rate of duty not affected by the trade conference.
3/ Subordinate Cuban provisions, items 146.45 and 149.16, deleted effective Jan. 1, 1970 as a result of the Kennedy Round.
4/ Formerly part of item 152.70 (other fruit pastes and pulps) which was deleted on Jan. 1, 1968 and superseded by items 152.72 and 152.74.

The tabulation above shows the column 1 rates of duty in effect prior to January 1, 1968, and modifications therein as a result of concessions granted by the United States in the sixth round of trade negotiations under the General Agreement on Tariffs and Trade. Only the second (that in effect during 1969) and final (fifth) stages of the annual modifications are shown (see the TSUSA-1969 for the other stages). During the period from August 31, 1963, when the TSUS became effective, to December 31, 1967, the prior rates shown above did not change. The duty-free status of fresh bananas and plantains (items 146.40 and 149.10) was provided for in the Tariff Act of 1930, as originally enacted.

The rates shown for items 146.45 and 149.16 are preferential rates for products of Cuba, which were suspended on May 24, 1962. Imports from Cuba have been prohibited since February 7, 1962.

U.S. consumption

The United States is the world's largest consumer of bananas. In recent years the domestic consumption of bananas has averaged about 3,400 million pounds annually (see imports section). In 1967 the U.S. per capita consumption of fresh bananas totaled about 18 pounds--about the same as that prevailing for the past 20 years. Domestic consumption of fresh plantains (imports plus shipments from Puerto Rico) has averaged about 52 million pounds annually in recent years.

U.S. consumption of banana products consists chiefly of banana pulp, dried bananas, and canned bananas. U.S. imports of such products in 1967 were valued at about 1 million dollars.

U.S. and Puerto Rican production and exports

Hawaiian banana production, which consists mostly of varieties different from those imported into the United States, averaged 8 million pounds annually in recent years. Hawaii is the only U.S. State in which bananas are grown commercially.

In recent years, the annual production of bananas and plantains in Puerto Rico, a customs district of the United States, is estimated at about 225 million pounds and 125 million pounds, respectively. Such production is consumed principally in Puerto Rico. Annual shipments from Puerto Rico to the United States have consisted of about 2 million pounds of plantain and 1 million pounds of bananas. Small quantities of the Puerto Rican production are exported.

Significant quantities of the fresh bananas imported into the United States are subsequently exported, virtually all to Canada. Such exports of foreign merchandise averaged 130 million pounds annually during 1963-67 (see note to table 1).

U.S. imports

Determining the trend of annual U.S. imports of fresh bananas has been difficult, historically, because of changes in the bases on which quantity and value data have been reported. Prior to 1962, fresh banana imports were reported by the number of bunches, which varied in weight, rather than in pounds. Prior to 1964 the reported values of imported fresh bananas were nominal values rather than market values.

In about 1960 a new method was introduced for packing and shipping fresh bananas from the country of origin to the United States. This consists of cutting the fruit off the stem and packing it into fiberboard cartons, which are usually packed to contain a net weight of 40 pounds at destination, compared to the then traditional practice of shipping bananas on-the-stem (bunches) in bulk. About 20 percent of the weight of a bunch consists of the nonedible stem. Actual weights of the bunches and carton-packed bananas are combined in the official import statistics. Of total U.S. imports of fresh bananas, imports in cartons are estimated to have accounted for 2 percent in 1960, 30 percent in 1962, 85 percent in 1964, and virtually 100 percent in 1967.

The U.S. Department of Agriculture has prepared estimates, taking into consideration the changes discussed above, of imported bananas consumed annually in the United States during the last 20 years. These estimates, which are shown below in millions of pounds, indicate that imports of fresh bananas have increased.

5-year average:	
1948-52	2,972
1953-57	2,831
1958-62	3,120
1963-67	3,370
Annual:	
1963	3,039
1964	3,193
1965	3,451
1966	3,566
1967	3,603

During 1963-67 virtually all U.S. imports of fresh bananas were supplied by Ecuador and countries in Central America, principally Honduras, Panama, and Costa Rica (table 1). From 1963 to 1967, imports from Ecuador declined about 40 percent while imports from Central America increased.

In recent years annual U.S. imports of fresh plantains averaged about 50 million pounds as shown in the following tabulation:

Year	Quantity (million pounds)	Value (1,000 dollars)
1963	1/	1,490
1964	44	1,734
1965	48	2,213
1966	56	2,835
1967	57	2,895

1/ Not available.

In recent years the major suppliers of U.S. imports of fresh plantains have been Venezuela, Costa Rica, Guatemala, and Honduras. During the late 1950's such imports were smaller and were supplied principally by Cuba.

Total U.S. imports of banana and plantain products (items 146.42, 146.44, 149.15, and 152.72) increased from an estimated $520,000 in 1963 to $970,000 in 1967 (table 2). The principal suppliers of banana pulp have been Honduras, the Dominican Republic, and Mexico. Imports of otherwise prepared or preserved bananas have come chiefly from Honduras, the Dominican Republic and the Philippines. Ecuador and Brazil have supplied nearly all of the imports of dried bananas. Imports of plantain products have been negligible or nil in recent years. Imports of banana and plantain flour (item 152.00), which are covered in another summary in this volume, have been insignificant.

World production and trade

World banana production in 1966 totaled about 53,000 million pounds, or almost double the annual average of the 1940's. More than half of the world production is grown in South America, principally in Brazil, Ecuador, and Venezuela. Approximately one-fourth of the world production is exported.

World trade in bananas consists largely of exports from Ecuador and countries in Central America to the United States, Western Europe, and Japan. Significant trade also occurs between traditional banana exporting-importing partners such as Martinique-France, Jamaica-United Kingdom, and Brazil-Argentina. The U.S. Department of Agriculture reports exports and imports of bananas for specified countries; such data are estimated to account for about 90 percent of the world banana trade. These reported exports and imports for 1966 are shown in the following tabulation:

Item	Quantity	Item	Quantity
1966 Exports	Million pounds	1966 Imports	Million pounds
South America:		North America:	
Ecuador	2,788	United States	3,566
Colombia	685	Canada	386
Brazil	452	Europe:	
Central America and Caribbean area:		West Germany	1,327
Honduras	1,710	France	1,013
Panama	849	United Kingdom	814
Costa Rica	791	Italy	711
Martinique	457	Netherlands	219
Jamaica	442	Other	791
Leeward and Windward Islands	385	South America:	
Other	434	Argentina	485
Africa	895	Other	116
Asia and Oceania:		Africa, Asia, and Oceania:	
Taiwan	761	Japan	918
Other	71	Other	149
Total	10,720	Total	10,495

From 1963 to 1966 the reported world imports of fresh bananas increased 12 percent. The principal reasons for this increased trade have been larger supplies of bananas in exporting countries, the favorable acceptance of cartonized bananas in most import markets, liberalized foreign trade policies in some importing countries, and lower prices in some major markets. Fresh bananas imported into most countries are subject to a duty; however, the United States, as indicated earlier, and West Germany are exceptions. Imports of fresh bananas enter West Germany, the second largest importer, on a duty-free quota basis. West Germany enjoys an exception to the general rate of duty of 20 percent ad valorem applicable to fresh bananas entering the European Economic Community.

Table 1.--Bananas, fresh: U.S. imports for consumption, by principal sources, 1963-67

Source	1963	1964	1965	1966	1967
	Quantity (1,000 pounds)				
Honduras	613,916	537,210	899,240	1,111,150	940,427
Panama	516,870	544,607	690,097	805,366	943,185
Ecuador	1,670,452	1,572,893	1,285,159	1,107,186	996,455
Costa Rica	457,493	527,796	541,078	579,951	636,664
Guatemala	96,751	37,616	6,504	27,272	101,810
Nicaragua	34,080	47,764	19,119	35,213	74,008
Mexico	7,987	11,100	19,214	14,669	18,449
All other	87,858	150,863	32,425	35,813	33,980
Total	3,485,407	3,429,849	3,492,885	3,716,621	3,744,978
	Value (1,000 dollars)				
Honduras	12,915	20,218	43,965	55,920	44,803
Panama	11,667	20,922	33,444	40,563	44,715
Ecuador	39,196	55,046	55,286	48,119	43,497
Costa Rica	12,197	20,126	26,201	28,567	30,217
Guatemala	2,102	1,131	320	1,383	4,821
Nicaragua	1,351	2,116	893	1,755	3,402
Mexico	260	398	654	508	688
All other	2,280	6,552	1,581	1,792	1,747
Total	81,968	126,509	162,344	178,607	173,889

Source: Compiled from official statistics of the U.S. Department of Commerce.

Note.--All U.S. imports of fresh bananas are normally reported as "imports for consumption" regardless of whether they are to be consumed domestically or exported. Reported U.S. exports of foreign merchandise show that exports of bananas (and plantains beginning in 1965) were as follows during 1963-67, in thousands of pounds:

1963---- 109,035
1964---- 138,170
1965---- 126,165
1966---- 143,163
1967---- 134,885

March 1969
1:8

Table 2.--Banana and plantain products: U.S. imports for consumption, by type of product, 1963-67

Year	Dried bananas	Bananas, otherwise prepared or preserved	Banana and plantain pulp 1/	Total
	Quantity (1,000 pounds)			
1963	339	2/	5,800	3/
1964	388	4/ 75	6,400	3/
1965	783	4/ 149	7,800	3/
1966	694	513	3,100	3/
1967	855	520	8,000	3/
	Value (1,000 dollars)			
1963	93	2/	425	518
1964	126	4/ 17	475	618
1965	277	4/ 50	620	947
1966	202	112	240	554
1967	256	88	620	5/ 968
	Unit value (cents per pound)			
1963	27.4	2/	7.3	3/
1964	32.5	22.7	7.4	3/
1965	35.4	33.6	7.9	3/
1966	29.1	21.8	7.7	3/
1967	29.9	16.9	7.8	3/

1/ Estimated, based on analysis of imports under former item 152.70. Beginning Jan. 1, 1968 such imports are separately reported under item 152.72.

2/ Not available.

3/ Not meaningful.

4/ Adjusted to reflect data incorrectly recorded in official statistics.

5/ Includes imports of prepared or preserved plantains (item 149.15) entered in 1967 valued at $4,000.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Commodity	TSUS item
Blueberries:	
Fresh or in brine	146.50
Frozen	146.68
Otherwise prepared or preserved (except dried)	146.70

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969).

U.S. trade position

The United States is the world's largest producer of cultivated blueberries and a substantial producer of lowbush blueberries. Imports of lowbush blueberries from Canada supplement domestic production. Exports of blueberries are not significant.

Description and uses

This summary does not cover dried blueberries (item 146.66 (pt.)), which are negligible in U.S. production and trade.

The blueberry is a blue to black fruit of a perennial shrub native to the North American continent. In Europe and Asia the whortleberry or bilberry is a native plant generally used for much the same purposes as the blueberry. In some parts of the United States the name "huckleberry" is erroneously used to refer to certain types of blueberries while the true huckleberry, which is a member of a different botanical group than the blueberry, is not extensively traded.

U.S. commercial production is from both native (wild) lowbush blueberries and cultivated highbush blueberries. Cultivated blueberries, initially developed from native highbush blueberries, are generally much larger in size than the lowbush blueberries harvested commercially.

Fresh, canned, and frozen blueberries are, to a large degree, competitive for the same uses. The principal uses of blueberries are in pies, bakery goods, ice creams, jams and jellies, and as a dessert fruit. Partly because of their smaller size, the wild lowbush berries are not sold extensively for fresh use.

U.S. tariff treatment

The column 1 rates of duty applicable to imports (see general headnote 3 in the TSUSA-1969) are as follows:

TSUS item	Commodity	Rate prior to Jan. 1, 1968	U.S. concessions granted in 1964-67 trade conference (Kennedy Round)	
			Second stage, effective Jan. 1, 1969	Final stage, effective Jan. 1, 1972
	Berries, fresh, or prepared or preserved:			
	Fresh or in brine:			
146.50	Blueberries	0.7¢ per lb.	0.5¢ per lb.	0.3¢ per lb.
	Otherwise prepared or preserved (except dried):			
	Blueberries:			
146.68	Frozen	6% ad val.	4.5% ad val.	3% ad val.
146.70	Other	7% ad val.	5.5% ad val.	3.5% ad val.

The tabulation above shows the column 1 rates of duty in effect prior to January 1, 1968, and modifications therein as a result of concessions granted by the United States in the sixth round of trade negotiations under the General Agreement on Tariffs and Trade. Only the second (that in effect during 1969) and final (fifth) stages of the rate modifications are shown (see the TSUSA-1969 for the other stages). During the period from August 31, 1963, when the TSUS became effective, to December 31, 1967, the prior rates shown above did not change.

The average ad valorem equivalent of the specific rate of duty in effect on December 31, 1967, for item 146.50, based on dutiable imports entered during 1967, was 6.0 percent.

U.S. consumption

U.S. consumption of blueberries increased from about 80 million pounds in 1963 to 113 million pounds in 1967 and averaged 93 million pounds annually during the 5-year period (table 1). Although data for earlier periods are limited, it is believed that annual consumption during the 1950's averaged about 70 million pounds. In recent years 52 percent of the blueberries consumed were frozen, 37 percent were fresh, and the remainder canned. More than 90 percent of the frozen blueberries have been packed in institutional size containers holding over 10 pounds each, and about half of the canned blueberries have been been packed in large size containers. The consumption of canned blueberries has declined in recent years.

U.S. producers

The 1964 United States Census of Agriculture reported that blueberries were harvested on 3,400 farms in that year and of these about 1,000 farms were in Maine, 750 in Michigan, 500 in New Jersey, 200 in Washington, 100 in North Carolina, and the remainder in many other States. There are from 20 to 25 processors of canned blueberries in the United States, nearly half of them in Maine. Frozen blueberry producers, which total about 50, are located primarily in Maine, Michigan, and Washington State.

U.S. production

The U.S. production of blueberries increased from 61 million pounds in 1963, a below average crop, to 95 million pounds in 1967, an all-time record crop (table 1). During 1963-67 the average annual blueberry production of the 6 principal producing States was as follows:

State	Production (1,000 pounds)
Michigan	24,522
Maine	20,693
New Jersey	19,919
North Carolina	7,231
Washington	3,762
Oregon	632
Total	76,760

All of the production in Maine, which accounts for about one-quarter of the total U.S. output, consists of lowbush blueberries gathered from native wild bushes. Production in the five other principal producing States is from cultivated highbush blueberries. Most lowbush blueberry fields, even though not cultivated in the usual

sense for cultivated crops, are under management programs to increase yields. In recent years average grower prices for Maine blueberries have ranged from 10 cents to 20 cents per pound while grower returns for highbush blueberries generally ranged from 25 cents to 30 cents per pound. In some years large quantities of lowbush blueberries go unharvested due to economic conditions.

The production of frozen blueberries has more than doubled since the early 1950's, offsetting a decline of about 40 percent in the production of canned blueberries. During the early 1950's the average annual production of frozen blueberries was 14 million pounds and of canned blueberries about 24 million pounds (canned weight). In the 1963-67 period such production averaged 30 million pounds of frozen blueberries and 14 million pounds of canned blueberries. Domestic producers have frozen or canned an estimated 7 million to 8 million pounds of imported fresh blueberries annually in recent years.

U.S. exports

Blueberries are not separately reported in the export statistics of the United States. Canadian imports of fresh blueberries from the United States during 1963-67 averaged 1.5 million pounds annually (table 1). Trade sources indicate that U.S. exports of fresh blueberries to other markets have been negligible. The fresh blueberry exports consist principally of early season cultivated blueberries destined for fresh market sale. U.S. exports of frozen and canned blueberries are believed to be small.

U.S. imports

During 1963-67 annual imports of all blueberries ranged from 15 million to 22 million pounds and accounted for from 17 percent to 24 percent of U.S. consumption (table 1). The imports of fresh and frozen blueberries each averaged about 9 million pounds during the same period. Imports of canned blueberries have been insignificant. Imports of all blueberries during the early 1950's averaged 19 million pounds annually, about the same as in recent years, but consisted of about 15 million pounds of fresh blueberries and 4 million pounds of frozen blueberries. Canada has been the dominant supplier of fresh, frozen, and canned blueberries (table 2). Imports from Poland, the second most important supplier, have been erratic, reaching a peak of 3 million pounds in 1965.

Nearly all of the fresh blueberries imported from Canada are processed by domestic freezers or canners, primarily located in Maine. Some domestic processors have financial ties with Canadian production.

Canadian production and trade

Blueberry production in eastern Canada, like that in Maine, is from native lowbush blueberries. In recent years Canadian production (excluding Ontario) averaged 27 million pounds annually, 85 percent of which was in eastern Canada and the remainder was of cultivated blue berries produced in British Columbia. Estimates for production in the Province of Ontario are not available. Such production is believed to consist chiefly of cultivated blueberries. The size of the Canadian harvest depends partly on the attractiveness of the U.S. market.

During 1963-67 Canadian foreign trade in blueberries, virtually all with the United States, consisted of imports of 1.5 million pounds of fresh blueberries and exports of about 16 million pounds of fresh and frozen blueberries.

Table 1.--Blueberries: U.S. production, imports for consumption, exports, and apparent consumption, 1963-67

(Quantity in thousands of pounds; value in thousands of dollars)

Year	Production 1/	Imports	Exports 2/	Apparent consumption	Ratio (percent) of imports to consumption
	Quantity				
1963	61,379	18,668	816	79,231	23.6
1964	74,542	14,911	1,385	88,068	16.9
1965	68,860	15,340	1,979	82,221	18.7
1966	83,575	21,663	1,765	103,473	20.9
1967	95,442	19,203	1,800	112,845	17.0
	Value				
1963	3/	2,924	240	3/	3/
1964	3/	2,898	380	3/	3/
1965	3/	3,647	498	3/	3/
1966	3/	4,517	466	3/	3/
1967	3/	2,981	476	3/	3/

1/ Production from 6 States believed to account for more than 95 percent of U.S. commercial production.

2/ Canadian imports of fresh blueberries from the United States; values are shown in Canadian dollars. Other exports of fresh blueberries are believed to be negligible or nil, and exports of canned and frozen blueberries are not separately reported but are believed to be smaller than those of the fresh, shown above.

3/ Not available.

Source: Production compiled from data supplied by the North American Blueberry Council and from official statistics of the U.S. Department of Agriculture and the Departments of Agriculture of California, New Jersey, and Maine; imports compiled from official statistics of the U.S. Department of Commerce; exports compiled from official statistics of the Dominion Bureau of Statistics (Canada).

Table 2.--Blueberries: U.S. imports for consumption, by principal sources and by types, 1963-67

Source and type	1963	1964	1965	1966	1967
	Quantity (1,000 pounds)				
Canada:					
Fresh	9,821	7,319	5,793	15,159	8,532
Frozen	8,401	5,232	6,268	4,646	10,021
Other (except dried)	27	41	22	72	-
Total	18,249	12,592	12,083	19,877	18,553
Other sources: 1/					
Frozen 2/	410	2,318	3,184	1,771	633
Other (except dried)	9	1	73	15	16
Total	419	2,319	3,257	1,786	649
All sources:					
Fresh	9,821	7,319	5,793	15,159	8,532
Frozen	8,811	7,550	9,452	6,417	10,655
Other (except dried)	36	42	95	87	16
Total	18,668	14,911	15,340	21,663	19,203
	Value (1,000 dollars)				
Canada:					
Fresh	1,304	1,303	1,188	2,905	996
Frozen	1,549	1,166	1,861	1,233	1,867
Other (except dried)	5	10	7	22	-
Total	2,858	2,479	3,056	4,160	2,863
Other sources: 1/					
Frozen 2/	62	417	578	353	117
Other (except dried)	3	3/	12	4	2
Total	65	417	590	357	119
All sources:					
Fresh	1,304	1,303	1,188	2,905	996
Frozen	1,612	1,584	2,440	1,586	1,983
Other (except dried)	8	11	19	26	2
Total	2,924	2,898	3,647	4,517	2,981

1/ During 1963-67 there were no imports of fresh blueberries from sources other than Canada. Reported imports from Japan in 1965 were actually from Canada. Reported imports of all types from Mexico were products other than blueberries and have been deleted from this table.

2/ Nearly all from Poland.

3/ Less than $500.

Source: Compiled from official statistics of the U.S. Department of Commerce.

March 1969
1:8

Commodity	TSUS item
Strawberries:	
Fresh:	
If entered June 15-September 15	146.58
If entered September 16-June 14	146.60
Frozen	146.75 (pt.)
Paste and pulp	152.74 (pt.), -.75 (pt.)

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969).

U.S. trade position

In recent years the share of fresh strawberry consumption supplied by imports, mostly from Mexico, has increased, and imports exceeded exports in 1966 and 1967. Annual imports of frozen strawberries, virtually all from Mexico, increased from negligible quantities in the early 1950's to 28 percent of consumption in 1966 and 1967. Exports of frozen strawberries, virtually all to Canada, have declined substantially in recent years.

Description and uses

This summary covers only fresh and frozen strawberries and strawberry paste and pulp, which together account for nearly all of the U.S. foreign trade in strawberries. Fresh strawberries are consumed largely as a dessert fruit. Frozen strawberries are used for the same purpose and as an ingredient in food products such as jams, preserves, ice cream, and bakery products. Before freezing, strawberries are usually sliced and mixed with sugar in a ratio of about 4 pounds of berries to 1 pound of sugar. Some strawberries are frozen whole and some are reduced to a paste or pulp before being frozen.

Strawberry products not covered in this summary but which are discussed elsewhere in this volume are dried strawberries (see item 146.66), canned strawberries (see item 146.75 in the summary on most berries), and strawberry jam (see item 153.04).

U.S. tariff treatment

The column 1 rates of duty applicable to imports (see general headnote 3 in the TSUSA-1969) are as follows:

TSUSA item	Commodity	Rate prior to Jan. 1, 1968	U.S. concessions granted in 1964-67 trade conference (Kennedy Round)	
			First stage, effective Jan. 1, 1968	Final stage, effective Jan. 1, 1971
	Strawberries:			
	Fresh:			
146.5800	If entered June 15-September 15.	0.5¢ per lb.	0.4¢ per lb. 1/	0.2¢ per lb.
146.6000	If entered any other time.	0.75¢ per lb.	2/	2/
146.7520	Frozen 3/	14% ad val.	2/	2/
152.7420	Paste and pulp 4/	15% ad val.	2/	2/
152.7500(pt.)	If product of Cuba. 5/	14% ad val.	2/	2/

1/ Rate of duty became effective Jan. 1, 1968 and remains in effect until Jan. 1, 1970.

2/ Rate of duty not affected by the trade conference.

3/ Formerly part of item 146.72 (other berries, otherwise prepared or preserved) which was deleted on Jan. 1, 1968 and superseded by items 146.73 and 146.75.

4/ Formerly part of item 152.70 (other fruit pastes and pulps) which was deleted on Jan. 1, 1968 and superseded by items 152.72 and 152.74.

5/ Part of item 152.71 prior to Jan. 1, 1968. The rates of duty for products of Cuba were suspended on May 24, 1962.

The tabulation above shows the column 1 rates of duty in effect prior to January 1, 1968, and modifications therein as a result of concessions granted by the United States in the sixth round of trade negotiations under the General Agreement on Tariffs and Trade. Only the first and final stages of the rate modifications are shown (see the TSUSA-1969 for the other stages). For the period since the TSUS became effective on August 31, 1963, the rates of duty shown above have not changed.

The average ad valorem equivalents of the specific rates of duty in effect on fresh strawberries on December 31, 1967, based on dutiable imports during 1967, were as follows:

TSUS item	Percent
146.58-----	1.4
146.60-----	4.8

Strawberry products that are in chief value of manufactured sugar are subject to an additional duty of 0.53 cent per pound on the total sugar content under item 901.00. It is believed that few, if any, of the imports of frozen strawberries are subject to this duty.

U.S. consumption

U.S. consumption of strawberries has been increasing since World War II, however, there has been a larger increase in frozen strawberry consumption than in fresh consumption. In the years 1963-67 consumption of fresh strawberries averaged 270 million pounds annually and that of frozen strawberries (including paste and pulp) 288 million pounds. On a per capita basis, aggregate consumption of such fresh and frozen strawberries was 2.9 pounds in 1967.

U.S. producers and production

Strawberries are produced commercially in every State. The spring and early summer months are the period of most active strawberry harvesting in the United States; however, harvesting in Texas and Florida starts in December, and the harvest in California continues from February through November. The 1964 United States Census of Agriculture indicated that strawberries were grown on about 66,000 acres on about 28,000 farms. California, Oregon, and Washington, which accounted for 10 percent of the farms producing strawberries in 1964, supply about two-thirds of the total domestic strawberry output.

U.S. production of strawberries, for fresh market and processing purposes (including freezing), increased in the period between the end of the Second World War and 1957, when output reached an all-time high of 551 million pounds. The following tabulation shows reported production of strawberries for the years 1963-67:

Year	Quantity Million pounds	Value Million dollars	Unit value Cents per pound
1963----------	510	96	18.7
1964----------	549	110	20.0
1965----------	429	95	22.1
1966----------	465	103	22.2
1967----------	474	97	20.5

Fluctuations in total strawberry production reflect, for the most part, year to year changes in production in California, Oregon, and Washington. In recent years, a number of factors--the most important of which have been weather, imports, and labor--have caused the output

of strawberries from the Pacific coast area to fluctuate considerably from year to year.

In the period 1963-67, 57 percent of the domestic strawberry production was sold through fresh market outlets and the remainder to processors. Annual domestic output of fresh market strawberries, which supplies most of the domestic consumption of such strawberries, ranged during 1963-67 from 249 million to 297 million pounds and averaged 275 million pounds, valued at $69 million (table 1). In comparison, annual production averaged 232 million pounds during the 1950's.

In 1963, 78 companies produced frozen strawberries. The four leading producers packed about one-third of the total frozen strawberry output. The domestic frozen strawberry industry is concentrated in California, Washington, and Oregon. Although most firms freezing strawberries also process other fruits and vegetables, frozen strawberries are the principal product for most.

The production of frozen strawberries increased rapidly following the Second World War reaching a peak in 1956 when 312 million pounds (including sugar added) were produced. Annual production since that time has ranged from a high of 262 million pounds in 1958 to a low of 192 million pounds in 1965. It averaged 226 million pounds during 1963-67 (table 2). In recent years about 45 percent of the frozen strawberries have been packed in containers holding 20 ounces or less. Such containers are sold mainly through retail outlets. Most of the remainder have been packed in containers holding 30 pounds or more. Such packs are used mainly by firms preparing preserves, jams, and ice cream.

U.S. exports

During the years 1963-67, annual exports of fresh strawberries, which went mainly to Canada, declined from 21 million pounds in 1964 to less than 10 million pounds in 1967. Canada is also the only important U.S. export market for frozen strawberries. Canadian annual imports of U.S. produced frozen strawberries averaged 1.5 million pounds annually during 1963-67. In earlier years the United States was by far the largest supplier of Canadian frozen strawberry imports, but in recent years Mexico has become the most important supplier.

U.S. imports

U.S. imports of fresh strawberries reached a peak of 7.6 million pounds in 1950, but then declined to negligible quantities in 1957 and 1958. Since that time, they have increased. Annual imports rose from 3.6 million pounds in 1963 to new highs of 13.1 million pounds in 1966 and 21.7 million pounds in 1967 (table 1).

The share of domestic consumption of fresh market strawberries supplied by imports increased during 1963-67 from 1.3 percent to 7.5 percent. During those years, over 90 percent of the fresh strawberry imports entered during the September 16-June 14 tariff period in which the duty is highest (item 146.60) and nearly all came from Mexico. Most of these imports entered during the months of December-May. Of the imports entered during the June 15-September 15 tariff period (item 146.58) during 1963-67, virtually all came from Canada, which was the chief source of all U.S. fresh strawberry imports during the 1950's. The imported fresh strawberries generally sell for the same price in the U.S. market as domestically grown fresh strawberries when of similar type and quality.

U.S. annual imports of frozen strawberries (including strawberry paste and pulp), which come almost entirely from Mexico, have been rising since 1950. Such imports increased steadily from 40 million pounds in 1963 to 92 million pounds in 1966 but totaled only 81 million pounds in 1967. The share of domestic frozen strawberry consumption supplied by imports has increased from virtually none in the early 1950's to 28 percent in 1966 and 1967 (table 2).

There are no reliable price series published that give comparable domestic and Mexican frozen strawberry prices; however, trade sources indicate that the Mexican frozen strawberries usually sell for 5 to 10 percent less than the similar quality domestic product.

Foreign production and trade

Strawberries are produced in many areas of the world but only fragmentary information is available concerning total world strawberry production and trade. Because of the perishable nature of fresh strawberries and the high cost of shipping frozen strawberries long distances, most international trade in strawberries is confined to neighboring countries. The strawberry production and trade of only Mexico and Canada are discussed here, inasmuch as they are the only countries that significantly influence the U.S. fresh and frozen strawberry market.

Mexican annual strawberry production has been increasing since 1948 when strawberries were first produced in significant commercial quantities in that country. For a number of years most of the Mexican output was frozen and exported to the United States. As the Mexican economy and transportation system have improved, however, increased quantities have been marketed in Mexico, mostly in the fresh form. In addition annual exports of fresh strawberries have increased sharply since 1959 when the first sizable shipment was made to the United States.

As in other recent years, most of the 1967 Mexican strawberry output was exported. Mexican strawberry exports are estimated to have totaled approximately 90 million pounds of frozen strawberries--of which about 90 percent went to the United States and virtually all of the remainder to Canada--and about 21 million pounds of fresh strawberries, nearly all of which went to the United States.

In recent years the total Canadian output of strawberries has averaged nearly 40 million pounds annually--equal to less than 10 percent of U.S. output. About two-thirds of the Canadian production has been sold through fresh market outlets and the remainder to processors--mostly for freezing. Most of the Canadian production is believed to be consumed in Canada. Canadian strawberry exports are believed to consist mainly of fresh strawberries, and the United States is probably the most important export market for Canadian fresh strawberries. U.S. imports of such strawberries ranged from a low of 214,000 pounds to a high of 1,216,000 pounds during the years 1963-67.

Table 1.--Strawberries, fresh: U.S. production, imports for consumption, exports, and apparent consumption, 1963-67

(Quantity in thousands of pounds; value in thousands of dollars)

Year	Production 1/	Imports		Exports 2/	Apparent consumption	Ratio (percent) of imports to consumption
		June 15-Sept. 15	Jan. 1-June 14 and Sept. 16-Dec. 31			
	Quantity					
1963	295,131	214	3,433	20,369	278,409	1.3
1964	297,325	686	4,511	20,999	281,523	1.8
1965	3/ 249,246	609	5,834	13,000	242,689	2.7
1966	257,426	1,066	12,069	12,692	257,869	5.1
1967	278,358	1,216	20,520	9,756	290,338	7.5
	Value					
1963	69,632	53	428	4,152	4/	4/
1964	74,111	170	557	4,434	4/	4/
1965	64,571	165	857	3,109	4/	4/
1966	68,124	301	2,103	3,010	4/	4/
1967	68,589	436	3,185	2,572	4/	4/

1/ The data shown include only strawberries produced for fresh market sale. The quantity and value of fresh strawberries produced for processing during the years 1963-67 were as follows:

Year	Quantity 1,000 pounds	Value 1,000 dollars
1963	214,805	25,897
1964	251,568	35,822
1965	179,897	30,313
1966	207,116	34,923
1967	199,668	28,432

The data shown in the tabulation above exclude the following quantities produced but not marketed: 7,700 thousand pounds in 1964, 8,000 thousand pounds in 1965, and 4,200 thousand pounds in 1967.

2/ U.S. export statistics were not separately reported prior to 1965. Data shown for years prior to 1965 are Canadian imports from the United States; exports to other countries in those years are believed to have been small.

3/ Excludes 22,112 thousand pounds not marketed. 4/ Not available.

Source: Production compiled from official statistics of the U.S. Department of Agriculture; imports and 1965-67 exports compiled from official statistics of the U.S. Department of Commerce; 1963-64 exports compiled from official import statistics of the Dominion Bureau of Statistics (Canada).

March 1969
1:8

Table 2.--Strawberries, frozen: U.S. production, imports for consumption, exports, and apparent consumption, 1963-67

(Quantity in thousands of pounds; value in thousands of dollars)

Year	Production	Imports 1/	Exports 2/	Apparent consumption	Ratio (percent) of imports to consumption
	Quantity				
1963	234,440	39,550	2,414	271,576	14.6
1964	252,646	47,233	877	299,002	15.8
1965	191,613	60,573	2,588	249,598	24.3
1966	236,492	92,315	969	327,838	28.2
1967	213,340	80,701	508	293,533	27.5
	Value				
1963	3/	4,964	501	3/	3/
1964	3/	6,618	224	3/	3/
1965	3/	9,057	695	3/	3/
1966	3/	16,794	313	3/	3/
1967	3/	11,037	119	3/	3/

1/ Includes imports of frozen strawberries (item 146.7520) and strawberry paste and pulp (item 152.7420). Frozen strawberry imports were not separately reported prior to Aug. 31, 1963. Frozen strawberry data included for the period prior to that date include only frozen berries from Mexico. Virtually all such imports are believed to have been frozen strawberries. Mexico was the only known supplier of imports of frozen strawberries prior to Aug. 31, 1963. Strawberry paste and pulp imports, all of which are believed to have been frozen, were not separately reported prior to 1967. Imports for earlier years are estimated. About 90 percent of the combined imports shown for the years 1963-67 consisted of frozen strawberries and the rest of strawberry paste and pulp.

2/ U.S. export statistics are not separately reported. Data shown are Canadian imports from the United States. Exports to other countries are believed to have been negligible. 3/ Not available.

Source: Production compiled from official statistics of the National Association of Frozen Food Packers; imports compiled from official statistics of the U.S. Department of Commerce; and exports compiled from official statistics of the Dominion Bureau of Statistics (Canada).

March 1969
1:8

Commodity	TSUS item
Berries:	
Fresh or in brine:	
Lingon or partridge berries	146.52
Loganberries and raspberries:	
Entered July 1-August 31	146.54
Entered any other time	146.56
Other (except blueberries and strawberries)	146.62
Dried:	
Barberries	146.64
Other	146.66
Otherwise prepared or preserved:	
Black currants, gooseberries, lingon or partridge berries, and loganberries	146.73
Other (except blueberries and frozen strawberries)	146.75 (pt.)

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969).

U.S. trade position

Domestic production supplies nearly all of the consumption of the berries considered in this summary. Except for raspberries, imports consist primarily of berries not produced in the United States. Imports of fresh raspberries supplied about 8 percent of the raspberries consumed in 1963-67. Exports are of little significance.

Description and uses

The major types of berries traded in the United States, ranked in order of domestic consumption, are strawberries, cranberries, blueberries, blackberries, raspberries, currants, and gooseberries. This summary covers all berries except strawberries and blueberries, which are discussed in other summaries in this volume. However, dried blueberries and prepared or preserved strawberries other than frozen (both minor items of trade) are within the scope of this summary.

Cranberries are a round to oval fruit produced on low-growing vines. The fruit is usually about $\frac{1}{2}$ inch in diameter and red-mottled in color. Cranberries are not normally consumed as a fresh fruit, but are often marketed in the fresh form. A closely related berry, known variously as lingon berry or partridge berry (see tariff classification), presselberry, cowberry, and foxberry, requires a subartic climate and is not grown commercially in the United States. The

principal use for cranberries and lingon berries is as a sauce, which is usually served with meat. Cranberry sauce is a cooked mixture of cranberries, water, and sugar. Such sauce accounts for virtually all of the U.S. canned cranberry production. Cranberries are also used, alone or with other fruit, in the preparation of fruit drinks.

Caneberries, produced on short-lived woody canes, consist principally of raspberries and blackberries. Raspberries, which consist chiefly of red, black, and purple types, are distinguished from blackberries by their cup-shaped fruit. Blackberries are usually elongated in shape with a center core and generally consist of red or black types. Dewberries and olallieberries, which are types of blackberries, as well as common blackberries, are black in color when mature. Boysenberries, youngberries and loganberries are types of blackberries that are red or reddish-black in color when mature.

The principal uses of caneberries are as fresh fruit and in making jams, jellies, pies, flavoring sirups, dessert toppings, and fermented beverages. Fresh caneberries are highly perishable and susceptible to rapid spoilage after harvest. The bulk of the crop is initially preserved by freezing and later converted to various other processed forms prior to consumption. For all practical purposes caneberries no longer enter the trade of the United States in brine.

Berries preserved with sugar in much the same manner as a jam are dutiable here as prepared or preserved berries if the shape of the fruit in the product largely remains whole. Berry jams, item 153.04, are discussed in another summary in this volume.

Other berries covered by this summary are traded in small quantities relative to those previously enumerated. The most important of these other berries are currants, gooseberries, and elderberries. Currant berries are not the same fruit as Corinth grapes which enter commerce as dried currants (see summary covering item 147.66). Currants and gooseberries are round to oval fruits with longitudinal markings. Gooseberries are green in color, and usually larger in size than currants, which include red, black, and white types. Both kinds of berries are used primarily for making jams and jellies, but are also eaten fresh and in pies. Elderberries are used in making wines, pies, and jellies. Dried berries are used principally in making wine and flavor extracts. Dried barberries are provided for in item 146.64; however, there is no U.S. commercial production or trade.

U.S. tariff treatment

The column 1 rates of duty applicable to imports (see general headnote 3 of the TSUSA-1969 in appendix A) are as follows:

TSUS item	Commodity	Rate prior to Jan. 1, 1968	U.S. concessions granted in 1964-67 trade conference (Kennedy Round)	
			Second stage, effective Jan. 1, 1969	Final stage, effective Jan. 1,1972
	Berries:			
	Fresh or in brine:			
146.52	Lingon or partridge berries.	0.375¢ per lb.	0.2¢ per lb.	Free 1/
	Loganberries and raspberries:			
146.54	Entered July 1-August 31.	0.5¢ per lb.	0.3¢ per lb.	Free 1/
146.56	Entered September 1-June 30.	0.75¢ per lb.	0.6¢ per lb. 2/	0.3¢ per lb.
146.62	Other berries (except blueberries and strawberries).	0.75¢ per lb.	0.4¢ per lb.	Free
	Dried:			
146.64	Barberries----------	2.5¢ per lb.	3/	3/
146.66	Other----------	2¢ per lb.	1.6¢ per lb.	1¢ per lb.
	Otherwise prepared or preserved:			
146.73	Black currants, gooseberries, lingon or partridge berries, and loganberries. 4/	14% ad val.	11% ad val.	7% ad val.
146.75 (pt.)	Other berries (except blueberries and frozen strawberries). 4/	14% ad val.	3/	3/

1/ Becomes free of duty at the fourth stage, effective Jan. 1, 1971.
2/ Rate of duty became effective Jan. 1, 1968, and remains in effect until Jan. 1, 1970.
3/ Rate of duty not affected by the trade conference.
4/ Item 146.72 (other berries, otherwise prepared or preserved) was superseded by items 146.73 and 146.75 on Jan. 1, 1968.

The preceding tabulation shows the column 1 rates of duty in effect prior to January 1, 1968, and modifications therein as a result of concessions granted by the United States in the sixth round of trade negotiations under the General Agreement on Tariffs and Trade. Only the current (that in effect during 1969) and final stages of the rate modifications are shown (see the TSUSA-1969 for the other stages). During the period from August 31, 1963, when the TSUS became effective, to December 31, 1967, the prior rates shown did not change. The rate for dried barberries (item 146.64) is that provided for dried berries in the Tariff Act of 1930, as originally enacted.

The average ad valorem equivalents of the specific rates of duty in effect on December 31, 1967, based on dutiable imports during 1967, were as follows:

TSUS item	Percent
146.52	1.3
146.54	2.6
146.56	2.2
146.62	6.1
146.66	17.2

There were no imports of dried barberries (item 146.64) in 1967.

U.S. consumption

Available information indicates that the domestic consumption of berries covered by this summary averaged in excess of 250 million pounds annually in 1963-67 (tables 1 and 2). In recent years more than 50 percent of the domestic consumption consisted of cranberries, nearly 25 percent of blackberries of various types, about 20 percent of raspberries, and less than 5 percent consisted of all other berries such as gooseberries, currants, elderberries, and lingon berries.

Except for cranberries, which do not compete for the same uses as the caneberries, a large share of the berry production is frozen. The following tabulation shows the average annual utilization during

1963-67 of the different berries covered in this summary, in millions of pounds actual weight:

Type of berry	Fresh	Frozen	Canned 1/
Raspberries	2/ 5.0	34.0	3.9
Blackberries and olallieberries	2/ 7.0	25.1	10.9
Boysenberries and loganberries	2/ 3.0	10.6	3.0
Currants and gooseberries	-	1.3	0.9
Total	15.0	69.7	17.8
Cranberries	37.6	3/	161.9
Grand total	42.6	3/	180.6

1/ Canned weights are greater than weight of berries used.
2/ Estimated.
3/ Not available.

The annual consumption of fresh cranberries, which averaged about 38 million pounds in recent years, has not changed significantly during the past 2 decades. The annual consumption of cranberry sauce has increased from about 129 million pounds (processed weight) in the early 1950's to 162 million pounds in the mid-1960's. Data on the consumption of frozen cranberries, which are required to produce cranberry juice, are not available; however, trade sources indicate that the consumption of cranberry juice has been increasing.

The annual consumption of frozen caneberries increased from about 57 million pounds during 1950-54 to 70 million pounds during 1963-67. During the 1950's most of the increase consisted of boysenberries. Since that time the consumption of frozen boysenberries and black raspberries has declined while the consumption of frozen red raspberries and blackberries has increased. The net change, however, has been an increase in the consumption of frozen caneberries. Red raspberries are the only frozen caneberries sold in substantial amounts through retail outlets for direct consumption. During 1963-67, retail packs accounted for more than a third of the 29-million-pound average annual production of frozen red raspberries.

Producers, production, and exports

Cranberries.--Cranberries are produced on about 20,000 acres in Massachusetts, Wisconsin, New Jersey, Washington, and Oregon; more than one-half the total is in Massachusetts. A Federal marketing order allows handlers to withhold from sale supplies of cranberries in excess of normal market requirements. The marketing order program is intended to minimize the price depressing effects of unusually large crops. There are about 1,400 growers of cranberries in the United

States who generally market their crop through centralized packing facilities. One cooperative accounts for about 80 percent of the domestic volume marketed.

Annual U.S. cranberry production increased from a level of 98 million pounds in the early 1950's to 141 million pounds in 1963-67 (table 2). Exports of cranberries have been small. In recent years such exports have consisted mainly of early season shipments of fresh cranberries to Canada.

In 1967 the production of canned cranberries totaled 170 million pounds, processed weight (table 3). About 30 million pounds of cranberries were sold fresh in 1967 and an unreported quantity was frozen and made into juice.

Caneberries.--Caneberries are grown in every State; however, data on total U.S. production are not available because fruit harvested from small gardens, wild (uncultivated) stands, and some commercial areas is not reported on an annual basis. The most recent data covering the production of caneberries in all States are those reported by the 1964 United States Census of Agriculture. That report shows that the number of farms reporting caneberry production and the acres harvested were as follows for the various types of caneberries:

Type of caneberry	Farms reporting	Acres harvested
Raspberries	10,024	19,147
Blackberries	3,268	7,712
Boysenberries	756	2,620
Loganberries	282	518
Youngberries	31	29
Total	1/	30,026

1/ Cannot be added because some farms produce more than one type of berry.

During 1963-67 the reported U.S. commercial production of caneberries averaged almost 100 million pounds annually, of which nearly 45 percent consisted of red and black raspberries; more than 35 percent of blackberries and olallieberries; and about 20 percent of boysenberries, loganberries, and youngberries (table 2). The principal States producing caneberries are Washington, Oregon, California, and Michigan. Blackberry production in Texas, which is not reported annually, amounted to about 2 million pounds in 1964. Exports of caneberries are negligible.

Other berries.--The U.S. production of berries covered by this summary, other than those previously discussed, has probably averaged less than 3 million pounds annually during recent years. Currants are

produced commercially in Washington and New York State; most are produced for freezing. The average annual production of frozen currants declined from 2.4 million pounds during the early 1950's to 0.9 million pounds during 1963-67 (table 3). Gooseberries are produced commercially in Oregon and Michigan. During 1963-67 the production of canned and frozen gooseberries averaged nearly 1.3 million pounds annually, essentially unchanged since the 1940's. Elderberry production is estimated to have totaled less than 0.5 million pounds annually in recent years. The annual production of canned strawberries, which averaged 3 million pounds in 1963-67, has been characterized by substantial fluctuation over the last 2 decades. Exports of "other" berries are negligible, if any.

U.S. imports

Except for raspberries, imports are primarily of berries not produced in the United States. Annual imports of all berries covered in this summary, on a fresh-weight basis, ranged from 3.8 million to 7.8 million pounds and averaged 5.9 million pounds during 1963-67 (table 4).

Cranberries have been the principal berry imported under item 146.62 ("other" fresh berries). Annual imports under this class averaged 151,000 pounds during 1963-67. Imports of cranberries usually have been intracompany transfers from Canada. During the same period imports of fresh lingon berries, which are used in a manner similar to cranberries, averaged 136,000 pounds annually. Imports of canned or frozen lingon berries and cranberries are believed to have accounted for more than 50 percent of the imports under former item 146.7240 1/ and to have averaged more than 800,000 pounds annually during 1963-67. Lingon berries have been supplied chiefly by Sweden, Norway, and Canada.

U.S. imports of caneberries have consisted primarily of fresh raspberries imported during July and August, when the low seasonal rate of duty for loganberries and raspberries applies. Such imports, all from Canada, ranged from 2.3 million to 4.9 million pounds in 1963-67. Imports of fresh raspberries and loganberries during the months of September through June have been insignificant, principally because few such berries are harvested during these months in Canada. Imports

1/ Effective Jan. 1, 1968, as a result of the 1964-67 trade conference, item 146.7240 (otherwise prepared or preserved other berries, except blueberries and frozen strawberries) was superseded by items 146.73 (otherwise prepared or preserved black currants, gooseberries, lingon or partridge berries, and loganberries) and item 146.7540 (otherwise prepared or preserved other berries, except blueberries and frozen strawberries).

of fresh raspberries supplied an estimated 8 percent of the raspberries consumed domestically during 1963-67. During 1963-67 annual imports of otherwise prepared or preserved caneberries, which consisted principally of frozen berries, are believed to have ranged from about 100,000 pounds in some years to more than 1 million pounds in 1965. Such imports accounted for about 30 percent of the imports entered under item 146.7240 during that period. In 1965 imports of these caneberries, which came principally from the United Kingdom, Poland, and the Netherlands, included about 800,000 pounds of raspberries and 400,000 pounds of blackberries.

U.S. imports of berries covered by this summary, except those previously discussed, are reported under one of three TSUS basket classes. Imports of such berries under item 146.62, the basket class for fresh or in-brine berries, have been negligible.

During 1963-67 imports under item 146.66, the basket class for dried berries, ranged from 71,000 to 242,000 pounds dried weight, equivalent to an estimated 568,000 to 1,936,000 pounds fresh weight. These imports consisted chiefly of dried elderberries from Portugal, West Germany, and Poland, and lesser amounts of dried blueberries and dried mulberries. Imports under former item 146.7240, the basket class for otherwise prepared or preserved berries, averaged 1.6 million pounds annually during 1963-67 (table 4). Of this amount, less than 20 percent consisted of otherwise prepared or preserved berry imports not previously discussed such as gooseberries, currants, elderberries, and cloudberries. These imports included berry preserves and sauces as well as canned and frozen berries.

Table 1.--Berries, except blueberries and strawberries: U.S. production and imports for consumption, 1963-67

Year	Production 1/	Imports 2/	Production plus imports
	Quantity (1,000 pounds, fresh weight equivalent)		
1963	215,741	3,828	219,569
1964	225,289	5,109	230,398
1965	245,616	7,801	253,417
1966	277,624	6,600	284,224
1967	243,314	6,264	249,578
	Value (1,000 dollars)		
1963	29,759	778	3/
1964	34,892	849	3/
1965	41,616	1,349	3/
1966	41,654	1,479	3/
1967	34,455	1,123	3/

1/ Represents an estimated 90 percent of U.S. production (table 2).
2/ Dried and "other" imports converted to fresh weight equivalent at the rate of 1 pound of dried equals 8 pounds of fresh and 1 pound of "other" equals 0.6 pounds of fresh (see table 4).
3/ Not added. Values of components are not comparable.

Source: Production compiled from official statistics of the U.S. Department of Agriculture and the California Department of Agriculture; imports compiled from official statistics of the U.S. Department of Commerce, except as noted.

Note.--Exports are not separately reported but are believed to amount to less than 1 million pounds annually.

Table 2.--Berries, fresh, except blueberries and strawberries: U.S. production, by kinds, 1/ 1963-67

Kind of berry	1963	1964	1965	1966	1967
	Quantity (1,000 pounds)				
Caneberries:					
Blackberries 2/	28,372	32,560	39,835	49,316	40,802
Boysenberries 3/	14,680	13,615	14,180	16,595	13,850
Loganberries	2,160	1,680	1,406	2,009	2,009
Red raspberries	34,072	31,233	32,861	38,379	35,072
Black raspberries	9,837	10,527	12,136	9,533	7,679
Total	89,121	89,615	100,418	115,832	99,412
Cranberries	125,450	134,450	143,680	159,860	142,430
Currants	1,170	1,224	1,518	1,932	1,472
Grand total	215,741	225,289	245,616	277,624	243,314
	Value (1,000 dollars)				
Caneberries:					
Blackberries 2/	3,195	5,272	6,967	4,538	3,645
Boysenberries 3/	2,032	2,385	3,066	3,045	1,356
Loganberries	266	286	309	396	184
Red raspberries	6,156	4,886	5,850	7,172	5,338
Black raspberries	3,539	2,782	3,153	1,734	1,860
Total	15,188	15,611	19,345	16,885	12,383
Cranberries	14,458	19,137	22,072	24,561	21,889
Currants	113	144	199	208	183
Grand total	29,759	34,892	41,616	41,654	34,455

1/ Data shown for caneberries and currants represent commercial production in the States of Washington, Oregon, and California, and the production of raspberries for processing in the State of Michigan. Production data are not available for blackberries produced in Texas, fresh-market raspberries produced in Michigan, and for production for local markets in all States. Cranberry production shown is total U.S. production. Data include minor quantities not utilized.

2/ Includes olallieberries produced in California.

3/ Includes youngberries.

Source: Compiled from official statistics of the U.S. Department of Agriculture and the California Department of Agriculture.

March 1969
1:8

Table 3.--Berries, except blueberries and frozen strawberries: U.S. pack of canned and frozen berries, by kinds, 1963-67

(In thousands of pounds, net processed weight)

Item	1963	1964	1965	1966	1967
Canned: 1/					
Cranberries	158,736	148,512	160,848	171,984	169,584
Blackberries	10,005	8,700	11,876	11,528	12,354
Boysenberries 2/	2,871	2,523	3,176	3,350	2,828
Raspberries	4,655	3,524	4,176	4,046	3,176
Strawberries	2,349	2,523	2,741	3,828	3,350
Gooseberries	827	783	1,262	740	783
Total	179,443	166,565	184,079	195,476	192,075
Frozen:					
Blackberries 3/	23,338	24,160	27,072	25,875	24,991
Boysenberries	9,521	8,840	8,962	9,165	8,433
Loganberries	2,023	1,344	1,243	1,750	1,672
Red raspberries	31,441	25,335	27,631	31,575	27,394
Black raspberries	7,332	5,954	6,210	3,465	3,771
Currants	965	1,295	715	650	891
Gooseberries	237	258	383	968	309
Total	74,857	67,186	72,216	73,448	67,461

1/ Cases of 24 size 2½ cans converted to pounds at the rate of 48 pounds per case for cranberries and 43.5 pounds per case for all other berries.

2/ Includes canned loganberries.

3/ Includes California olallieberries.

Source: Official statistics of the National Canners Association and the National Association of Frozen Food Packers.

Table 4.--Berries, except blueberries and strawberries: U.S. imports for consumption, 1963-67

Year	Fresh or in brine				Otherwise prepared or preserved 1/		Total (quantity converted to fresh weight 2/)
	Lingon berries	Loganberries and raspberries: July 1-Aug. 31	Loganberries and raspberries: Sept. 1-June 30	Other berries	Dried	Other	
	Quantity (1,000 pounds)						
1963	162	2,320	56	9	71	1,188	3,828
1964	130	2,619	22	57	165	1,602	5,109
1965	145	3,712	-	548	242	2,433	7,801
1966	112	4,919	1	92	80	1,394	6,600
1967	131	4,100	1	49	162	1,145	6,264
	Value (1,000 dollars)						
1963	32	467	8	3	19	249	778
1964	27	410	4	12	48	348	849
1965	40	744	-	56	44	465	1,349
1966	36	1,045	1	7	20	370	1,479
1967	38	799	3/	6	19	261	1,123
	Unit value (cents per pound)						
1963	19.6	20.1	15.2	28.2	26.9	20.9	4/
1964	20.5	15.6	16.4	21.7	29.4	21.7	4/
1965	27.7	20.0	-	10.2	18.1	19.1	4/
1966	32.1	21.2	52.1	8.1	25.1	26.6	4/
1967	29.2	19.5	35.7	12.4	11.6	22.8	4/

1/ Although the import classification "dried" includes blueberries and strawberries, only insignificant amounts of dried blueberries are believed to have been imported during this period. The imports reported under "other" include canned or otherwise prepared or preserved strawberries (except frozen); imports of such strawberries during the period shown are believed to have been small. Imports of frozen berries are not included prior to Aug. 31, 1963.

2/ Dried and "other" imports converted to fresh weight equivalent at the rate of 1 pound of dried equals 8 pounds of fresh and 1 pound of "other" equals 0.6 pounds of fresh.

3/ Less than $500.

4/ Not meaningful.

Source: Compiled from the official statistics of the U.S. Department of Commerce, except as noted.

March 1968
1:8

Commodity	TSUS item
Cashew apples, mameyes colorados, sapodillas, soursops, sweetsops, and papayas:	
Fresh, or prepared or preserved:	
All except papayas	146.80, -.81
Papayas, fresh	148.60, -.61
Papayas, prepared or preserved	148.65, -.66
Fruit paste or pulp	152.46, -.47
Cashew apple, mamey colorado, sapodilla, soursop, sweetsop, papaya, and mango jelly, jam, marmalade, or fruit butter	153.00

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969).

U.S. trade position

Of the six fruit discussed in this summary, only papaya is produced in more than token quantities in the United States. Imports of all six fruit are small and exports are negligible.

Comment

This summary covers six tropical fruit that are specifically provided for in the Tariff Schedules of the United States (TSUS). These fruit are of minor commercial importance in U.S. trade. While mango jelly or jam is included with products covered by this summary, fresh or prepared or preserved mangoes (item 147.90) are discussed in another summary in this volume. Four of the fruit discussed in this summary are grown chiefly in Latin America. Another, the cashew apple, is grown principally in India and Africa. The sixth fruit, the papaya, is grown commercially in the United States, Australia, the Republic of South Africa, and to a lesser extent in Latin America. The annual domestic consumption of these six fruit is estimated to have averaged about 25 million pounds in recent years. Such consumption has consisted almost entirely of papayas.

Papayas.--The papaya is a melon-like fruit produced on the trunk of a single-stemmed tree. Fruit can be harvested the same year the plant is propagated. The fruit is used chiefly as a fresh dessert fruit but is also canned or processed into other products, including juice. The processed fruit is frequently used as an ingredient in tropical fruit salads and mixed fruit drinks. Papaya, which is the source of the digestive enzyme papain, is sometimes used as a medicinal aid.

March 1969
1:8

Hawaii accounts for nearly all of the U.S. production of papayas; Florida produces most of the remainder. During 1963-67, the annual production of papayas in Hawaii averaged 19 million pounds, almost double the average of the 1950's. In recent years more than 3 million pounds of the Hawaiian production has been processed annually. The 1964 United States Census of Agriculture reported that more than 1 million pounds of papayas were harvested in Florida and nearly 1 million pounds of papayas were harvested in Puerto Rico in that year. A small share of the Puerto Rican papayas are shipped to the United States.

During 1964-67, U.S. imports of papayas and papaya products averaged an estimated 1.5 million pounds annually (see table). The principal suppliers of these imports were the Bahamas for fresh papayas; Mexico, Australia, and Taiwan for prepared or preserved papayas; and Nicaragua and Australia for papaya paste and pulp. Nearly all of the imports of pastes and pulps included in this summary (item 152.46) have consisted of papaya in recent years.

Cashew apple.--The cashew apple is the fleshy part of the fruit from which is suspended the cashew nut of commerce (item 145.44 which is discussed in volume 7 of schedule 1 summaries). The apples are usually discarded in the production of cashew nuts but sometimes they are used in the preparation of jellies, jams, or wine. U.S. imports of cashew apples and cashew apple products have been negligible, if any.

Mamey colorado.--Mamey colorado is the name traditionally used in Cuba for the sapote (Calocarpum mammosum), a fruit native to Central America. The sapote is a woody skinned, 3 to 6 inch long, fruit having a rich, sweet, somewhat granular flesh and generally one large seed. The fruit is usually consumed out of hand or as a dessert fruit. The small imports reported under item 146.80 in recent years have been chiefly frozen mamey fruit from the Dominican Republic.

Sapodilla.--The sapodilla, a common tropical fruit in Latin America, is highly regarded for its delicate sweet pear flavor. The fruit, which is used principally for dessert purposes, is similar in size and shape to a large plum, with a grayish or rusty-brown colored skin, a yellowish-brown flesh, and containing from 9 to 12 black seeds. The sap of the sapodilla tree contains chicle, the principal ingredient of chewing gum. A few thousand pounds of sapodillas are grown in Florida and Puerto Rico. U.S. imports have been negligible.

Soursop.--The soursop, a large, often irregularly shaped fruit, is dark green in color and covered with numerous fleshy spines. The fruit is slightly subacid and is used most commonly in preparing drinks, sherberts, ice creams, jellies, and preserves but is sometimes eaten as a dessert fruit. About 80,000 pounds of soursops were

reported to have been marketed in Puerto Rico in 1966. There is no reported U.S. production. U.S. imports, if any, have been negligible in recent years.

Sweetsop.--The sweetsop, which is also called sugar apple, is a fruit composed of loosely cohering shingle-like parts (carpels), usually covered with a whitish bloom. Sweetsops are highly perishable and are generally eaten fresh as a dessert fruit. The fruit pulp, in which numerous small brown seeds are embedded, is cream colored and has a custard-like consistency. Less than 1,000 pounds of sweetsops are produced in Florida annually and imports are probably nil.

Most of the imports entered in recent years under item 153.00 are believed to have consisted of mango jelly or jam. Total imports under this category in 1967 amounted to 17,000 pounds (see table).

U.S. tariff treatment

The column 1 rates of duty applicable to imports (see general headnote 3 in the TSUSA-1969) are as follows:

TSUS item	Commodity	Rate prior to Jan. 1, 1968	U.S. concessions granted in 1964-67 trade conference (Kennedy Round)	
			Second stage, effective Jan. 1, 1969	Final stage, effective Jan. 1, 1972
146.80	Cashew apples, mameyes colorados, sapodillas, soursops, or sweetsops, fresh or prepared or preserved.	15% ad val.	12% ad val.	7% ad val.
146.81	If products of Cuba--	10% ad val.	1/	2/
148.60	Papayas, fresh----------	17.5% ad val.	14% ad val.	8.5% ad val.
148.61	If product of Cuba-----	Free	1/	1/
148.65	Papayas, prepared or preserved.	15% ad val.	12% ad val.	7% ad val.
148.66	If product of Cuba---	10% ad val.	1/	2/
152.46	Cashew apple, mamey colorado, sapodilla, soursop, sweetsop, or papaya paste or pulp.	17.5% ad val.	1/	1/
152.47	If products of Cuba--	10% ad val.	1/	1/
153.00	Cashew apple, mamey colorado, sapodilla, soursop, sweetsop, papaya, or mango jelly, jam, marmalade, or fruit butter.	10% ad val.	8% ad val.	5% ad val.

1/ Rate of duty not affected by the trade conference.
2/ Subordinate Cuban provisions deleted effective Jan. 1, 1970.

The tabulation above shows the column 1 rates of duty in effect prior to January 1, 1968, and modifications therein as a result of concessions granted by the United States in the sixth round of trade negotiations under the General Agreement on Tariffs and Trade. Only

the second (that in effect during 1969) and final (fifth) stages of the annual rate modifications are shown (see the TSUSA-1969 for the other stages). Of the fruit covered in this summary, the only rate not modified in the sixth round was that on paste or pulp (item 152.46). The prior rates shown did not change during the period from August 31, 1963, when the TSUS became effective, to December 31, 1967.

The duty-free status and the preferential rates of duty for products of Cuba were suspended on May 24, 1962. Imports from Cuba have been prohibited since February 7, 1962.

Six tropical fruit (cashew apples, mameyes colorados, sapodillas, soursops, sweetsops and papayas): U.S. imports for consumption, by tariff items, 1964-67

Year	Six fresh or prepared or preserved fruit			Paste or pulp (152.46)	Jelly, jam, marmalade, or fruit butter 1/ (153.00)	Total of items shown
	Five fruit (146.80)	Papaya				
		Fresh (148.60)	Prepared or preserved (148.65)			
	Quantity (1,000 pounds)					
1964	15	2/ 269	602	722	1	1,609
1965	2/ 84	409	457	565	3	1,518
1966	78	302	386	617	-	1,383
1967	2/ 37	231	807	665	17	1,757
	Value (1,000 dollars)					
1964	6	2/ 15	76	69	3/	166
1965	2/ 32	14	61	41	3/	148
1966	35	16	40	55	-	146
1967	2/ 12	15	83	69	2	181
	Unit value (cents per pound) 4/					
1964	38	6	13	10	33	5/
1965	39	3	13	7	11	5/
1966	46	5	10	9	-	5/
1967	32	6	10	10	15	5/

1/ Includes a seventh fruit, mangoes.
2/ Excludes imports reported from Canada and Argentina which were incorrectly recorded in the official statistics.
3/ Less than $500.
4/ Computed from the unrounded figures.
5/ Not meaningful.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Commodity	TSUS item
Cherries:	
Fresh:	
Not in airtight or watertight containers---	146.90
In airtight or watertight containers-------	146.91
Dried----------	146.93
In brine:	
With pits----------	146.95
With pits removed----------	146.96
Frozen----------	146.97
Otherwise prepared or preserved----------	146.99
Candied, crystallized, or glace----------	154.05

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969).

U.S. trade position

Domestic production accounts for well over 90 percent of the cherries consumed in the United States. Imports, however, supply more than half of the consumption of glace cherries in most years. Exports of fresh cherries exceed imports of such cherries. Exports of canned and frozen cherries, which are not significant import items, have increased significantly in recent years.

Description and uses

Cherries may be divided into two broad categories: sweet cherries, which are marketed fresh and in various processed forms, and sour cherries, most of which are marketed in canned or frozen form.

Fresh cherries (item 146.90) are a highly seasonal product. The only commercial product classified under item 146.91 (fresh cherries in airtight or watertight containers) is Dalmatian-type sour cherries, which are not harvested until they have become semidry on the tree. Such cherries are marketed in sealed wooden casks. This unique product, which is not produced domestically and is an unimportant item of trade, is used to make maraschino liqueur.

Cherries in brine (items 146.95 and 146.96) are cherries which have been bleached in a water solution of sulfur dioxide (SO_2) and preserved in the same liquid, with lime added to harden the fruit. The brined fruit, which can be stored for a long period without deterioration, is marketed in the brine solution. After removal of the SO_2 by washing, such cherries are used in the production of

maraschino, fruit cocktail (including fruit salad), glace, and similar processed cherries.

Maraschino cherries (item 146.99), made by adding color, flavor, and sugar to brined cherries, are normally preserved in sirup. Such cherries, which usually are 35 to 45 percent sugar by weight, are used in the manufacture of chocolate-covered cherries, and in decorating and flavoring various confections, ice cream, cocktails, and bakery products. Fruit cocktail cherries (item 146.99) are like maraschino cherries except that little, if any, sugar or flavor is added before these cherries are mixed with the other fruit cocktail ingredients and canned. Such cherries are sweetened by absorbing sugar from the sirup in which the fruit cocktail is packed. Sweet cherries canned in sirup (item 146.99) are used for dessert purposes. Canned (item 146.99) and frozen (item 146.97) sour cherries are used mainly as a filling in pies and other bakery products. Brandied cherries (item 146.99) are cherries preserved in alcohol for use in fancy desserts.

In the trade, the terms "candied cherries," "crystallized cherries," and "glace cherries" (item 154.05) as well as the term "drained cherries" are generally used more or less interchangeably. In this summary, the designation "glace cherries" is used to refer to all such products. It includes cherries which are heavily impregnated with sugar (usually 70 percent or more by weight), some of which have an added surface covering of sugar crystals or a smooth, shiny coating of sugar sirup. Glace cherries are used chiefly in fruit cakes and other bakery products (see the summary entitled "Candied Fruit (Except Cherries)" contained in this volume.

Dried cherries (item 146.93), a minor item of trade, are used in the home and by the baking trade in the same manner as raisins.

Imported cherries, both fresh and preserved, usually compete directly with those produced domestically except fresh imported Dalmatian-type sour cherries, which are not produced domestically.

U.S. tariff treatment

The column 1 rates of duty applicable to imports (see general headnote 3 of the TSUSA-1969) are as follows:

TSUS item	Commodity	Rate prior to Jan. 1, 1968	U.S. concessions granted in 1964-67 trade conference (Kennedy Round)	
			Second stage, effective Jan. 1, 1969	Final stage, effective Jan. 1, 1972
	Cherries:			
	Fresh:			
146.90	Not in airtight or watertight containers.	0.5¢ per lb.	0.4¢ per lb. 1/	0.2¢ per lb. 2/
146.91	In airtight or watertight containers.	2¢ per lb.	1.5¢ per lb.	1¢ per lb.
146.93	Dried	6¢ per lb.	3/	3/
	In brine:			
146.95	With pits	5.5¢ per lb.	3/	3/
146.96	With pits removed	9.5¢ per lb.	3/	3/
146.97	Frozen 4/	7¢ per lb. + 10% ad val.	5.5¢ per lb. + 8% ad val.	3.5¢ per lb. + 5% ad val.
146.99	Otherwise prepared or preserved. 4/	7¢ per lb. + 10% ad val.	3/	3/
154.05	Candied, crystallized, or glace.	7¢ per lb. + 10% ad val.	3/	3/

1/ Rate of duty became effective Jan. 1, 1968 and remains in effect until Jan. 1, 1970.

2/ The final rate for this item becomes effective Jan. 1, 1971.

3/ Rate of duty not affected by the trade conference.

4/ Item 146.98 (otherwise prepared or preserved cherries) was superseded by items 146.97 and 146.99 on Jan. 1, 1968.

The tabulation above shows the column 1 rates of duty in effect prior to January 1, 1968, and modifications therein resulting from concessions granted by the United States in the sixth round of trade negotiations under the General Agreement on Tariffs and Trade. Only the current (that in effect during 1969) and final stages of the rate modifications are shown (see the TSUSA-1969 for the other stages).

The rates of duty for dried cherries (item 146.93) and cherries in brine (items 146.95 and 146.96) are those provided in the Tariff Act of 1930, as originally enacted. The prior rates shown did not change during the period August 31, 1963, when the TSUS became effective, to December 31, 1967.

The ad valorem equivalents of the specific and compound rates of duty in effect on December 31, 1967, based on dutiable imports during 1967, were as follows:

TSUS item	Percent
146.90	2.0
146.91	3.3
146.93	16.6
146.95	24.1
146.96	30.6
146.98 (superseded by items 146.97 and 146.99 on Jan. 1, 1968)	28.4
154.05	32.2

U.S. producers

In 1964 fresh cherries were harvested from 28,418 farms. The production of cherries is generally the principal enterprise for most large-scale producers. The principal States producing sweet cherries are Oregon, California, Washington, and Michigan. The principal sour cherry producing States are Michigan, New York, Wisconsin, and Pennsylvania.

In 1966 approximately 50 establishments were engaged in the production of brined cherries, about 25 produced maraschino cherries, about 10 produced glace cherries, about 85 produced canned cherries, and about 20 produced frozen cherries. Some of these establishments produce more than one of the cherry products mentioned. Most processors of cherries also produce other food products. Producers of brined, canned, and frozen cherries are located in areas where the fruit is grown. Maraschino and glace cherry producers are usually located near major population centers.

U.S. production and consumption

Domestic production, which supplies almost all of the cherries consumed in the United States, increased from an annual average of 439 million pounds in the 1950's to 455 million pounds in the years 1963-67 (table 1). Production fluctuates sharply from year to year inasmuch as the crop is highly susceptible to frost damage and because a large crop is generally followed by a small crop the following year. More than 55 percent of the production during 1963-67 consisted of sour cherries and the remainder was of sweet cherries. Practically all of the sour cherries and over half of the sweet cherries produced are processed. Sales of cherries for fresh use, which ranged from 67 million to 105 million pounds annually in the years 1963-67, supplied nearly all domestic needs plus a quantity for export (table 2).

Sharply increased plantings of cherry trees, especially of the sweet type, have occurred in recent years and may increase production substantially during the 1970's as these trees come into full production.

Domestic production of brined cherries has shown an irregular upward trend for a number of years. In the period 1963-67, production--almost entirely from sweet cherries--ranged between 55 million and 109 million pounds annually (table 3). Consumption, which is supplied mostly by domestic production, has also been increasing gradually for a number of years. Such consumption does not fluctuate materially from year to year because the demand by the producers of processed cherries is quite stable. Brined cherries may be kept in storage for considerable periods of time and excess production is stored in barrels or large tanks until the fruit is used by processors.

Domestic production of prepared or preserved cherries (other than dried, brined, and glace) in 1963-67 was sufficient to supply virtually all annual consumption and substantial quantities of canned and frozen cherries for export (table 4). During those years canned cherry production averaged 107 million pounds annually while frozen cherry production averaged 125 million pounds annually. Production of maraschino and fruit cocktail cherries probably averaged an additional 90 million pounds annually. The bulk of the canned and frozen cherries produced were from sour cherries, whereas nearly all of the maraschino and fruit cocktail cherries were made from brined sweet cherries.

Apparent consumption of glace cherries, 58 percent of which was imported, averaged about 14 million pounds annually in the period 1963-67 compared with 9 million pounds in 1948-51. During 1963-67, domestic production, which had declined one-third since 1958-51, averaged 6 million pounds annually (table 5). Exports were negligible or nil.

Domestic production of dried cherries is believed to have been negligible or nil in recent years. Consumption (supplied almost entirely by imports) has been small and sporadic for a number of years.

U.S. exports

Exports of fresh cherries, which averaged 2 million pounds annually during the 1950's, reached an average of 4 million pounds annually in 1963-67 (table 2). Such exports went largely to Canada.

Exports of canned cherries (mostly sour) have increased from an average of 2 million pounds annually during the 1950's to 14 million pounds in 1963-67 (table 4). By far the largest share of exports have gone to European markets (especially West Germany, Belgium, and the Netherlands) in recent years. Exports, which ranged from 3 million to 38 million pounds annually in 1963-67, fluctuate considerably from year to year depending mainly on the quantities of U.S. and European canned cherries available and their prices. While these factors have favored U.S. exports in recent years, U.S. interests have also been very active in promoting such exports.

Exports of frozen cherries (mostly sour), which were not separately reported prior to 1965, amounted to 9 million pounds in 1965, 4 million pounds in 1966, and 1 million pounds in 1967 (table 4). Exports of other kinds of processed cherries are believed to have been negligible in recent years.

U.S. imports

Annual imports of fresh cherries (item 146.90) ranged from 1 million to 3 million pounds in 1963-67 and accounted for 4 percent or less of annual domestic consumption (table 2). Such imports are largely sweet cherries from Canada, but in most years also include significant quantities from Chile and Argentina during the winter months. Imports of fresh cherries in airtight or watertight containers (item 146.91) consist of Dalmatian-type sour cherries from Yugoslavia and Italy.

Total imports of brined cherries, which fluctuate from year to year depending largely on the domestic and European market situation, averaged 3.7 million pounds annually during the 1950's and 3.4 million pounds during the period 1963-67 when they were equivalent to less than 4 percent of consumption. Italy and Spain are the principal sources of imports of cherries in brine. While annual imports have shown little change for many years, the share of such imports accounted for by brined cherries with pits removed (item 146.96)

declined from an average level of 95 percent of the total in the 1950's to about 75 percent in 1963-67. Some shipments of brined cherries have been refused entry because they did not meet Food and Drug Administration standards. Such actions and the threat of similar actions may have held down total imports in recent years.

Imports of cherries otherwise prepared or preserved (item 146.98) 1/ were not separately reported prior to August 31, 1963, but are known to have been small. Annual imports of such cherries increased from 51,000 to 103,000 pounds during the years 1964-67 (table 4). Most of the imports consisted of brandied cherries from Italy.

The volume of annual imports of glace cherries (item 154.05) increased from an average of 1 million pounds in 1950-54 to 5 million pounds in 1955-59, and to 8 million pounds in 1963-67. In the latter period, imports were equivalent to 58 percent of consumption. The bulk of the imports have come from France. In an investigation in 1952 under the provisions of section 7 of the Trade Agreements Extension Act of 1951, the Commission found that glace cherries were not being imported in such increased quantities as to cause or threaten serious injury to the domestic industry.

Imports of dried cherries (item 146.93) have been small and sporadic for a number of years, ranging from none to 45,000 pounds during 1963-67. Canada was the only supplier in that period.

Foreign production and trade

Cherries are produced in many areas of the world. International trade in fresh cherries usually is limited to neighboring countries because of the perishable nature of the fruit. Processed cherries (e.g., canned, brined, and glace cherries) are far more important in international trade than fresh cherries. West Germany, the United States, Italy, and France account for about two-thirds of the reported world production of fresh cherries, which does not include production from most Communist-bloc countries. A large part of the reported fresh production is processed before being marketed. Only fragmentary data are available on international trade in processed cherries.

1/ Effective Jan. 1, 1968, item 146.98 was superseded by item 146.97 (frozen cherries) and item 146.99 (otherwise prepared or preserved cherries).

Table 1.--Cherries: U.S. production and utilization, by types, 1963-67

(In thousands of pounds)

Type and year	Production 1/	Utilization			
		Sold fresh	Canned	Frozen	Brined
Sour cherries:					
1963	161,580	7,770	61,690	88,700	1,430
1964	451,846	13,666	199,532	233,268	2,530
1965	322,028	9,806	136,386	170,002	3,450
1966	177,932	9,994	2/ 73,476	92,332	2/
1967	171,780	6,116	2/ 60,348	103,608	2/
Sweet cherries:					
1963	138,720	63,580	17,580	720	53,580
1964	236,270	91,632	33,890	950	106,068
1965	173,160	56,790	26,350	3/	3/ 87,202
1966	222,100	84,928	4/ 25,086	4/ 2,210	4/ 106,528
1967	220,306	81,352	28,984	1,100	105,818
Total, sour and sweet cherries:					
1963	300,300	71,350	79,270	89,420	54,910
1964	688,116	105,298	233,422	234,218	108,598
1965	495,188	66,596	162,736	3/ 170,002	3/ 87,202
1966	400,032	94,922	2/4/ 101,062	4/ 94,542	2/4/ 106,528
1967	392,086	87,468	2/ 89,332	104,708	2/ 105,818

1/ Excludes economic abandonment and includes quantities used on farms.

2/ The small quantity of sour cherries that were brined are included with canned cherries to avoid disclosure of individual operations.

3/ The small quantity of sweet cherries that were frozen are included with brined cherries to avoid disclosure of individual operations.

4/ Small quantities of sweet cherries that were canned or frozen are included with brined cherries to avoid disclosure of individual operations.

Source: Compiled from official statistics of the U.S. Department of Agriculture.

Note.--The value of cherry production sold in the years 1963-67 was as follows (in thousands of dollars):

Year	Sour	Sweet	Total
1963	15,224	24,292	39,516
1964	22,937	33,698	56,635
1965	16,161	28,072	44,233
1966	24,175	42,523	66,698
1967	29,785	42,417	72,202

March 1969
1:8

Table 2.--Cherries, fresh: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1963-67

(Quantity in thousands of pounds; value in thousands of dollars)

Year	Production 1/	Imports 2/	Exports	Apparent consumption	Ratio (percent) of imports to consumption
	Quantity				
1963	71,350	3,062	2,307	72,105	4.2
1964	105,298	1,910	2,933	104,275	1.8
1965	66,596	939	4,382	63,153	1.5
1966	94,922	1,909	5,991	90,340	2.1
1967	87,468	2,881	3,635	86,714	3.3
	Value				
1963	3/	497	761	3/	3/
1964	3/	490	917	3/	3/
1965	3/	240	1,269	3/	3/
1966	3/	445	1,755	3/	3/
1967	3/	737	1,195	3/	3/

1/ Production data include only cherries sold through fresh market outlets.

2/ In addition to the data shown, an average of about 75 thousand pounds of partially dried on the tree Dalmatian cherries, which have been declared to be fresh (TSUS item 146.91) for tariff purposes, have entered annually for processing.

3/ Not available.

Source: Production compiled from official statistics of the U.S. Department of Agriculture; imports and exports compiled from official statistics of the U.S. Department of Commerce.

Note.--Production data shown include only cherries sold through fresh market outlets. The import and export data shown are believed to include only cherries destined for fresh market sale. If in calculating consumption the production data for cherries harvested for all purposes is used rather than that for the portion of the crop sold for fresh use, the ratio (percent) of imports to consumption is as follows for the years 1963-67:

Year	Ratio	Year	Ratio
1963	1.0	1966	0.5
1964	.3	1967	.7
1965	.2		

Table 3.--Cherries, brined: U.S. production, imports for consumption, and apparent consumption, 1963-67

(In thousands of pounds)

Year	Production 1/	Imports 2/	Apparent consumption 3/	Ratio (percent) of imports to consumption
1963	54,910	4,937	59,847	8.2
1964	108,598	5,232	113,830	4.6
1965	87,202	2,443	89,645	2.7
1966	106,528	1,736	108,264	1.6
1967	105,818	2,718	108,536	2.5

1/ The value of production is not available.

2/ The value of imports were as follows:

Year	Value 1,000 dollars
1963	871
1964	983
1965	503
1966	465
1967	761

3/ Production plus imports. Exports, if any, are negligible.

Source: Production compiled from official statistics of the U.S. Department of Agriculture; imports compiled from official statistics of the U.S. Department of Commerce.

Table 4.--Cherries, prepared or preserved, except dried, brined, and glace: U.S. production and exports of domestic merchandise, 1963-67

(In thousands of pounds)

Year	Production 1/		Exports	
	Canned	Frozen	Canned	Frozen
1963	63,032	82,687	6,466	2/
1964	197,490	204,127	13,954	2/
1965	136,503	147,846	37,963	9,337
1966	69,556	90,645	6,342	4,538
1967	70,296	101,124	3,152	1,327

1/ In addition to production shown, it is estimated that 60,000 thousand to 65,000 thousand pounds of maraschino-type cherries and 25,000 thousand to 30,000 thousand pounds of fruit-cocktail-type cherries were produced annually.

2/ Exports of frozen cherries were not separately reported prior to 1965.

Source: Production compiled from data supplied by the National Canners Association and the National Association of Frozen Food Packers; exports compiled from official statistics of the U.S. Department of Commerce.

Note.--Prior to Aug. 31, 1963, the import class covering prepared or preserved cherries, except dried and brined, included glace cherries. Despite the separate classification provided for glace cherries after that time, substantial quantities of such cherries have continued to enter under the prepared or preserved cherry classification. Annual imports of prepared or preserved cherries during 1964-67, after adjustment for merchandise classifiable elsewhere, were as follows:

Year	Quantity (1,000 pounds)	Value (1,000 dollars)
1964	51	38
1965	85	54
1966	86	54
1967 (estimated)	103	66

Most of these imports consisted of brandied cherries from Italy.

Table 5.--Cherries, glace: U.S. production, imports for consumption, and apparent consumption, 1963-67

(Quantity in thousands of pounds; value in thousands of dollars)

Year	Production	Imports 1/	Apparent consumption 2/	Ratio (percent) of imports to consumption
	Quantity			
1963	4,991	8,238	13,229	62.3
1964	4,849	8,089	12,938	62.5
1965	5,804	8,053	13,857	58.1
1966	7,408	7,069	14,477	48.8
1967	6,375	8,810	15,185	58.0
	Value			
1963	2,737	2,124	3/	3/
1964	2,207	2,252	3/	3/
1965	2,462	2,205	3/	3/
1966	3,187	2,324	3/	3/
1967	2,860	2,781	3/	3/

1/ Includes glace cherries entered under TSUS item 146.98 as explained in the note to table 4.

2/ Production plus imports. Exports, if any, are negligible.

3/ Not available.

Source: Production compiled from information supplied by domestic producers, imports compiled from official statistics of the U.S. Department of Commerce, except as noted.

Commodity	TSUS item
Citron:	
Fresh, dried, or in brine	147.00
Otherwise prepared or preserved	147.02
Candied, crystallized, or glace	154.15
Fruit peel:	
Crude, dried, or in brine:	
Citron	152.10
Orange	152.14
Lemon	152.18
Other	152.22
Otherwise prepared or preserved (excludes candied, crystallized, or glace):	
Citron	152.26
Orange	152.30
Lemon	152.34
Other	152.38, -.39
Candied, crystallized, or glace:	
Citron	154.20
Lemon	154.25
Orange	154.30
Other	154.35

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969).

U.S. trade position

Most of the crude or brined fruit peel used in the domestic production of candied peel is from domestic sources, though much of the lemon peel and some orange peel is imported. Nearly all of the candied fruit peel consumed in the United States is produced domestically. Exports of such peel are negligible. Some crude fruit peel is exported. Imports of whole citrons are largely for religious ceremonial uses.

Description and uses

Citrus peel is the only fruit peel traded in significant commercial quantities. In the United States crude citrus peel is a byproduct of the citrus processing industry. Such peel is used primarily for livestock feed but small amounts go into the edible peel uses discussed herein and into manufactured products such as essential oils, pectin, and flavoring extracts.

Peel in brine accounts for nearly all of the trade in "fruit peel: crude, dried, or in brine." Peel in brine is considered to be in a temporary preservative as it is never eaten in this form. The brine is removed by a prolonged rinsing of the peel with water before further processing. Virtually all brined fruit peel is used in the manufacture of candied, crystallized, or glace fruit peel and in fruit peel products in sirup. As used hereafter in this summary, the term "candied" includes candied, crystallized, or glace. The principal use of candied peel is in making fruit cakes, other bakery products, and confectionery. For more information on candied products see the summary entitled "Candied Fruit (Except Cherries)" in this volume.

"Fruit peel, otherwise prepared or preserved" consists principally of fruit peel packed in sugar sirup, with or without spices added. This product is used in much the same manner as candied fruit peel.

The citron, a citrus fruit that resembles a lemon in shape but is generally larger, is grown primarily for its thick, aromatic peel. The peel often comprises about two-thirds of the volume of the entire citron; thus a citron half with the pulp removed is considered to be fruit peel. The cut fruit is usually deragged, diced, and brined before being shipped to the manufacturer of candied peels. Small quantities of fresh whole citrons are used for religious ceremonial purposes. Trade in otherwise prepared or preserved citron (item 147.02) or in candied citron (item 154.15) is not likely under present commercial practices.

U.S. tariff treatment

The column 1 rates of duty applicable to imports (see general headnote 3 of the TSUSA-1969 in appendix A) are as follows:

TSUS item	Commodity	Rate prior to Jan. 1, 1968	U.S. concessions granted in 1964-67 trade conference (Kennedy Round)	
			Second stage, effective Jan. 1, 1969	Final stage, effective Jan. 1,1972
	Citron:			
147.00	Fresh, dried, or in brine.	Free	1/	1/
147.02	Otherwise prepared or preserved.	3.4¢ per lb.	2.7¢ per lb.	1.7¢ per lb.
154.15	Candied, crystallized, or glace.	3.4¢ per lb.	2.7¢ per lb.	1.7¢ per lb.
	Fruit peel:			
	Crude, dried, or in brine:			
152.10	Citron	Free	1/	1/
152.14	Orange	0.8¢ per lb.	0.7¢ per lb.	0.6¢ per lb.
152.18	Lemon	1.2¢ per lb.	1.05¢ per lb.	0.9¢ per lb.
152.22	Other	2¢ per lb.	1.5¢ per lb. 2/	1¢ per lb. 3/
	Otherwise prepared or preserved:			
152.26	Citron	3.4¢ per lb.	2.7¢ per lb.	1.7¢ per lb.
152.30	Orange	3.4¢ per lb.	1/	1/
152.34	Lemon	6¢ per lb.	4.5¢ per lb.	3¢ per lb.
152.38	Other	8¢ per lb.	1/	1/
152.39	If products of Cuba and grapefruit or pomelo or shaddock.	6.4¢ per lb.	1/	1/
	Candied, crystallized, or glace:			
154.20	Citron	3.4¢ per lb.	2.7¢ per lb.	1.7¢ per lb.
154.25	Lemon	6¢ per lb.	4.5¢ per lb.	3¢ per lb.
154.30	Orange	3.4¢ per lb.	1/	1/
154.35	Other	8¢ per lb.	6.4¢ per lb.	4¢ per lb.

1/ Rate of duty, or duty-free status, not affected by the trade conference.

2/ Rate of duty became effective Jan. 1, 1968, and remains in effect until Jan. 1, 1970.

3/ The final rate for this item becomes effective Jan. 1, 1971.

The preceding tabulation shows the column 1 rates of duty in effect prior to January 1, 1968, and modifications therein as a result of concessions granted by the United States in the sixth round of trade negotiations under the General Agreement on Tariffs and Trade. Only the current (that in effect during 1969) and final stages of the rate modifications are shown (see the TSUSA-1969 for the other stages). During the period from August 31, 1963, when the TSUS became effective, to December 31, 1967, the prior rates shown did not change. The rates for items 147.00, 152.10, and 152.38 are those provided for in the Tariff Act of 1930, as originally enacted.

The rate shown for item 152.39 is the preferential rate for products of Cuba, which was suspended on May 24, 1962. Imports from Cuba have been prohibited since February 7, 1962.

The average ad valorem equivalents of the specific rates of duty in effect on December 31, 1967, based on dutiable imports during 1967, were as follows:

TSUS item	Percent	TSUS item	Percent
152.14----------	10.8	152.34----------	1.4
152.18----------	16.9	154.20 1/--------	14.5
152.22----------	2.7	154.25----------	.2
152.30----------	28.2	154.30----------	28.9

1/ There were no imports reported under item 154.20 in 1967; however, it is believed that the imports reported under item 154.15, on which this ad valorem equivalent is based, should have been reported under item 154.20. The rate of duty on both items is the same.

In recent years the annual average ad valorem equivalents of the duties on items 152.22, 152.34, and 154.25 have varied widely from those shown above. In 1967 there were no imports under items 147.02, 152.26, 152.38, 154.15 (see footnote to tabulation above), and 154.35.

U.S. consumption, producers, production, and exports

Consumption of crude, dried, or brined fruit peel for edible purposes consists almost entirely of peel in brine used in the manufacture of candied peel. U.S. production data on peel in brine are not available but production is largely dependent upon the consumption of candied peel. Shipments of citron peel in brine from Puerto Rico to the United States declined from an annual average of 4.4 million pounds during 1958-60 to 3.1 million pounds in 1963 and to 2.0 million pounds in 1967 (table 1). U.S exports of fruit peel in brine are not separately reported but are believed to have ranged from 3 million to 5 million pounds annually in recent years.

The domestic consumption of candied fruit peel in recent years has ranged from 20 million to 25 million pounds annually, according to trade sources. Of such consumption, about 45 percent consisted of grapefruit peel, 25 percent of citron peel, 20 percent of orange peel, and 10 percent of lemon peel. About 20 firms produce candied fruit in the United States and most of them produce candied fruit peel. These producers ordinarily obtain their supplies of grapefruit peel from Florida, citron peel from Puerto Rico, and lemon peel from several foreign suppliers. Candied orange peel is produced from both imported and domestic peel. The domestic consumption of candied citron peel has been declining and the use of candied citron melon (a substitute for candied citron peel) has been increasing in recent years. Candied citron melon (item 154.55 (pt.)) is discussed in the summary on candied fruit. Exports of candied peel are negligible.

U.S. consumption of otherwise prepared or preserved fruit peel, which is used in much the same manner as candied fruit peel, is very small. Trade in such peel is also small.

U.S. consumption of whole citron, in terms of value, consists almost entirely of fresh citrons imported for ceremonial use during certain religious holidays. Ceremonial citrons are fruit especially selected for their shape and appearance; they are not consumed as food. 1/ About 20,000 pounds of such citrons have been used annually in the United States during recent years. Citrons are grown in Puerto Rico and, to a minor extent, in California but none of these are used as ceremonial fruit.

U.S. imports

During 1963-67 U.S. imports of crude, dried, or brined fruit peel averaged 3.0 million pounds annually (table 2). Virtually all such imports consisted of orange (item 152.14) and lemon (item 152.18) peel. Imports of orange peel averaged 1.6 million pounds annually during this period--more than one-third lower than the annual average of 2.7 million pounds during the late 1950's. Annual imports of lemon peel, which averaged 1.3 million pounds during 1963-67, have shown little change over the past decade. In recent years the principal suppliers of crude, dried, or brined peel have been Italy, Spain, Haiti, and the Republic of South Africa.

Imports of fresh, dried, or brined citron which have low unit values (item 147.00 (pt.)) and citron peel (item 152.10) have been small (table 1). Such imports have been chiefly supplied by Italy.

1/ While the provisions of the TSUS for fruit include only edible fruit (see headnote 1 to part 9 of schedule 1 in appendix A) ceremonial citron are included under item 147.00 because they are of a quality suitable for food.

U.S. annual imports of candied fruit peel and otherwise prepared or preserved fruit peel combined ranged from 29,000 to 115,000 pounds during 1963-67 (table 2). Such imports consisted chiefly of orange peel (items 152.30 and 154.30). In recent years the major suppliers have been the Republic of South Africa, Australia, Venezuela, and the Dominican Republic.

U.S. imports of fresh citrons which have high unit values (item 147.00 (pt.)) come chiefly from Israel. Such imports averaged about $100,000 annually during 1963-67. Unit values of such imports ranged from about $4.00 to $9.00 per pound (table 1).

Table 1.--Citron and citron peel, fresh, dried, or in brine: U.S. imports for consumption and shipments from Puerto Rico to the United States, by value classes and by principal sources, 1963-67

Value class and source	1963	1964	1965	1966	1967
	Quantity (1,000 pounds)				
Low unit value supplies:					
Imports:					
From Italy	79	37	31	-	12
Other 1/	-	-	33	-	64
Shipments from Puerto Rico	3,113	3,016	2,713	2,108	1,953
Total	3,192	3,053	2,777	2,108	2,060
High unit value supplies:					
Imports from Israel	21	17	18	24	12
Imports from Greece	2/	3	2	2	1
	Value (1,000 dollars)				
Low unit value supplies:					
Imports:					
From Italy	8	4	4	-	2
Other 1/	-	-	2	-	7
Shipments from Puerto Rico	230	250	251	207	208
Total	238	254	257	207	217
High unit value supplies:					
Imports from Israel	114	99	123	98	105
Imports from Greece	2	9	3	5	5
	Unit value (dollars per pound) 3/				
Low unit value supplies:					
Imports:					
From Italy	0.10	0.10	0.14	-	0.17
Other 1/	-	-	.05	-	.12
Shipments from Puerto Rico	.07	.08	.09	.10	.11
High unit value supplies:					
Imports from Israel	5.33	5.88	6.82	4.11	9.09
Imports from Greece	5.17	3.57	1.61	2.42	4.05

1/ From the Dominican Republic in 1965 and from Taiwan in 1967.
2/ Less than 500 pounds.
3/ Computed from the unrounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table 2.--Fruit peel: U.S. imports for consumption, by types, 1963-67

Type 1/ and TSUS item	1963	1964	1965	1966	1967
	Quantity (1,000 pounds)				
Citron peel in brine 2/	79	37	64	-	76
Orange peel:					
In brine (152.14)	2,138	1,782	1,353	1,537	1,313
Preserved (152.30)	5	30	23	76	8
Candied (154.30)	20	68	23	19	39
Lemon peel:					
In brine (152.18)	1,658	1,539	1,434	1,312	815
Preserved (152.34)	3	11	1	-	3/
Candied (154.25)	1	3	1	3/	3/
Other fruit peel in brine (152.22)	-	10	4	-	4
Total fruit peel: 4/					
In brine	3,875	3,368	2,855	2,849	2,208
Preserved	8	44	24	76	8
Candied	21	71	24	20	50
	Value (1,000 dollars)				
Citron peel in brine 2/	8	4	6	-	9
Orange peel:					
In brine (152.14)	134	101	86	103	97
Preserved (152.30)	2	3	3	9	1
Candied (154.30)	3	8	4	3	5
Lemon peel:					
In brine (152.18)	114	99	96	91	58
Preserved (152.34)	1	4	1	-	5/
Candied (154.25)	5/	1	5/	5/	5/
Other fruit peel in brine (152.22)	-	1	2	-	3
Total fruit peel: 4/					
In brine	256	205	190	194	167
Preserved	3	7	4	9	1
Candied	3	9	4	3	8

1/ "In brine" includes fresh or crude, dried, or in brine; "preserved" includes otherwise prepared or preserved; and "candied" includes candied, crystallized, or glace. Prior to the TSUS (effective Aug. 31, 1963), "candied" and "preserved" fruit peel were combined in a single classification; thus such data shown for 1963 are partly estimated.

2/ Consists of imported citron peel in brine (item 152.10) and whole citron in brine having low unit values (item 147.00 (pt.)).

3/ Less than 500 pounds.

4/ The following imports are not shown separately above but are included here in the totals: 3 thousand pounds of preserved other fruit peel (item 152.38) entered in 1964 and valued at less than $500, and an estimated 11 thousand pounds of candied citron peel (item 154.20) entered in 1967, valued at 3 thousand dollars. The latter imports were erroneously entered under item 154.15 (candied citron). These were the only imports of these three items reported during 1963-67.

5/ Less than $500.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Note.--During 1963-67, there were no imports of preserved citron peel (item 152.26) or candied other fruit peel (item 154.35).

Grapefruit, fresh or prepared or preserved:
Entered August 1-September 30---------- 147.10, -.11
Entered in October---------- 147.13, -.14
Entered November 1-July 31---------- 147.16, -.17

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969).

U.S. trade position

The United States produces about four-fifths of the world's grapefruit and exports large quantities of both fresh and processed grapefruit. Imports are negligible in relation to consumption.

Description and uses

The grapefruit is the product of a medium-sized, broadleaved, evergreen tree. The fruit is round, but often somewhat flattened at the blossom end, and is generally larger than most oranges; it has a leathery, oily rind which is usually light yellow in color when mature. Varieties of grapefruit are divided into two basic groups--seedy varieties and seedless varieties. These groups are further divided according to the flesh color of the fruit (e.g., white-fleshed, pink-fleshed, and red-fleshed varieties).

Grapefruit is used as a breakfast fruit, in fruit salads, and in the form of juice. About half of the U.S. grapefruit crop is marketed in the fresh form, about 10 percent as canned or chilled segments, and the remaining 40 percent as canned or frozen juice. Grapefruit juice is discussed in the summary covering items 165.30 and 165.35 in volume 10. Grapefruit processing residues such as rind and seeds are dried and ground into meal for animal feed (item 184.75) and provide an economic return to processors. Such animal feed is covered in volume 6 of these summaries.

U.S. tariff treatment and other import requirements

The column 1 rates of duty applicable to imports (see general headnote 3 of the TSUSA-1969) are as follows:

TSUS item	Commodity	Rate prior to Jan. 1, 1968	U.S. concessions granted in 1964-67 trade conference (Kennedy Round)	
			Second stage, effective Jan. 1, 1969	Final stage, effective Jan. 1,1972
	Grapefruit, fresh or prepared or preserved:			
147.10	Entered August 1-September 30.	1.2¢ per lb.	1.1¢ per lb.	1¢ per lb.
147.11	If product of Cuba----	0.3¢ per lb.	1/	1/
147.13	Entered in October------	0.9¢ per lb.	0.85¢ per lb. 2/	0.8¢ per lb. 3/
147.14	If product of Cuba----	0.6¢ per lb.	1/	1/
147.16	Entered November 1-July 31.	1.5¢ per lb.	1.4¢ per lb. 2/	1.3¢ per lb. 3/
147.17	If product of Cuba.	1.2¢ per lb.	1/	1/

1/ Rate of duty not affected by the trade conference.
2/ Rate of duty became effective Jan. 1, 1968, and remains in effect until Jan. 1, 1970.
3/ The final rate for this item became effective Jan. 1, 1971.

The tabulation above shows the column 1 rates of duty in effect prior to January 1, 1968, and modifications therein as a result of concessions granted by the United States in the sixth round of trade negotiations under the General Agreement on Tariffs and Trade. Only the current (that in effect during 1969) and final stages of the rate modifications are shown above (see the TSUSA-1969 for the other stages). During the period from August 31, 1963, when the TSUS became effective, to December 31, 1967, the prior rates shown above did not change. The rates shown for items 147.11, 147.14, and 147.17 are the preferential rates for products of Cuba which were suspended on May 24, 1962. Imports from Cuba have been prohibited since February 7, 1962.

The average ad valorem equivalents of the specific rates of duty in effect on December 31, 1967, based on dutiable imports during calendar year 1967.

TSUS item	Percent
147.10	8.0
147.16	9.5

There were no imports under item 147.13 in 1967.

Two Federal plant quarantines relating to citrus diseases and insect pests restrict imports of fresh grapefruit. Also, under section 8e of the Agricultural Marketing Agreement Act of 1937, as amended, imports of fresh grapefruit are subject to the same minimum quality requirements applicable to domestic grapefruit under Federal marketing orders.

U.S. consumption

The annual U.S. domestic consumption of fresh and processed grapefruit during 1963-67 averaged 3,100 million pounds fresh equivalent weight, and was virtually all supplied by domestic production (see table). Fresh grapefruit consumption has averaged 1,500 million pounds annually in recent years--about the same as in the early 1950's. Moderate annual fluctuations have been largely due to variable crop conditions.

U.S. producers

The 1964 United States Census of Agriculture reported that in that year grapefruit were produced on 13,500 farms, 9,200 of which were in Florida. Individual grapefruit growing operations range in size from those with a few acres, often a part of a larger citrus operation, to those with groves comprising several hundred acres.

In Florida, the predominant producing State, there are about 140 firms which pack and ship fresh grapefruit in interstate commerce; of these, about 20 firms probably account for over half of the volume of fresh grapefruit shipped from that State. Also, a substantial number of handlers sell fresh grapefruit at local markets within the State. There are about 25 firms which produce canned grapefruit juice and grapefruit segments and a smaller number which produce concentrated grapefruit juice.

U.S. production

U.S. grapefruit production in the years 1962-66 1/ averaged 3,460 million pounds annually. While annual production has fluctuated considerably from year to year, the average for 1962-66 is about the same as that for the early 1950's.

In recent years Florida has accounted for nearly 80 percent of the total U.S. fresh grapefruit production, California for about 10 percent, and Arizona and Texas supply the remainder. Seedless varieties predominate in all States, although about one-third of the Florida production is of seedy grapefruit. More than half of the Florida grapefruit crop and about 40 percent of the California and Arizona crops are processed. About 80 percent of the Texas crop is sold through fresh market outlets.

The marketing season for grapefruit begins in the fall, reaching substantial volume in November and continuing heavy through April. The portion of the California grapefruit crop that is produced in the coastal areas is marketed during the summer months.

Practically all U.S. fresh grapefruit shipments are regulated by Federal or State marketing orders. A Federal marketing order for California-Arizona desert grapefruit regulates the quality of grapefruit that may be shipped from that area. Two Federal orders regulate the grade and size of Florida grapefruit and also provide for limiting weekly grapefruit shipments and prorating such shipments among packers. Most of the grapefruit that do not meet fresh market standards are small or have surface blemishes. These, together with most of the heavily seeded grapefruit are used for processing. Florida processed grapefruit products are subject to quality requirements under State regulations.

U.S. exports

Exports of grapefruit in all forms have averaged (on a fresh equivalent weight basis) about 10 percent of domestic production in recent years (see table). In the years 1962-66, annual exports of fresh grapefruit, which comprised about 60 percent of the exports of grapefruit in all forms, averaged 198 million pounds, valued at $12 million.

The California-Arizona Citrus League and the Foreign Agricultural Service of the U.S. Department of Agriculture carry on a jointly financed program to promote the sale of summer grapefruit in Europe.

1/ Unless otherwise indicated, all years referred to herein are crop years beginning Nov. 1 of the year specified.

U.S. imports

U.S. imports of grapefruit, which are believed to consist chiefly of fresh grapefruit, averaged only 1.3 million pounds annually in the years 1962-66--less than 1 percent of domestic fresh grapefruit sales. Since cessation of trade with Cuba in 1962, most grapefruit imports have come from Mexico and Israel.

World production and trade

The United States normally produces about four-fifths of the world's grapefruit and, until recently, U.S. exports of fresh grapefruit have exceeded those of any other country. Production in Israel has been increasing and exports from that country have reached a volume comparable with that of the United States. Israel, as well as several other countries with less production, compete with U.S. exports in the European market. Grapefruit grown in Southern Hemisphere countries is marketed during a different season than most U.S. fresh exports. The Republic of South Africa is the most important exporter of such grapefruit.

Grapefruit: U.S. production, utilization, imports for consumption, exports of domestic merchandise, and apparent consumption, crop years 1962-66

Year beginning Nov. 1-	Production 1/	Utilization		Imports 2/	Exports 3/	Apparent consumption
		Fresh sales	Processed			
	Quantity (million pounds, fresh weight equivalent)					
1962	2,858	1,348	1,495	1	323	2,522
1963	2,754	1,582	1,151	2	279	2,456
1964	3,334	1,760	1,551	1	323	2,990
1965	3,788	1,818	1,948	4/	321	3,445
1966	4,588	2,024	2,524	2	420	4,124
	Value (1,000 dollars)					
1962	57,090	41,122	15,563	70	16,825	5/
1963	90,046	60,728	28,601	170	16,723	5/
1964	78,147	53,749	23,450	42	16,851	5/
1965	90,968	55,864	34,593	26	18,005	5/
1966	76,559	45,891	29,829	263	20,006	5/

1/ Includes small quantities not utilized commercially.
2/ Includes fresh and prepared or preserved grapefruit.
3/ Includes exports of fresh grapefruit and reported exports of grapefruit juice and canned grapefruit segments converted to fresh weight equivalent.
4/ Less than 500,000 pounds.
5/ Not available.

Source: Production and utilization compiled from official statistics of the U.S. Department of Agriculture; imports and exports compiled from official statistics of the U.S. Department of Commerce, as noted.

Commodity	TSUS item
Lemons, fresh	147.19
Lemons, prepared or preserved	147.21

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969).

U.S. trade position

The United States and Italy each produce about one-third of the reported world production of lemons. U.S. production in recent years has had an annual value in excess of $50 million. Exports of lemons, which consisted largely of fresh lemons, accounted for 21 percent of domestic production. U.S. exports were exceeded only by those of Italy, the world's largest lemon exporter. U.S. imports in recent years have been negligible.

Description and uses

The lemon is distinguished from other citrus fruit by its high acid content and unique flavor. The fruit of the main varieties of lemons are smaller than oranges and somewhat oblong in shape. They are generally marketed when 2-1/2 inches in diameter and bright yellow in color.

In recent years an average of 58 percent of the U.S. crop has been marketed in the form of fresh lemons which are used principally as a garnish with seafood and other dishes, as a flavoring agent in food preparations, and as a beverage ingredient. Most of the rest of the crop goes into the production of frozen concentrate for lemonade and various types of lemon juice (items 165.30 (pt.) and 165.35 (pt.)) which are discussed in volume 10 of the schedule 1 summaries. Lemon peel (items 152.18, 152.34, and 154.25) is discussed in another summary in this volume. Byproducts such as lemon oil (item 452.34), citrus pectin (item 455.04 (pt.)), and citric acid (item 425.74) are relatively more important in the case of lemons than other citrus fruit; such products are discussed in the summaries covering schedule 4.

In recent years imports have included canned whole lemons, preserved in salt water, which are used for beverage purposes and dried spiced lemons, which are used as a confection by persons of oriental background. These products are not produced domestically.

Although lemons are harvested throughout the year in the United States, about half the crop is picked in March, April, and May. Production is lowest in October and November. Lemons are usually picked when still somewhat green in color. Fully tree-ripened yellow fruit is considerably lower in quality. After picking the fruit is color sorted into lots that will ripen uniformly and then stored under humid conditions at a temperature of 55-60 degrees F. During storage, a "curing" process takes place in which the lemon skins tend to become thin and tough and the juice content increases. Storage lasts from a few weeks to several months depending upon how green the lemons were when picked, the degree of yellow color attained by the fruit in storage, and the market demand for fresh lemons.

Because the mid-summer peak in demand occurs about 2 months later than the harvest peak, large storage capacity is required. The quantity of lemons in storage normally increases from January through May, then falls off rapidly during the summer months when the demand is high.

U.S. tariff treatment and other import requirements

The current column 1 rates of duty applicable to imports (see general headnote 3 in the TSUSA-1969) are as follows:

TSUS item	Commodity	Rate prior to Jan. 1, 1968	U.S. concessions granted in 1964-67 trade conference (Kennedy Round)	
			First stage, effective Jan. 1, 1968	Final stage, effective Jan. 1, 1972
147.19	Lemons, fresh 1/	1.25¢ per lb.	2/	2/
147.21	Lemons, prepared or preserved. 1/	1.25¢ per lb.	1¢ per lb. 3/	0.6¢ per lb.

1/ Item 147.20 (lemons, fresh or prepared or preserved) was superseded by items 147.19 and 147.21 on Jan. 1, 1968.

2/ Rate of duty not affected by the trade conference.

3/ Rate of duty became effective Jan. 1, 1968 and remains in effect until Jan. 1, 1970.

The tabulation above shows the column 1 rates of duty in effect prior to January 1, 1968, and modifications therein as a result of concessions granted by the United States in the sixth round of trade negotiations under the General Agreement on Tariffs and Trade (GATT). Only the first and final stages of the rate modifications are shown (see

TSUSA-1969 for the other stages). During the period from August 31, 1963, when the TSUS became effective, to December 31, 1967, the prior rates shown above did not change.

In a concession granted under the GATT effective May 30, 1950, the United States reserved the right to increase the rate of duty on lemons to the statutory rate of 2.5 cents per pound on imports in any calendar year in excess of 5 percent of domestic production in the previous calendar year.

The average ad valorem equivalent of the specific rate of duty in effect on December 31, 1967, on lemons, based on dutiable imports during calendar year 1967, was 4.0 percent.

Federal plant quarantine regulations designed to prevent the importation of certain citrus diseases and insect pests, prohibit fresh lemon imports from some areas, including the larger South American producers such as Argentina.

U.S. consumption

During 1962-66, 1/ the annual U.S. consumption of fresh and processed lemons, on a fresh-weight basis, averaged 980 million pounds (table 1). Domestic production supplied virtually all of the lemons consumed domestically. About 48 percent of such consumption consisted of fresh lemons. There has been a downward trend in the annual consumption of fresh lemons. Such consumption averaged 469 million pounds during 1962-66 (table 2)--22 percent below the level of the early 1950's. On a per capita basis, annual fresh lemon consumption fell from 3.8 pounds during the early 1950's to 2.5 pounds in recent years.

U.S. producers

In California and Arizona there were about 4,400 lemon producers in 1964, according to the Census of Agriculture. In 1967 about 47,000 acres in California and about 12,000 acres in Arizona were devoted to the production of lemons.

Two firms, both cooperatives, probably handle over 90 percent of the lemon crop, although there are nearly 50 firms which pack and ship fresh lemons. Less than 10 firms are engaged in processing

1/ Unless otherwise indicated all years referred to herein are crop years beginning Nov. 1 of the year specified.

lemons. Most of these firms pack both canned and frozen lemon juice. Frozen lemonade concentrate is the largest volume item.

U.S. production

California-Arizona lemon production, virtually equivalent to U.S. production, averaged 1,215 million pounds in the years 1962-66 (table 1), about 12 percent higher than in the early 1950's. This upward trend in production has resulted from increased yields inasmuch as a decline in acreage has occurred over the same period. In 1962-66, 58 percent of the crop was sold fresh and 42 percent was processed.

In recent years, California has produced about 90 percent and Arizona about 10 percent of the total reported U.S. production. Florida lemon production is not regularly reported but is believed to amount to about 2 percent of the California-Arizona production. During 1962-66, an annual average of 700 million pounds of lemons were marketed fresh--about 5 percent above the level of the early 1950's. The gain is accounted for by exports inasmuch as domestic consumption has declined and imports have remained negligible.

Domestically grown lemons marketed as fresh fruit in the United States and Canada are subject to regulation in accordance with a Federal marketing order under the Agricultural Marketing Agreement Act of 1937, as amended. The marketing order includes minimum size requirements and limitations on the quantity of fresh lemons that may be shipped weekly. Lemons not marketed in the United States and Canada as fresh fruit are exported to other countries or are processed into various forms of juice and other products.

U.S. exports

There has been an upward trend in U.S. fresh lemon exports since the late 1940's. A substantial increase in such exports occurred in the mid-1950's with most of the increase going to continental Europe. In the years 1962-66, annual fresh lemon exports averaged 231 million pounds (table 2), 29 percent above the late 1950's and more than 3 times the 69 million pound average of the early 1950's.

Exports to Japan, which increased sharply following removal of certain lemon import restrictions by that country in May 1964, accounted for 25 percent of the U.S. exports of fresh lemons during crop year 1966, making it the largest export market (table 3). In that year 21 percent of the U.S. exports of fresh lemons went to France, 13 percent to Canada, and most of the remainder to four other countries.

The California-Arizona Citrus League and the Foreign Agriculture Service of the U.S. Department of Agriculture carry on a jointly financed lemon promotional program in Europe and Japan.

U.S. imports

U.S. imports of lemons have been negligible in most years since the early 1930's. After World War II such imports increased to a high in 1948 and 1949 when they averaged about 13 million pounds annually. Notwithstanding a 50 percent reduction in the U.S. duty on lemons in May 1950, imports in 1950 totaled less than 1 million pounds and only small quantities have entered since that time. Imports during 1962-66 averaged only 170,000 pounds annually. In earlier years most of the imports consisted of fresh lemons from Italy, but in recent years the bulk of the imports have consisted of prepared or preserved lemons from the Orient.

World production and trade

In recent years the United States and Italy have each produced about one-third of the reported world production of lemons (table 4). About 21 percent of the U.S. crop was exported in recent years, mostly in the form of fresh lemons. Historically, the Italian island of Sicily has been, and remains, the main source of lemons entering the channels of international trade. In recent years Italy, the world's largest lemon exporter, has exported over half of its annual production. During the winter and spring months when production is high, Italian lemons dominate the European market.

Most other Mediterranean countries also produce lemons and practically all of them export a large part of their output. The most important of these producing countries are Spain, Greece, and Turkey. Although Southern Hemisphere producers account for only about 10 percent of the world production of lemons, countries such as the Republic of South Africa, Argentina, and Australia export significant quantities during the months when supplies are seasonally low in the major producing countries.

Table 1.--Lemons: U.S. production, utilization, imports, exports, and apparent consumption, crop years 1962-66

Year beginning Nov. 1--	Production 1/	Utilization		Imports 2/	Exports 3/	Apparent consumption
		Fresh sales	Processed			
	Quantity (million pounds, fresh basis)					
1962	987	701	285	62	249	799
1963	1,448	717	728	26	243	1,228
1964	1,080	681	398	1	247	833
1965	1,198	696	502	4/	278	920
1966	1,362	704	656	4/	284	1,076
	Value (1,000 dollars)					
1962	51,899	42,965	8,935	819	5/	5/
1963	50,749	32,844	17,828	398	5/	5/
1964	47,057	38,771	8,278	95	5/	5/
1965	51,746	40,365	11,352	72	5/	5/
1966	58,685	44,510	14,142	28	5/	5/

1/ Includes small quantities not utilized commercially.

2/ Includes fresh and prepared or preserved lemons plus estimated imports of lemon juice converted to fresh-equivalent weight.

3/ Includes fresh lemons plus estimated exports of lemon juice converted to fresh-equivalent weight. Exports of lemon juice account for about 10 percent of the quantity shown.

4/ Less than 0.5 million pounds.

5/ Not available.

Source: Production and utilization compiled from official statistics of the U.S. Department of Agriculture; imports and exports derived from official statistics of the U.S. Department of Commerce, as noted.

Table 2.--Lemons, fresh: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, crop years 1962-66

Year beginning Nov. 1--	Production 1/	Imports 2/	Exports 3/	Apparent consumption
	Quantity (million pounds)			
1962	701	4/	222	479
1963	717	4/	220	497
1964	681	4/	215	466
1965	696	4/	246	450
1966	704	4/	252	452
	Value (1,000 dollars)			
1962	42,965	65	19,731	5/
1963	32,844	76	16,039	5/
1964	38,771	72	17,697	5/
1965	40,365	66	20,015	5/
1966	44,510	26	22,195	5/

1/ Includes only production sold fresh.

2/ Imports include prepared or preserved lemons and are believed to consist chiefly of such lemons.

3/ Includes exports of fresh limes prior to January 1965. Annual exports of such limes are believed to have averaged about 2 million pounds.

4/ Less than 0.5 million pounds.

5/ Not available.

Source: Production compiled from official statistics of the U.S. Department of Agriculture; imports and exports compiled from official statistics of the U.S. Department of Commerce.

Table 3.--Lemons, fresh: U.S. exports of domestic merchandise, 1/ by principal markets, crop years 1962-66

(In millions of pounds)

Market	Year beginning Nov. 1--				
	1962	1963	1964	1965	1966
Europe:					
France	58	52	48	53	54
Netherlands	36	33	27	27	24
Belgium-Luxembourg	18	16	12	16	16
West Germany	24	22	22	17	14
United Kingdom	14	9	5	5	6
Other	19	16	18	28	28
Total	169	148	132	146	142
Other areas:					
Japan	10	34	37	54	63
Canada	32	20	43	32	33
Other	11	18	3	14	14
Total	53	72	83	100	110
Grand total	222	220	215	246	252

1/ Includes exports of fresh limes prior to January 1965. Such lime exports are believed to have accounted for less than 1 percent of the total annual exports shown.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table 4.--Lemons: World production, by specified areas, crop years 1962-66

(In millions of pounds)

Area	Year beginning Nov. 1--				
	1962	1963	1964	1965	1966
United States	987	1,448	1,080	1,198	1,362
Mediterranean area:					
Italy	775	1,073	1,014	1,234	1,213
Spain	121	131	357	204	209
Greece	198	184	187	209	225
Turkey	128	130	119	173	187
Other	248	254	257	321	368
Total	1,470	1,772	1,934	2,141	2,202
Southern Hemisphere:					
Argentina	175	175	152	192	174
Other	190	200	185	205	212
Total	365	375	337	397	386
World total	2,822	3,595	3,351	3,736	3,950

Source: Compiled from official statistics of the U.S. Department of Agriculture.

March 1969
1:8

Commodity	TSUS item
Limes:	
Fresh or in brine	147.22, -.23
Otherwise prepared or preserved	147.26, -.27

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969).

U.S. trade position

U.S. production of limes is small in comparison with other citrus. Imports of fresh limes, which supplied 15 percent of consumption during 1963-67, have usually exceeded exports. Imports of limes in the form of lime juice, which is discussed in another summary, have been greater than imports of fresh limes. There is no known domestic consumption of the otherwise prepared or preserved limes covered in this summary.

Description and uses

The most common lime, world wide, is known in this country as the Mexican or Key lime--the latter name referring to the fact that this lime was formerly grown on the Florida Keys. The Mexican lime is generally $1\frac{1}{2}$ inches or less in diameter and contains a number of seeds. Current U.S. production consists primarily of the seedless Persian or Tahiti lime, which is larger than the Mexican lime. The Persian lime resembles some varieties of lemons in appearance except that it is marketed while still green in color.

The bulk of the limes, whether fresh or processed, are used in beverages. Small amounts are also used for flavoring ice cream, pies, and other food preparations, and for the production of essential oils and chemicals. In the years 1963-67, an average of 55 percent of the crop was sold in fresh form. The remainder was processed, mostly as frozen concentrate for limeade which is not covered in this summary (see lime juice, item 165.25, in volume 10 of these summaries). There is no known U.S. production or importation of prepared or preserved limes as provided for in item 147.26.

U.S. tariff treatment and other import requirements

The column 1 rates of duty applicable to imports (see general headnote 3 of the TSUSA-1969) are as follows:

TSUS item	Commodity	Rate prior to Jan. 1, 1968	U.S. concessions granted in 1964-67 trade conference (Kennedy Round)	
			Second stage, effective Jan. 1, 1969	Final stage, effective Jan. 1, 1972
	Limes:			
147.22	Fresh or in brine------	1¢ per lb.	1/	1/
147.23	If product of Cuba---	0.8¢ per lb.	1/	1/
147.26	Otherwise prepared or preserved.	35% ad val.	28% ad val.	17.5% ad val.
147.27	If product of Cuba.	14% ad val.	1/	1/

1/ Rate of duty not affected by the trade conference.

The above tabulation shows the column 1 rates of duty in effect prior to January 1, 1968, and modifications therein as a result of concessions granted by the United States in the sixth round of trade negotiations under the General Agreement on Tariffs and Trade. Only the second (that in effect during 1969) and final (fifth) stages of the annual rate modifications are shown (see the TSUSA-1969 for the other stages).

For the period since the TSUS became effective on August 31, 1963, the rates of duty shown above have not changed. The rates shown for items 147.23 and 147.27 are preferential rates for products of Cuba, which were suspended on May 24, 1962. Imports from Cuba have been prohibited since February 7, 1962.

The average ad valorem equivalent of the specific rate of duty in effect on December 31, 1967, for item 147.22, based on dutiable imports during 1967, was 12.9 percent. There were no imports under item 147.26 in 1967.

U.S. plant quarantine regulations prohibit imports of fresh limes from some parts of the world. Under the provisions of section 8e of the Agricultural Marketing Agreement Act of 1937, as amended, imported limes must meet the same grade and size requirements in effect for domestic fruit shipped from Florida under the Federal marketing order.

U.S. consumption

Annual consumption of limes in all forms, on a fresh weight basis, averaged 54 million pounds during 1963-67 (table 1). Limes in processed form, mainly frozen limeade concentrate and imported bottled single-strength lime juice, accounted for 30 million pounds of the annual total. This was more than double that of the early 1950's and reflects a pronounced upward trend in the use of limes in processed form. Fresh limes accounted for the remaining 24 million pounds of annual consumption. Such fresh consumption was at about the same level as during the early 1950's.

U.S. producers and production

Currently, about 300 commercial growers produce limes on 3,400 acres in southern Florida. In addition, about 500 acres are devoted to lime production in California. After reaching nearly 7,000 acres in 1956, Florida lime acreage dropped sharply to the present level where it has remained since 1958. Despite the stable acreage in recent years, the trend in the annual production of limes has been upward. Such increased production reflects increased yields which have resulted largely from the use of longer-lived strains of trees and the closer spacing of trees per acre.

In 1963-67, Florida lime production averaged 41 million pounds annually (table 1) while California lime production is estimated to have averaged 5 million pounds annually. Limes are harvested throughout the year; however, production is small during the period January-May. The peak of the Florida harvest occurs in early summer and substantial supplies are available through December.

About 35 firms pack and ship fresh limes in Florida. Five of these firms handle about two-thirds of the total crop. Two firms located in Florida account for virtually all of the limes processed domestically.

A Federal marketing order, adopted by Florida lime growers and handlers, limits fresh lime shipments from Florida to those meeting established quality standards.

U.S. exports

In the years 1965-67, exports of fresh limes averaged 2.9 million pounds per year, valued at $221,000 (table 2). In those years, 33 percent of the exports went to Canada, 17 percent to Mexico, and the balance to various other countries. The limes exported to Mexico are chiefly California limes shipped into the neighboring Mexican State of

Baja California, where limes are not extensively grown. Data on exports of limes in processed forms are not separately reported; however, trade sources indicate that such exports are negligible.

U.S. imports

U.S. imports of limes in all forms, on a fresh equivalent weight basis, averaged 14.9 million pounds per year during 1963-67 (table 1). Such imports supplied about 28 percent of the consumption of limes in all forms. On a fresh equivalent basis, these imports consisted of 25 percent fresh limes, 53 percent single-strength lime juice, and 22 percent concentrated lime juice.

Practically all fresh lime imports come from Mexico. These imports constitute an important source of fresh lime supplies for the Western States. In recent years U.S. imports of fresh limes have averaged 3.7 million pounds annually, accounting for about 15 percent of consumption.

Foreign production and trade

Limes are grown and used throughout the tropical parts of the world, including most of the Caribbean islands. Mexico, with a production of about 300 million pounds annually in recent years, is the world's largest lime producer. The United Arab Republic, the second largest producer, harvests about half as many limes as does Mexico. While production and trade statistics are sparse, limes are known to be of considerable local economic importance in a number of other countries.

Table 1.--Limes: U.S. production, utilization, imports for consumption, exports, and apparent consumption, 1963-67

Year	Production 1/	Utilization		Imports 2/	Exports 3/	Apparent consumption
		Fresh sales	Processed			
	Quantity (1,000 pounds, fresh basis)					
1963	36,000	18,560	17,040	16,753	1,600	50,753
1964	44,800	23,600	20,800	16,214	1,800	58,814
1965	34,000	22,000	12,000	15,262	2,075	47,187
1966	34,000	22,000	12,000	13,377	1,986	45,391
1967	58,000	28,000	30,000	13,121	4,700	66,421
	Value (1,000 dollars)					
1963	1,976	1,462	490	1,643	160	4/
1964	2,038	1,534	489	2,045	180	4/
1965	2,025	1,755	245	1,793	208	4/
1966	2,692	2,372	329	1,712	218	4/
1967	3,218	2,366	833	1,549	237	4/

1/ Production does not include California production estimated at an average of 5 million pounds annually in recent years, but includes small quantities of Florida production not utilized commercially.

2/ Includes lime juice converted to fresh equivalent on the basis of juice weight being equal to an estimated 55 percent of fresh weight.

3/ Estimated for the years prior to 1965 because exports of fresh limes were not then separately reported. Exports of processed limes, which are believed to be negligible, are not included.

4/ Not available.

Source: Production and utilization compiled from official statistics of the U.S. Department of Agriculture; imports and exports compiled from official statistics of the U.S. Department of Commerce, as noted.

Table 2.--Limes, fresh: U.S. production, imports for consumption, exports, and apparent consumption, 1963-67

Year	Production 1/	Imports	Exports 2/	Apparent consumption	Ratio (percent) of imports to consumption
	Quantity (1,000 pounds)				
1963	18,560	4,917	1,600	21,877	22.5
1964	23,600	4,096	1,800	25,896	15.8
1965	22,000	3,426	2,075	23,351	14.7
1966	22,000	3,416	1,986	23,430	14.6
1967	28,000	2,520	4,700	25,820	9.8
	Value (1,000 dollars)				
1963	1,462	364	160	3/	3/
1964	1,534	311	180	3/	3/
1965	1,755	270	208	3/	3/
1966	2,372	306	218	3/	3/
1967	2,366	195	237	3/	3/

1/ Includes only fresh sales of Florida limes.
2/ Estimated for the years prior to 1965 because exports of fresh limes were not then separately reported.
3/ Not available.

Source: Production compiled from official statistics of the U.S. Department of Agriculture; imports and exports compiled from official statistics of the U.S. Department of Commerce, except as noted.

Commodity	TSUS item
Oranges:	
Mandarin, packed in airtight containers	147.29
Kumquats, packed in airtight containers	147.30
Other, fresh, or prepared or preserved	147.31, -.32

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969).

U.S. trade position

The United States, which produces about one-third of the world's oranges, exports about 8 percent of its production. U.S. production in recent years has had an average value of $390 million. Imports supply about 3 percent of domestic consumption.

Description and uses

The oranges of commerce are the fruit of a medium-sized evergreen tree. There are three major types of oranges--sweet, mandarin, and bitter oranges. The Valencia, a variety of the sweet orange grown extensively in Florida and California, typifies the common group of sweet oranges of which there are many varieties, both seedless and with seeds. There are two other groups of sweet oranges. The navel orange, which is grown extensively in California, is characterized by an undeveloped secondary fruit within the blossom end of each orange. The blood orange, which is grown mainly in Spain and other parts of the Mediterranean area, is characterized by having red flesh or streaks of red in its flesh.

Mandarin oranges differ from sweet oranges primarily in that they have loose, easily removable peel and pulp sections (segments) that are easily separated from each other. They include the tangerines grown in the United States and the satsumas grown in Japan.

The bitter orange is not normally grown in the United States for its fruit, however, in Spain and some other countries, it is grown for its fruit, which is used in orange marmalade. In the United States and many other parts of the world, the bitter orange is widely used as a rootstock for trees of the sweet orange and other citrus species.

Several citrus hybrids are also included with oranges in this summary. The most common of these are the tangelo, a cross between a tangerine and a grapefruit, and the temple, a cross between a tangerine and an orange.

Kumquats, which resemble very small oranges, are classed as oranges for tariff purposes.

Oranges are used primarily as a source of juice. While nearly one-third of the domestic orange crop is sold through fresh market outlets, a large share of these oranges is made into juice before being consumed.

About three-fourths of the total domestic tangerine and tangelo production is consumed as fresh fruit, as is half the temple orange production. Canned mandarin orange sections, imported principally from Japan, are used mainly in salads and desserts. Such mandarin oranges are peeled and the skin surrounding the individual fruit sections is removed before canning in sirup. Fresh kumquats are used principally for decorating gift boxes of citrus fruit and for table decorations. They are also preserved whole (usually in sirup) and made into marmalade.

About 50 percent of the domestic orange crop is processed into frozen concentrated juice. Canned, single-strength juice and chilled orange juice distributed under refrigeration, account for an additional 15 percent of the crop. Some of the crop is distributed as chilled orange sections and as chilled citrus salad, which consists of orange and grapefruit sections. Such products are prepared from peeled fruit which has been separated into sections. These products are usually bottled in glass, kept under refrigeration, and marketed as fresh produce. Small quantities of oranges are also used in the production of canned (hot pack) concentrated juice, puree, beverage bases, orange marmalade, and candied orange peel.

An important byproduct of orange processing is citrus meal, which is used for livestock feed. It is made from the dried and ground peel and rag (i.e., the inner connective tissues and seeds) that remain after removal of the juice or sections from the whole orange. Liquid residues from the preparation of meal and some other liquid processing residues are often evaporated into citrus molasses for use as cattle feed. Other byproducts include pectin and essential oils.

U.S. tariff treatment and other import requirements

The column 1 rates of duty applicable to imports (see general headnote 3 in the TSUSA-1969) are as follows:

TSUS item	Commodity	Rate prior to Jan. 1, 1968	U.S. concessions granted in 1964-67 trade conference (Kennedy Round)	
			Second stage, effective Jan. 1, 1969	Final stage, effective Jan. 1, 1972
	Oranges:			
147.29	Mandarin, packed in airtight containers.	0.5¢ per lb.	0.4¢ per lb. 1/	0.2¢ per lb. 2/
147.30	Kumquats, packed in airtight containers. 3/	1¢ per lb.	0.8¢ per lb.	0.5¢ per lb.
147.31	Other, fresh, or prepared or preserved 3/	1¢ per lb.	4/	4/
147.32	If product of Cuba.	0.8¢ per lb.	4/	4/

1/ Rate of duty became effective Jan. 1, 1968 and remains in effect until Jan. 1, 1970.

2/ The final rate for this item becomes effective Jan. 1, 1971.

3/ Prior to Jan. 1, 1968, kumquats in airtight containers were included in item 147.31.

4/ Rate of duty not affected by the trade conference.

The tabulation above shows the column 1 rates of duty in effect prior to January 1, 1968, and modifications therein as a result of concessions granted by the United States in the sixth round of trade negotiations under the General Agreement on Tariffs and Trade. Only the current and final stages of the rate modifications are shown (see the TSUSA-1969 for the other stages). During the period from August 31, 1963, when the TSUS became effective, to December 31, 1967, the prior rates shown above did not change. The rate for item 147.31 is that provided for in the Tariff Act of 1930, as originally enacted. The rate shown for item 147.32 is the preferential rate for products of Cuba, which was suspended on May 24, 1962. Imports from Cuba have been prohibited since February 7, 1962.

The average ad valorem equivalents of the specific rates of duty in effect on December 31, 1967, based on dutiable imports during calendar year 1967, were as follows:

TSUS item	Percent
147.29-------	2.6
147.31-------	14.0

Federal plant quarantine regulations, which are designed to prevent the introduction of certain citrus diseases and insect pests, prohibit imports of fresh oranges from some areas and require treatment of oranges from other areas prior to entry. One of the quarantines, which prohibited imports of fresh oranges from Japan, eliminated imports of fresh satsumas to the continental United States (except Alaska) from 1947 to 1967. Prior to World War II, imports of such oranges constituted a small but significant item of trade. This quarantine was modified, effective July 3, 1967, to permit imports of oranges from Japan into the States of Oregon, Washington, Montana, and Idaho, as well as into Alaska.

Regulations under the Agricultural Marketing Agreement Act of 1937, as amended, limit imports of fresh oranges to those meeting current quality requirements for comparable domestic fruit.

U.S. consumption

Domestic consumption of all oranges averaged 10,808 million pounds during 1962-66 1/ (table 1). The consumption of fresh oranges, which accounted for 3,239 million pounds of the total (table 2), has declined moderately since World War II. The decline has been associated with an increase in the consumption of processed oranges particularly frozen concentrated orange juice. Exceptions to this trend have been fresh Florida tangelo consumption, which has been increasing, and fresh Florida temple orange and tangerine consumption, which has remained unchanged.

Consumption of processed oranges, which has been increasing for many years, averaged about 7,569 million pounds (fresh-weight equivalent) annually in the 1962-66 period. Exceptions to this trend have been tangerines and California navel oranges. The small quantities of these consumed in the processed form has not changed.

1/ Unless otherwise indicated all years referred to are crop years beginning Nov. 1 of the year specified.

The per capita annual consumption of fresh oranges, which has been declining irregularly for over 20 years, was 16.4 pounds in calendar year 1966. In the same year per capita consumption of frozen concentrated orange juice, the predominant processed product, was 3.8 pounds--equivalent to about 23 pounds of fresh oranges.

Consumption of canned mandarin oranges, virtually all of which are imported, has followed an upward trend since the late 1940's. Annual imports of this product have increased sharply in recent years and totaled 68 million pounds in 1966.

U.S. producers

There are from 25,000 to 30,000 orange growers in the United States. Individual producing units range in size from a few to several thousand acres.

In 1967, the total U.S. bearing acreage of oranges, tangerines, and hybrids in the United States was roughly 800,000 acres. Three-fourths of the acreage was in Florida and most of the rest was in California.

There has been an upward trend in the orange acreage in Florida for many years. In California there was a downward trend in orange acreage from the end of World War II until the mid-1960's. Such acreage has increased moderately since that time. The acreage reduction occurred in Southern California and was primarily a result of urban development of areas formerly devoted to orange production.

There are nearly 300 firms which pack fresh oranges in the United States. In Florida fresh oranges are packed for interstate shipment by over 100 firms. The packing houses operated by these firms are dispersed throughout the producing area. No single firm handles more than 5 percent of total interstate shipments. Most firms also pack other fresh citrus fruit. California and Arizona fresh oranges are packed and shipped by about 150 firms. One firm, a cooperative, handles a large part of the California-Arizona output. That firm together with the second largest firm, also a cooperative, is reported to handle about 90 percent of the total. Fresh citrus fruit is packed by about 20 firms in Texas and a few in Louisiana. Nearly all of these pack oranges.

About 75 firms process citrus fruit in the United States. In 1967, 52 firms are reported to have processed citrus fruit in Florida. Of these firms 33 packed concentrated orange juice, 21 packed canned single-strength orange juice, 13 packed canned orange sections or citrus salad, 25 packed chilled orange juice, and 26 packed citrus beverage bases. Many of them also packed one or more of a number of other citrus products. California has less than 10 orange processors. Some

of them pack both concentrated orange juice and canned, single-strength orange juice. Orange sections are not packed on a regular basis in California. The largest processors are divisions of the two largest fresh orange packing firms. Texas has about 10 citrus processors, including 3 with freezing facilities and 2 that handle chilled orange and grapefruit juice only.

Most of the processing firms in all producing areas handle dried citrus pulp and some handle other citrus byproducts such as molasses, oil, and pectin.

U.S. production

There has been an upward trend in the production of oranges in the United States for many years. The upward trend was sharply arrested by the severe freeze in Florida in December 1962 but has since resumed its former course, reaching 17,108 million pounds in 1966 (table 1). The upward trend is largely the result of extensive new plantings of oranges; however, U.S. production probably would have increased substantially more if production from the new plantings had not been offset to some extent by occasional frost damage and by tree removals.

While the trend in total orange production has been upward, the trends in individual producing areas have varied. There has been a downward trend in Louisiana's very small production. Texas production has declined erratically since the late 1940's, mainly due to cold weather damage, and there is no basis for projecting a return of production to the levels of the highest years. Arizona production has increased, but it remains a very small part of the U.S. total.

Orange production in California declined from World War II until the early 1960's. In recent years such production has increased. California production consists primarily of navel and valencia oranges. Fresh California valencias are marketed in quantity from April through October and are the only domestic fresh oranges available in the summer months. The valencia is also suitable for processing and over a third of the California crop goes into canned, single-strength juice and frozen and canned (hot pack) concentrated juice.

About 85 percent of the California navel oranges are sold in the fresh form inasmuch as they are not well suited for processing. The marketing season for such oranges extends from December through April, coinciding with the period of peak fresh orange shipments from Florida.

More than two-thirds of the U.S. orange crop is harvested in Florida. Increased production in that State has been largely

responsible for the upward trend in U.S. orange production. About 41 percent of the Florida crop consists of early and mid-season varieties; 33 percent, of late season valencias; 10 percent, of temples; 13 percent, of tangerines; and 3 percent, of tangelos.

In most recent years more than four-fifths of the Florida orange crop has been processed and the remainder has been marketed fresh. Less than 20 percent of the early and mid-season varieties and about 15 percent of the valencias were sold fresh. About half of the temples and three-quarters of the tangerines and tangelos entered fresh fruit markets.

More than three-fourths of the Florida oranges used for processing go into frozen concentrated orange juice. The Florida valencia is better suited to this use than most other varieties. Because of substantial differences in the quality of juice produced from different orange varieties and during different seasons of the year, blending is necessary to produce a uniform product. Thus, some frozen concentrated juice made from valencia oranges late in the season is carried over in bulk containers for blending with the juice of early and mid-season varieties from the following crop. This is in addition to the quantity needed to meet normal demand from July through November when there is no production in Florida.

Florida normally ships over half the fresh oranges marketed during the mid-winter months. The harvesting season for Florida oranges extends from October through June.

Oranges can be stored for several weeks under controlled temperature and humidity. Most storage, however, is incidental to distribution. Oranges are marketed in fiberboard and wirebound wooden boxes. Small mesh or plastic bags are also used to some extent to meet the retail demand for prepackaged fruit. Oranges are generally cooled in transit to maintain quality.

Four Federal marketing orders under the Agricultural Marketing Agreement Act of 1937, as amended, regulate various aspects of the marketing of practically the entire U.S. orange crop. The Florida citrus order regulates the grade and size of oranges shipped fresh and also provides for shipping holidays following the heavy Christmas shipping period. The Texas orange order provides for grade and size regulations. Under the California-Arizona navel and valencia orange orders, fresh market shipments are limited and prorated among shippers each week. These orders also regulate the size of the fruit shipped. In addition, the several producing States regulate various aspects of quality and marketing.

U.S. exports

Annual U.S. exports of oranges averaged 910 million pounds (fresh-weight equivalent) during 1962-66 and accounted for about 8 percent of all oranges marketed in those years. About 56 percent of such exports consisted of fresh oranges; 22 percent, of frozen concentrated juice; 12 percent, of canned single-strength juice (some blended with other juices); and 10 percent, of canned concentrated juice.

Canada is the largest export market for U.S. fresh and processed oranges. During 1962-66 that country took 59 percent (fresh-weight equivalent) of such U.S. exports, the EEC countries took 18 percent, the rest of Europe 8 percent, and numerous other countries the remaining 15 percent (table 3).

In recent years 55 percent of U.S. exports of fresh oranges have gone to Canada, 20 percent to the EEC, 7 percent to the rest of Europe, 12 percent to Hong Kong, and the remaining 6 percent to numerous other countries.

Exports of fresh oranges have declined since the mid-1950's while exports of frozen concentrated juice have shown a modest increase. Exports of canned, single-strength and canned, concentrated orange juice during the same period varied considerably from year to year, with no trend apparent.

Foreign market promotion is conducted by both Florida and California-Arizona citrus organizations. The Florida Citrus Commission promotes the sale of fresh and processed oranges in Canada. It also has a promotional program in Europe in which the Foreign Agricultural Service of the U.S. Department of Agriculture participates. The California-Arizona Citrus League in cooperation with the Foreign Agricultural Service has a fresh orange promotional program in Europe. A number of individual firms also conduct programs to increase their export sales.

U.S. imports

Imports normally supply a very small part of the total domestic consumption of fresh and processed oranges. In the years 1962-66, annual imports of oranges in all forms averaged 289 million pounds (fresh-weight equivalent) or about 3 percent of consumption.

Virtually all orange imports enter in one of three forms--fresh oranges, concentrated orange juice, and canned mandarin oranges. In the years 1962-66, canned mandarin oranges accounted for 47 percent of all orange imports (fresh-weight equivalent), fresh oranges

accounted for 29 percent, and concentrated orange juice, mostly frozen, accounted for 23 percent. Most of the remaining 1 percent consisted of canned single-strength orange juice.

Annual U.S. imports of canned mandarin oranges increased from an average of 6 million pounds in the early 1950's to 62 million pounds in 1962-66. Until recently Japan was virtually the only source of such imports. Since 1962, however, Taiwan has also become an important supplier, accounting for nearly 15 percent of the imports entered during 1962-66.

U.S. imports of fresh oranges averaged 83 million pounds annually during 1962-66. Imports from Mexico accounted for about 90 percent of such imports (table 4). The imports from Mexico, which consist mostly of common sweet oranges, generally enter through Texas ports and are distributed in fresh form or processed by Texas citrus fruit handlers. Imports of fresh oranges from Israel have been increasing in recent years. During 1962-66 entries from that country accounted for 5 percent of total imports.

World production and trade

The two predominant orange producing areas of the world are the United States and the Mediterranean region, each of which account for about one-third of the world output (table 5). Next to the United States, Spain is probably the largest producer of oranges and is by far the largest exporter of fresh oranges. All the producing countries of the Mediterranean area export substantial portions of their production, primarily in the form of fresh oranges.

In the Southern Hemisphere, Brazil, with an output approximating that of Spain, is the largest producer. Only a small part of Brazil's production, however, enters international trade. The Republic of South Africa exports the bulk of its production. It is the largest exporter of fresh oranges during the last half of the calendar year--the period when large supplies are available in the Southern Hemisphere. In the late summer and fall months, fresh California valencia oranges are exported in competition with Southern Hemisphere fruit.

Orange production is increasing in most commercial producing countries and many regulatory and promotional programs are in operation in several of the more important countries to gain larger shares of the market. Mexico, a small producer relative to many orange producing countries, is of particular significance to the United States due to its proximity and rapidly increasing production. Mexican oranges from the Montemorelos area have good quality and appearance and have been the predominant source of U.S. fresh orange imports, particularly since cessation of trade with Cuba, which formerly supplied substantial quantities.

Table 1.--Oranges: 1/ U.S. production, utilization, imports for consumption, exports of domestic merchandise, and apparent consumption, crop years 1962-66

Year beginning Nov. 1--	Production 2/	Utilization		Imports 3/	Exports 3/	Apparent consumption
		Fresh sales	Processed			
	Quantity (million pounds, fresh-weight equivalent)					
1962	9,232	2,680	6,452	247	802	8,577
1963	8,234	3,246	4,866	417	746	7,783
1964	10,820	3,794	6,884	326	812	10,192
1965	12,562	4,010	8,406	226	953	11,689
1966	17,108	4,582	12,226	226	1,234	15,800
	Value (1,000 dollars)					
1962	372,614	155,014	214,441	15,566	59,855	4/
1963	450,952	189,208	257,013	24,060	57,593	4/
1964	398,511	176,797	220,789	20,954	60,954	4/
1965	365,722	158,811	203,905	17,611	66,099	4/
1966	361,496	147,764	212,418	15,793	77,071	4/

1/ Oranges, mandarins (including tangerines), and certain citrus hybrids, principally tangelos and temples.

2/ Includes small quantities not utilized commercially.

3/ Includes estimates for the fresh orange equivalent weight of imports and exports of orange juice.

4/ Not available.

Source: Production and utilization compiled from official statistics of the U.S. Department of Agriculture; imports and exports compiled from official statistics of the U.S. Department of Commerce, as noted.

Table 2.--Oranges, fresh: 1/ U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, crop years 1962-66

Year beginning Nov. 1--	Production 2/	Imports 3/	Exports	Apparent consumption
	Quantity (million pounds)			
1962	2,680	75	366	2,389
1963	3,246	149	429	2,966
1964	3,794	98	477	3,415
1965	4,010	64	577	3,497
1966	4,582	29	685	3,926
	Value (1,000 dollars)			
1962	155,014	3,035	35,731	4/
1963	189,208	5,795	37,342	4/
1964	176,797	4,764	42,515	4/
1965	158,811	3,753	47,165	4/
1966	147,764	1,942	53,677	4/

1/ Oranges, mandarins (including tangerines), and certain citrus hybrids, principally tangelos and temples.

2/ Includes only production sold fresh.

3/ Imports entered under item 147.31. Virtually all of these imports are believed to have been fresh oranges.

4/ Not available.

Source: Production compiled from official statistics of the U.S. Department of Agriculture; imports and exports compiled from official statistics of the U.S. Department of Commerce, as noted.

Table 3.--Oranges, fresh and processed: U.S. exports of domestic merchandise, by principal markets, crop years 1962-66

(In millions of pounds, fresh-weight equivalent)

Form and market	Year beginning Nov. 1--				
	1962	1963	1964	1965	1966
Fresh:					
Canada	206	270	268	305	357
Europe:					
EEC 1/	74	64	110	116	150
Other	21	10	25	40	69
Hong Kong	45	60	49	71	73
All other	20	25	25	45	36
Total	366	429	477	577	685
Processed: 2/					
Canada	285	216	229	241	302
Europe:					
EEC 1/	83	32	29	54	112
Other	22	18	25	38	86
All other	46	51	52	43	49
Total	436	317	335	376	549
Fresh and processed:					
Canada	491	486	497	546	659
Europe:					
EEC 1/	157	96	139	170	262
Other	43	28	50	78	155
All other	111	136	126	159	158
Total	802	746	812	953	1,234

1/ The European Economic Community (EEC) consists of Belgium, France, Italy, Luxembourg, the Netherlands, and West Germany.

2/ Consists of the fresh-weight equivalent of oranges used in the following juices: frozen concentrate, hot pack concentrate, canned single strength, and the estimated orange content of mixed citrus juice. Excludes exports of orange segments. Such exports are not separately reported but are believed to have been negligible.

Source: Compiled from official statistics of the U.S. Department of Commerce, as noted.

Table 4.--Oranges, fresh: U.S. imports for consumption, 1/ by principal sources, crop years 1962-66

Source	Year beginning Nov. 1--				
	1962	1963	1964	1965	1966
	Quantity (million pounds)				
Mexico	69.1	129.8	88.6	51.8	27.4
Israel	3.5	4.2	6.7	10.4	.4
All other	2.1	14.7	2.3	1.4	.9
Total	74.7	148.7	97.6	63.6	28.7
	Value (1,000 dollars)				
Mexico	2,548	4,900	4,033	2,886	1,756
Israel	302	321	431	686	69
All other	185	574	300	181	117
Total	3,035	5,795	4,764	3,753	1,942
	Unit value (cents per pound)				
Mexico	3.7	3.8	4.6	5.6	6.4
Israel	8.6	7.6	6.4	6.6	17.2
All other	8.8	3.9	13.0	12.9	13.0
Average	4.1	3.9	4.9	5.9	6.8

1/ Imports under item 147.31 (fresh and prepared or preserved oranges, other than mandarins, in airtight containers). Imports of prepared or preserved oranges (except canned mandarins) have been insignificant.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table 5.--Oranges: 1/ World production, by specified areas and countries, crop years 1962-66

(In millions of pounds)

Area and country	Crop year 2/				
	1962	1963	1964	1965	1966
North America:					
United States	9,232	8,234	10,820	12,562	17,108
Mexico	1,372	1,764	1,897	1,907	1,939
Other	434	455	360	345	305
Total	11,038	10,453	13,077	14,814	19,352
Mediterranean area:					
Spain	2,100	4,080	3,843	4,125	5,172
Italy	1,883	2,365	2,632	2,590	3,019
Israel	1,211	1,337	1,491	1,455	1,759
Morocco	1,050	1,344	1,127	1,315	1,491
Algeria	700	750	869	710	840
Other 3/	2,229	2,752	2,877	3,012	3,377
Total	9,173	12,628	12,839	13,207	15,657
Other Northern Hemisphere:					
Japan	2,450	2,715	3,386	3,600	4,592
Taiwan	112	164	175	238	280
Total	2,562	2,879	3,561	3,838	4,872
Southern Hemisphere:					
Brazil	1,820	1,680	3,185	1,750	2,557
Argentina	1,526	1,577	1,149	1,647	1,739
Republic of South Africa	791	935	1,106	1,155	1,125
Other	581	688	602	661	666
Total	4,718	4,880	6,042	5,213	6,087
Grand total	27,491	30,840	35,519	37,072	45,968

1/ Oranges and mandarins (including tangerines). U.S. data include the citrus hybrids, tangelos and temples.

2/ Harvesting in Northern Hemisphere countries begins in November of the year shown, and in Southern Hemisphere countries, begins in May following the year shown.

3/ Greece, the United Arab Republic, and Turkey each accounted for about one-fourth of the production shown for 1966.

Source: Compiled from official statistics of the U.S. Department of Agriculture.

Commodity	TSUS item
Citrus fruit not elsewhere enumerated:	
Fresh	147.33
Prepared or preserved	147.36, -.37

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969).

U.S. trade position

The citrus fruit considered herein are unimportant in the domestic and foreign trade of the United States.

Comment

This summary covers a number of minor species of citrus and a number of hybrids of citrus not covered elsewhere in the Tariff Schedules of the United States (TSUS). Citrons, grapefruit, lemons, limes, and oranges, which are specifically provided for in the TSUS, are discussed in other summaries in this volume.

In recent years imports of the fresh citrus fruit (item 147.33) covered in this summary are believed to have consisted mostly of ugli fruit from Jamaica. The ugli fruit, which is used in much the same manner as grapefruit, is not produced commercially in the United States.

The prepared or preserved citrus fruit (item 147.36) covered in this summary are in such forms as dried, brined, pickled, canned in sirup, or frozen. Such prepared or prepared citrus fruit do not enter the United States in significant quantities. In recent years most of the imports that have been recorded under item 147.36 have consisted of canned kumquats in sirup. These are now classed as oranges under item 147.30.

Domestic production of the citrus fruit covered by this summary is believed to be small. Such production is harvested largely in Florida and California. Exports are believed to be negligible. During 1964-67 annual imports of fresh citrus under item 147.33 averaged 500,000 pounds and imports of prepared or preserved citrus under item 147.36 averaged 10,000 pounds.

U.S. tariff treatment

The column 1 rates of duty applicable to imports (see general headnote 3 in the TSUSA-1969) are as follows:

TSUS item	Commodity	Rate prior to Jan. 1, 1968	U.S. concessions granted in 1964-67 trade conference (Kennedy Round)	
			Second stage, effective Jan. 1, 1969	Final stage, effective Jan. 1, 1972
147.33	Other citrus fruit, fresh.	17.5% ad val.	14% ad val.	8.5% ad val.
147.36	Other citrus fruit, prepared and preserved.	35% ad val.	1/	1/
147.37	If product of Cuba---	14% ad val.	1/	1/

1/ Rate of duty not affected by the trade conference.

The tabulation above shows the column 1 rates of duty in effect prior to January 1, 1968, and modifications therein as a result of concessions granted by the United States in the sixth round of trade negotiations under the General Agreement on Tariffs and Trade. Only the second (that in effect during 1969) and final (fifth) stages of the annual rate modifications are shown (see the TSUSA-1969 for the other stages). During the period from August 31, 1963, when the TSUS became effective, to December 31, 1967, the prior rates shown above did not change. The rate for item 147.36 is that provided for in the Tariff Act of 1930, as originally enacted.

The rate shown for item 147.37 is the preferential rate for products of Cuba, which was suspended on May 24, 1962. Imports from Cuba have been prohibited since February 7, 1962.

Commodity	TSUS item
Dates, fresh or prepared or preserved:	
Fresh or dried:	
With pits:	
In units weighing 10 pounds or less--	147.40
In units weighing more than 10 pounds----------	147.42
Without pits:	
In units weighing 10 pounds or less--	147.44
In units weighing more than 10 pounds----------	147.46
Otherwise prepared or preserved----------	147.48

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969).

U.S. trade position

Date production in the United States is very small compared with world production. Imports account for about half of U.S. consumption. Exports equal about 15 percent of production.

Description and uses

Dates are the fruit of a palm tree commonly found in the hot, dry regions of the Middle East. They have been commercially produced in the United States for about half a century. The climatic requirements of the date palm limit its cultivation in the United States to California and Arizona. The varieties of dates are designated as "soft," "dry," and "semidry." Irrespective of variety, about three-fourths of the dry matter of dates in their cured, stable condition is sugar. In the soft varieties this is virtually all invert sugar (glucose and fructose), while the dry varieties are characterized by a predominence of sucrose (cane sugar) and a more fibrous texture.

Consumers in the United States do not generally distinguish between dried dates and fresh dates as they do for most other dried fruit and their fresh counterparts. The full-sized date turning color on the tree is sometimes called tree-ripe, and is considered a fresh date. The date which is dried on the tree becomes wrinkled, sticky to the touch and darkened.

In the United States the principal date variety produced is the Deglet Noor, a semidry variety, that is usually marketed loosely packed in consumer-sized units. Dates imported into the United States

are virtually all "soft" varieties which are usually packed in containers holding about 55 pounds when imported. They are repackaged in the United States if they are to be sold at retail.

In the United States, dates are consumed principally as whole fruit or used in confectionery and bakery products. Cull dates are utilized in products not for human consumption such as stock feed and alcohol.

Otherwise prepared or preserved dates (item 147.48) include specialty products such as stuffed dates and chopped dates.

U.S. tariff treatment and other import requirements

The current column 1 rates of duty applicable to imports (see general headnote 3 in the TSUSA-1969) are as follows:

TSUS item	Commodity	Rate of duty
	Dates, fresh or prepared or preserved:	
	Fresh or dried:	
	With pits:	
147.40	In units weighing 10 pounds or less---	7.5¢ per lb.
147.42	In units weighing more than 10 pounds.	1¢ per lb.
	Without pits:	
147.44	In units weighing 10 pounds or less---	7.5¢ per lb.
147.46	In units weighing more than 10 pounds.	2¢ per lb.
147.48	Otherwise prepared or preserved----------	35% ad val.

The TSUS rates of duty for dates are those provided for in the Tariff Act of 1930, as originally enacted.

The average ad valorem equivalents of the specific rates of duty in effect on December 31, 1967, based on dutiable imports during calendar year 1967, were as follows:

TSUS item	Percent
147.40--------	93.8
147.42--------	10.5
147.44--------	37.3
147.46--------	23.0

Under section 8e of the Agricultural Marketing Agreement Act of 1937, as amended, dates imported for sale as whole dates at retail

are subject to minimum grade requirements comparable to those of domestic dates marketed under the Federal marketing order. Dates for other uses are subject only to the minimum quality and wholesomeness requirements of the Food and Drug Administration.

U.S. consumption

Domestic consumption of dates during 1962-66 1/ averaged about 64 million pounds annually on a pitted-date basis, about one-half of which was supplied by imports (table 1). In the decade before World War II, imports usually accounted for 85 to 90 percent of domestic consumption.

In recent years approximately three-fourths of the domestically grown dates have been sold through packinghouses for retail distribution or for processing into date products. The remainder were disposed of directly by growers or were packinghouse culls. Imports enter for both retail distribution and for processing. The share of domestic and imported dates going to each of these use categories is shown in the following tabulation:

Use category and origin	Share (percent)
For retail distribution:	
Domestic	34
Imported	42
Total	76
For processing:	
Domestic	12
Imported	12
Total	24
Grand total	100

U.S. producers and production

Virtually all of the commercial production of dates occurs around Indio, California, where dates are harvested from about 4,500 acres on about 500 farms. During recent years there have been about 15 packers of domestic dates. One cooperative reportedly handles more than two-thirds of the crop.

The domestic production of dates in the decade prior to World War II was about 6 million pounds annually (pitted basis). By the

1/ Unless otherwise indicated, the years referred to are crop years beginning Aug. 1 of the year specified.

mid-1950's it had increased to a level of about 40 million pounds annually where it has remained. During the crop years 1962-66, annual production ranged from 37 million to 43 million pounds (table 1).

A Federal marketing order regulating both the quality and quantity of dates marketed has been in effect since 1955. Under the order, all dates are graded. Those meeting the quality standards for whole dates are released in such quantities as are needed to supply the trade demand for whole California dates. Excess quantities are allocated to manufacturers or export markets which also serve as outlets for edible dates that do not meet the quality requirements for whole dates. Dates that do not meet the minimum requirements for human consumption are used for such products as livestock feed and alcohol. From 1955 through 1959, the Department of Agriculture made diversion payments to supplement grower returns and encourage development of new markets for dates. During the crop years 1960 and 1964 more than 5 million pounds of dates were purchased by the U.S. Department of Agriculture for the Federal school lunch program.

U.S. exports

Exports of domestic dates, which have more than doubled over the past 10 years, have amounted to about 15 percent of domestic production in recent years. During 1962-66, they averaged 6 million pounds annually (table 1). The bulk of the exports have gone to Canada and northern Europe in recent years. Substantial quantities have also gone to Latin America and the remainder to many other countries.

U.S. imports

During 1962-66 the aggregate U.S. imports of dates in all forms, on a pitted-date basis, averaged 32 million pounds annually (table 2), a decrease of about 20 percent from the level of the mid-1950's. Nearly all date imports enter in units weighing more than 10 pounds. Generally Iraq has supplied about two-thirds of such imports and Iran has supplied the remainder.

Imports of dates are entered for packaging as whole dates after passing U.S. Department of Agriculture inspection for minimum quality, or are entered for processing after passing U.S. Food and Drug Administration inspection for quality and wholesomeness. There have been several changes in the form and composition of date imports since the Department of Agriculture inspections began in 1962. Prior to 1962 most imports were packed compressed into blocks in containers holding about 70 pounds. Now most imports are packed loose in containers holding about 55 pounds, the 70-pound packs being used only for dates imported for processing. In recent years about 80 percent

of the dates imported have been for packaging and about 20 percent for processing. For more than a decade prior to 1963 nearly all dates imported in units of more than 10 pounds entered with pits removed at a duty rate of 2 cents per pound, but during the 1963 and 1964 seasons about one-third of such dates entered with pits, at a duty rate of 1 cent per pound. The quantity imported with pits declined after 1964 (table 2), but averaged about 25 percent of annual imports of pitted and unpitted dates during 1962-66. The shift from pitted to nonpitted dates was associated with improvements made in date-pitting machinery in the United States and to the desire of importers to reduce the percentage of dates failing to pass Federal inspection.

Imports of dates in units of 10 pounds or less have been very small or nil in recent years. Such imports consist chiefly of dates without pits from Iraq. Annual imports of dates otherwise prepared or preserved (147.48), virtually all of which come from Iraq and Iran, averaged less than 1 million pounds during 1962-66. Such imports were equal to less than 3 percent of total date imports.

World production and trade

World date production, which is restricted to hot, dry climates, is estimated at about 3,300 million pounds annually. World trade is estimated at about 800 million pounds annually, or about 25 percent of the world production. The principal producing countries are Iraq, Iran, the United Arab Republic, Saudi Arabia, Algeria, and Pakistan. Substantial quantities of dates are also produced in many other countries throughout North Africa and the Middle East, and in small amounts in Spain and Mexico. Because of the favorable climate for date production in Iraq, Iran, and the United Arab Republic, these countries are the world's largest producers. Only a small part of this production, however, meets the standards of quality necessary for trade with many European countries and the United States.

Dates of the Deglet Noor variety, the chief type produced in the United States, are also produced in Algeria and Tunisia.

Table 1.--Dates, fresh or dried, or otherwise prepared or preserved: U.S. carry-in stocks, production, imports for consumption, exports of domestic merchandise, and apparent consumption, crop years 1962-66

(Quantity in thousands of pounds of pitted dates; value in in thousands of dollars)

Year beginning Aug. 1--	Carry-in stocks 1/	Production 2/	Imports	Exports 3/	Apparent consumption 4/	Ratio (percent) of imports to consumption
	Quantity					
1962	12,092	42,350	32,429	3,238	62,957	51.5
1963	20,676	38,675	37,511	4,953	75,281	49.8
1964	16,628	42,525	35,269	6,772	70,214	50.2
1965	17,436	36,750	28,165	7,187	55,918	50.4
1966	19,246	37,275	27,842	8,421	57,362	48.5
	Value					
1962	5/	3,775	3,371	809	5/	5/
1963	5/	2,851	3,771	1,202	5/	5/
1964	5/	3,596	3,573	1,691	5/	5/
1965	5/	2,310	2,639	1,880	5/	5/
1966	5/	3,067	2,585	2,211	5/	5/

1/ Handlers' stocks of marketable dates.

2/ California production only. Such production accounts for more than 98 percent of the U.S. total.

3/ As reported, including dates with pits.

4/ Represents beginning inventory (carry-in stocks) plus production, plus imports, less exports, and less ending inventory (carry-in stocks of the following year; stocks on Aug. 1, 1967 were 18,580 thousand pounds).

5/ Not available.

Source: Production compiled from official statistics of the U.S. Department of Agriculture; imports and exports compiled from official statistics of the U.S. Department of Commerce; stocks compiled from Date Administrative Committee reports.

Note.--All quantities of nonpitted dates were converted to a pitted-date basis, except as noted, by multiplying by 0.875.

Table 2.--Dates, fresh or dried, or otherwise prepared or preserved: U.S. imports for consumption, crop years 1962-66

Year beginning Aug. 1--	Fresh or dried			Otherwise prepared or preserved	Total
	In units of more than 10 pounds		In units of 10 pounds or less 1/		
	With pits 1/	With pits removed			
	Quantity (1,000 pounds of pitted dates)				
1962	26	31,694	20	689	32,429
1963	12,841	24,262	165	243	37,511
1964	12,115	22,242	83	829	35,269
1965	6,394	20,433	-	1,338	28,165
1966	8,350	18,671	-	821	27,842
	Value (1,000 dollars)				
1962	6	3,298	6	61	3,371
1963	1,366	2,360	17	28	3,771
1964	1,414	2,075	8	76	3,573
1965	694	1,821	-	124	2,639
1966	944	1,561	-	80	2,585

1/ Converted to a pitted-date basis by multiplying the quantities of dates imported with pits by 0.875.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Commodity	TSUS item
Figs:	
Fresh or in brine	147.50
Dried:	
In containers of over 1 pound	147.51
Other	147.53
Otherwise prepared or preserved	147.54
Paste and pulp	152.50

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969).

U.S. trade position

Fresh fig consumption, virtually all supplied by domestic production, has declined in recent years. The consumption of dried figs, like that of other dried fruit, has been declining for many years because of the increased availability of other fresh, frozen, and canned fruit. Imports of such figs have supplied about one-third of consumption in recent years. The consumption of fig paste, nearly half of which is now supplied by imports, has been increasing for many years. Domestic canned figs supply nearly all of the consumption of otherwise prepared or preserved figs, which has been declining since 1943. Imports, which consist primarily of baked figs stuffed with almonds, are not directly competitive with domestic canned figs.

Description and uses

Figs are the fruit of certain trees which are grown in tropical and subtropical regions of the world for their edible fruit. Fresh figs (item 147.50 (pt.)) are usually eaten out of hand or used in fruit salads. The commercial preservation of figs by brining (item 147.50 (pt.)) is obsolete and there is no known trade in such figs. Dried figs (items 147.51-147.53) are eaten out of hand, used in cooking and baking, or ground into fig paste (item 152.50) which is used primarily in fig bars. 1/ Virtually all of the otherwise prepared or preserved figs (item 147.54) produced domestically are canned in sirup; they are used mainly as a dessert fruit. The imported otherwise prepared or preserved figs consist primarily of baked figs stuffed with almonds, which are used as a confection. Small quantities of canned, sugar-cured, dried figs are also imported.

1/ A bar-shaped cookie with a filling made chiefly of fig paste.

U.S. tariff treatment

The column 1 rates of duty applicable to imports (see general headnote 3 in the TSUSA-1969) are as follows:

TSUS item	Commodity	Rate prior to Jan. 1, 1968	U.S. concessions granted in 1964-67 trade conference (Kennedy Round)	
			Second stage, effective Jan. 1, 1969	Final stage, effective Jan. 1, 1972
	Figs:			
147.50	Fresh or in brine-----	2¢ per lb.	1.8¢ per lb.	1.5¢ per lb.
	Dried:			
147.51	In immediate containers weighing with their contents over 1 pound each. 2/	4.5¢ per lb.	1/	1/
147.53	Other 2/----------	4.5¢ per lb.	4.1¢ per lb.	3.5¢ per lb.
147.54	Otherwise prepared or preserved.	16% ad val.	14% ad val.	12% ad val.
152.50	Paste and pulp--------	5¢ per lb.	1/	1/

1/ Rate of duty not affected by the trade conference.
2/ Item 147.52 (dried figs) was superseded by items 147.51 and 147.53 on Jan. 1, 1968.

The tabulation above shows the column 1 rates of duty in effect prior to January 1, 1968, and modifications therein as a result of concessions granted by the United States in the sixth round of trade negotiations under the General Agreement on Tariffs and Trade. Only the second (that in effect during 1969) and final (fifth) stages of the annual rate modifications are shown above (see the TSUSA-1969 for the other stages). During the period from August 31, 1963, when the TSUS became effective, to December 31, 1967, the prior rates shown above did not change. The rate for fig paste (item 152.50) is that provided for in the Tariff Act of 1930, as originally enacted.

The average ad valorem equivalent of the specific rates of duty in effect on December 31, 1967, based on dutiable imports during calendar year 1967, were as follows:

TSUS item	Percent
147.50	11.8
147.52 (superseded by items 147.51 and 147.53 on Jan. 1, 1968)	25.5
152.50	65.6

U.S. producers

Virtually all of the U.S. output of dried figs and most of the output of fresh figs is produced in California. Small quantities of figs, mostly in fresh form, are produced in a number of Southern States, but this production is only of local significance. All domestic dried figs are produced in the San Joaquin and Sacramento Valleys in California.

The 1964 United States Census of Agriculture reported that figs were produced on 534 California farms in that year, but figs were produced in commercial quantities on only about 200 of them. On many such farms, figs were the most important crop. The acreage devoted to fig production declined almost steadily from a high of 46,770 acres in 1930 to 19,263 acres in 1966. 1/ About 10 growers reportedly controlled about half of the acreage in 1966.

Twelve food processors, 9 of which were located in California, packed canned figs in 1966. The remaining firms were located in Louisiana and Texas. In 1966, dried figs and fig paste were processed by 4 fig packers, 1 of which handled about 60 percent of the domestic crop.

Between 20 and 30 firms use substantial quantities of fig paste in their products. Formerly many of these firms produced their own fig paste from domestic and imported dried figs, but this practice is no longer common.

U.S. consumption, production, and trade

Fresh figs (item 147.50).--Inasmuch as fresh figs are extremely perishable and difficult to ship, they have never become a very important fresh fruit in U.S. or world trade. Domestic production,

1/ Unless otherwise indicated, all years referred to are crop years beginning Aug. 1 of the year specified.

little of which is exported, supplies virtually all U.S. consumption of fresh figs. Such production supplied 99 percent of consumption in the years 1962-66 (table 1). Domestic production, which has declined in recent years, averaged about 3 million pounds annually during 1962-66 compared with about 4 million pounds during 1955-59. Annual imports of fresh figs, largely from Italy, averaged 43,000 pounds during 1962-66.

Dried figs 1/ (items 147.51-147.53).--The increased availability of all types of fresh, frozen, and canned fruits has resulted in a long-term decline in the consumption of dried figs as well as other dried fruits. During the crop years 1962-66, the annual domestic consumption of dried figs averaged more than 12 million pounds (table 2) compared with about 20 million pounds during the late 1950's. During 1962-66, domestic production supplied about two-thirds of the consumption of dried figs. During that period such production, continuing a trend, averaged 12 million pounds annually as compared with about 15 million pounds during 1955-59. An average of more than 1 million pounds of domestic dried figs were exported annually during 1962-66. Canada, Hong Kong, and New Zealand were the principal markets for these exports.

Since 1944 a California State marketing order, concerned with sales promotion, research, growers' deliveries to packers, and the control and disposal of substandard fruit, has been in effect for California dried figs and dried fig products. From March 22, 1955 to August 1, 1960 a Federal marketing order also was in effect for California dried figs, pursuant to the Agricultural Marketing Act of 1937, as amended.

Even though the rate of duty applicable to imports of dried figs valued at more than 7 cents per pound was reduced from 5 cents to 3 cents per pound in 1939, annual imports of such figs were substantially lower during the following decade than during the 1930's. As much as two-thirds of annual imports during the period 1930-50 were converted to fig paste after importation. Following the extension of the 3-cents-per-pound rate to all dried figs in 1950, imports of such figs increased sharply and amounted to 10 million pounds in the 1950 crop year. The duty was reduced further in 1951 to 2.5 cents per pound, but imports, while still at a high level, declined somewhat to 7 million pounds in 1951. Following a Tariff Commission escape-clause investigation, 2/ which resulted in a finding of injury, the President increased the rate of duty on dried figs from 2.5 cents per pound to

1/ The data used in this section do not include those domestic dried figs which were converted to fig paste and those declared to be nonmerchantable under the State marketing order.

2/ See Figs, Dried, Report to the President on the Escape-Clause Investigation Under the Provisions of Section 7 of the Trade Agreements Extension Act of 1951, U.S. Tariff Commission, July 1952.

4.5 cents per pound, effective August 30, 1952. Imports of such figs in 1952 declined to only 4 million pounds but increased sharply in 1953 to 8 million pounds and in 1954 were still at a high level of 7 million pounds. The increased imports in 1953 and 1954, however, were almost entirely the result of increased imports of string figs. 1/ Because Food and Drug Administration condemnations of string figs had been very heavy in the preceding years and were expected to continue, importers ordered substantially more of such figs. Condemnations in 1953 and 1954, however, were insignificant, resulting in a substantial oversupply of string figs. Since that time, annual imports of dried figs have ranged between 3 million and 6 million pounds and during 1962-66 averaged more than 4 million pounds, which was equivalent to 36 percent of the domestic dried figs consumed during that period. During the years since the rate of duty was increased on dried figs (1952), U.S. imports of such figs have consisted chiefly of retail packages of specialty products, mostly from Greece but also from Turkey, Italy, and Portugal (table 3). In some years, especially during the 1950's, significant quantities of dried figs entered from Portugal for processing into fig paste.

During the years 1953-62, the Tariff Commission annually reviewed the dried fig situation, pursuant to Executive Order 10401, and found in each of those years that conditions had not changed sufficiently to warrant a formal investigation to consider whether the duty on dried figs could be returned to the reduced rate of 2.5 cents per pound.

Fig paste (item 152.50).--While the consumption of dried figs (consumed as dried figs) has declined, the consumption of fig paste has shown a general upward trend owing to the increased consumption of fig bars. During the crop years 1962-66, an average of 35 million pounds (table 4) of fig paste was consumed annually as compared with an average of 31 million pounds during 1955-59. The share of consumption supplied by domestic fig paste has in general trended downward from nearly 100 percent prior to 1950 to 54 percent during 1962-66 when domestic production averaged only 19 million pounds annually. In contrast, annual imports, which had been negligible prior to the 1950's, increased sharply to an average of 12 million pounds during 1955-59 and 16 million pounds during 1962-66. In most years prior to 1962, Turkey was by far the most important supplier, but Portugal also was important in some years. Since that time large quantities of fig paste, especially from Turkey, have been denied entry due to failure to comply with the sanitary requirements of the Food and Drug Administration. During 1962-66, 50 percent of U.S. imports of fig paste were from Portugal, 25 percent from Spain, and 21 percent from Turkey. (table 5). Prior to 1961 Spain had not been a source of U.S. imports of fig paste. U.S. exports of fig paste are not reported separately but are believed to have been negligible or nil.

1/ String figs, which come mainly from Greece, are generally imported in containers holding 1 pound or less. Such figs are not used for fig paste.

Otherwise prepared or preserved figs (item 147.54).--In recent years about 99 percent of the U.S. consumption of otherwise prepared or preserved figs has been supplied by domestic production which consists of canned figs (table 6). The remainder of consumption has been supplied by imports, which consist primarily of baked figs stuffed with almonds. The domestic and imported products are not directly competitive.

U.S. production of canned figs reached a peak of 43 million pounds in 1943 and has declined irregularly since then. Annual production of such figs averaged only 17 million pounds during 1962-66 compared with 23 million pounds during 1955-59.

Annual U.S. imports of otherwise prepared or preserved figs (primarily baked figs), which averaged 418,000 pounds during the calendar years 1950-54, increased in the late 1950's but then declined to an average of 221,000 pounds during crop years 1962-66. U.S. exports of otherwise prepared or preserved figs (consisting entirely of canned figs) are not reported separately, but in recent years are believed to have been somewhat larger in volume than imports. Most of these exports go to Canada.

World production and trade

Dried figs and fig paste are the only fig products traded in significant quantities internationally. Annual production of dried figs (including fig paste), based on the output reported by the major producing countries, ranged from 262 million to 313 million pounds during the calendar years 1963-66. About 43 percent of the reported world fig production was exported during those years. The following tabulation shows (in percentages) the share of reported world production accounted for by each major fig producing country, the share of its production that was exported, and the share of world exports it supplied.

Country	Share of world production	Share of production exported	Share of world exports
Turkey	33	72	57
Italy	21	7	4
Greece	19	51	22
United States	13	4	1
Portugal	8	64	12
Spain	6	29	4
Total or average	100	43	100

March 1969
1:8

Table 1.--Figs, fresh: U.S. production, imports for consumption, and apparent consumption, crop years 1962-66

(Quantity in thousands of pounds; value in thousands of dollars)

Year beginning Aug. 1--	Production 1/	Imports 2/	Apparent consumption	Ratio (percent) of imports to consumption
	Quantity			
1962	3,200	45	3,245	1.4
1963	3,000	42	3,042	1.4
1964	3,600	22	3,622	.6
1964	3,000	46	3,046	1.5
1966	2,600	61	2,661	2.3
	Value			
1962	259	3	3/	3/
1963	276	3	3/	3/
1964	326	2	3/	3/
1965	266	6	3/	3/
1966	235	9	3/	3/

1/ Includes only production sold through fresh market outlets.

2/ Import category includes fresh or in brine figs. The commercial preservation of figs by brining (brined figs) is obsolete; trade in such figs is believed to be negligible or nil.

3/ Not available.

Source: Production compiled from official statistics of the California Department of Agriculture; imports compiled from official statistics of the U.S. Department of Commerce.

Note.--U.S. exports of fresh figs are negligible or nil.

Table 2.--Figs, dried: U.S. carry-in stocks, production, imports for consumption, exports of domestic merchandise, and apparent consumption, crop years 1962-66

(Quantity in thousands of pounds; value in thousands of dollars)

Year beginning Aug. 1--	Carry-in stocks 1/	Production 2/	Imports	Exports 3/	Apparent consumption 4/	Ratio (percent) of imports to consumption
	Quantity					
1962	4,988	12,746	5,224	1,576	12,754	41.0
1963	8,628	13,224	5,122	1,492	18,792	27.3
1964	6,690	11,730	4,942	1,624	10,082	49.0
1965	11,656	11,176	3,614	1,643	9,395	38.5
1966	15,408	12,444	3,353	1,748	5/ 10,957	30.6
	Value					
1962	6/	1,995	642	459	6/	6/
1963	6/	2,116	705	441	6/	6/
1964	6/	1,959	687	491	6/	6/
1965	6/	1,721	582	507	6/	6/
1966	6/	1,804	546	553	6/	6/

1/ Old-crop, natural-condition figs in the hands of packers and growers as of Aug. 1 (includes figs under contract to fig-bar manufacturers and held for future delivery) is equivalent to carryout of preceding crop year. Does not include dried figs (domestic and imported) in transit or held by fig-bar manufacturers in their own warehouses or elsewhere.

2/ Does not include dried figs that were converted to paste or those that were nonmerchantable. Value is estimated return to growers calculated by multiplying the average annual price per pound received for Calimyrna figs by the total production of dried figs.

3/ Export statistical class includes both dried figs and fig paste; however, virtually all exports in recent years are believed to have been dried figs.

4/ Apparent consumption is equivalent to the sum of carry-in stocks, production, and imports, less exports and carry-in stocks of the following year.

5/ Takes into account 18,500 thousand pounds of dried figs which trade sources indicate were carried into 1967. 6/ Not available.

Source: Carry-in stocks and production compiled from official statistics of the California Dried Fig Advisory Board, except as noted; imports and exports compiled from official statistics of the U.S. Department of Commerce.

March 1969
1:8

Table 3.--Figs, dried: U.S. imports for consumption, by principal sources, crop years 1962-66

Source	Year beginning Aug. 1--				
	1962	1963	1964	1965	1966
	Quantity (1,000 pounds)				
Greece	4,323	4,257	4,404	3,135	2,648
Turkey	601	525	361	366	496
Italy	221	204	96	64	100
Portugal	79	88	71	45	103
All other	-	48	10	4	6
Total	5,224	5,122	4,942	3,614	3,353
	Value (1,000 dollars)				
Greece	483	535	571	477	405
Turkey	118	113	91	88	109
Italy	33	35	16	12	21
Portugal	8	9	8	6	10
All other	-	12	1	1/	1/
Total	642	705	687	582	546
	Unit value (cents per pound) 2/				
Greece	11.2	12.6	13.0	15.2	15.3
Turkey	19.6	21.6	25.2	24.1	22.0
Italy	15.1	17.3	17.0	18.3	21.6
Portugal	10.4	10.1	10.9	12.4	9.3
All other	-	25.7	12.0	10.0	8.1
Average	12.3	13.8	13.9	16.1	16.3

1/ Less than $500.
2/ Calculated from unrounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table 4.--Fig paste: U.S. production, imports for consumption, and apparent consumption, crop years 1962-66

(Quantity in thousands of pounds; value in thousands of dollars)

Year beginning Aug. 1--	Production 1/	Imports	Apparent consumption	Ratio (percent) of imports to consumption
	Quantity			
1962	21,452	9,216	30,668	30.0
1963	19,778	20,863	40,641	51.3
1964	18,682	18,063	36,745	49.2
1965	14,574	19,802	34,376	57.6
1966	20,036	13,766	33,802	40.7
	Value			
1962	2,735	580	2/	2/
1963	2/	1,702	2/	2/
1964	2/	1,754	2/	2/
1965	2/	1,913	2/	2/
1966	2/	1,075	2/	2/

1/ Value of production estimated from data supplied to the U.S. Tariff Commission by leading California packing firms.

2/ Not available.

Source: Production compiled from official statistics of the California Dried Fig Advisory Board, except as noted; imports compiled from official statistics of the U.S. Department of Commerce.

Note.--Domestic exports of fig paste are negligible or nil.

Table 5.--Fig paste: U.S. imports for consumption, by principal sources, crop years 1962-66

Source	Year beginning Aug. 1--				
	1962	1963	1964	1965	1966
	Quantity (1,000 pounds)				
Portugal	4,393	10,728	8,493	11,356	5,747
Turkey	2,964	4,774	3,390	2,133	4,155
Spain	1,709	4,307	4,761	5,562	3,750
Greece	148	1,050	1,338	696	-
All other	2	4	81	55	114
Total	9,216	20,863	18,063	19,802	13,766
	Value (1,000 dollars)				
Portugal	283	796	749	1,038	439
Turkey	203	517	477	308	333
Spain	82	305	399	494	293
Greece	12	84	122	64	-
All other	1/	1/	7	8	10
Total	580	1,702	1,754	1,913	1,075
	Unit value (cents per pound) 2/				
Portugal	6.5	7.4	8.8	9.1	7.6
Turkey	6.8	10.8	14.1	14.4	8.0
Spain	4.8	7.1	8.4	8.9	7.8
Greece	7.9	8.0	9.1	9.3	-
All other	6.9	7.0	8.3	15.0	8.9
Average	6.3	8.2	9.7	9.7	7.8

1/ Less than $500.
2/ Calculated from unrounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table 6.--Figs, otherwise prepared or preserved: 1/ U.S. production, imports for consumption, and apparent consumption, crop years 1962-66

(Quantity in thousands of pounds; value in thousands of dollars)

Year beginning Aug. 1--	Production	Imports	Apparent consumption	Ratio (percent) of imports to consumption
	Quantity			
1962	22,576	279	22,855	1.2
1963	17,182	343	17,525	2.0
1964	20,662	248	20,910	1.2
1965	12,528	164	12,692	1.3
1966	11,962	72	12,034	.6
	Value			
1962	2/	55	2/	2/
1963	2,497	69	2/	2/
1964	2/	59	2/	2/
1965	2/	42	2/	2/
1966	2/	20	2/	2/

1/ Canned figs are the only important domestic product; imports are believed to have consisted almost entirely of baked figs stuffed with almonds.

2/ Not available.

Source: Production compiled from official statistics of the National Canners Association, except for 1963 value of production which was compiled from the 1963 Census of Manufactures; imports compiled from official statistics of the U.S. Department of Commerce.

Note.--Domestic exports, most of which go to Canada, are not classified separately; in recent years they are believed to have been somewhat larger in volume than imports.

Commodity	TSUS item
Grapes:	
Fresh:	
Hothouse grown	147.60
Other:	
If entered February 15-March 31	147.61
If entered April 1-June 30	147.63
If entered July 1-February 14	147.64
Prepared or preserved, except dried	147.77, -.78

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969).

U.S. trade position

About 15 percent of U.S. grape production is marketed through fresh market outlets. Exports account for 21 percent of fresh market sales and imports for about 4 percent of the consumption of fresh market grapes.

Description and uses

Grapes are the fruit of large woody deciduous vines, which in commercial practice are trained on wires or grown freestanding on erect stumps, depending on the variety. The many varieties of grapes, which vary greatly in size, color, and flavor, are divided into two basic types--European and American.

About 90 percent of the grapes produced in the United States consist of European types, which are grown mostly in California and, to a limited extent, in Arizona. The remaining production consists of American types, which are grown mostly in the Eastern and Central States (chiefly New York and Michigan). American-type grapes are also grown in Canada. The bulk of the U.S. grape crop is dried for raisins or crushed for wine and grape juice. Raisins are discussed in another summary in this volume and wine and grape juice are discussed in separate summaries in volume 10.

In the United States about 25 varieties of European-type grapes are of significant commercial importance. About half of these varieties are marketed mainly as table grapes (i.e., used mainly for eating out of hand and for salads). The three principal varieties for table use are the Emperor, Thompson Seedless, and Tokay. Thompson Seedless grapes are classed as a raisin-variety grape but are used extensively as table grapes. Several of the California table-variety grapes can be held in cold storage for a number of months, thus extending the marketing season from midsummer into the following spring.

The Concord is the principal variety of American-type grape grown in the United States; it is used primarily in the preparation of juice, jelly, and wine. Because the skin of the Concord breaks easily under pressure, it is not well suited for fresh shipment; however, this variety is imported from Canada in the fresh form for processing in the United States. Other American-type grapes include the Niagara, Delaware, and Catawba varieties, which are used primarily for wine.

Hothouse grapes are grown in artificially heated glass houses and receive a great deal of specialized attention. There is no known commercial production of such grapes in the United States.

Prepared or preserved (except dried) grapes consist primarily of canned Thompson Seedless and frozen Concord grapes. Canned grapes are used mostly in fruit salads and in fruit cocktail. Frozen grapes (including pulp) are used mostly for the manufacture of jams and jellies.

U.S. tariff treatment

The column 1 rates of duty applicable to imports (see general headnote 3 in the TSUSA-1969) are as follows:

TSUS item	Commodity	Rate prior to Jan. 1, 1968	U.S. concessions granted in 1964-67 trade conference (Kennedy Round)	
			Second stage, effective Jan. 1, 1969	Final stage, effective Jan. 1,1972
	Grapes:			
	Fresh:			
147.60	Hothouse grown	12.5¢ per cu. ft.	10¢ per cu. ft.	6¢ per cu. ft.
	Other:			
147.61	If entered February 15-March 31. 1/	5.25¢ per cu. ft.	2/	2/
147.63	If entered April 1-June 30. 1/	5.25¢ per cu. ft.	3¢ per cu. ft.	Free
147.64	If entered July 1-February 14.	12.5¢ per cu. ft.	10¢ per cu. ft.	6¢ per cu. ft.
147.77	Prepared or preserved, except dried.	35% ad val.	28% ad val.	17.5% ad val.
147.78	If product of Cuba	14% ad val.	2/	2/

1/ Item 147.62 (fresh grapes, other than hothouse, entered Feb. 15 to June 30) was superseded by items 147.61 and 147.63 on Jan. 1, 1968.
2/ Rate of duty not affected by the trade conference.

The preceding tabulation shows the column 1 rates of duty in effect prior to January 1, 1968, and modifications therein as a result of concessions granted by the United States in the sixth round of trade negotiations under the General Agreement on Tariffs and Trade. Only the second (that in effect during 1969) and final (fifth) stages of the annual rate modifications are shown (see the TSUSA-1969 for the other stages). During the period from August 31, 1963, when the TSUS became effective, to December 31, 1967, the prior rates shown above did not change.

The rate shown for item 147.78 is the preferential rate for products of Cuba, which was suspended on May 24, 1962. Imports from Cuba have been prohibited since February 7, 1962.

The average ad valorem equivalents of the specific rates of duty in effect on December 31, 1967, based on dutiable imports during 1967, were as follows:

TSUS item	Percent
147.60	0.8
147.62 (superseded by items 147.61 and 147.63 on January 1, 1968)	1.8
147.64	7.0

U.S. consumption

Fresh grape consumption averaged 885 million pounds annually in 1963-67 (table 1), down 16 percent from the 1951-55 average. About 10 percent of the fresh grapes consumed during 1963-67 were of wine varieties; most of these were utilized in the production of homemade wine and grape juice. Such usage of fresh wine-variety grapes was down about a third from the level of the early 1950's.

It is estimated that about 110 million pounds (fresh weight) of canned grapes were consumed annually during 1963-67, roughly twice the level of the early 1950's. Nearly all of these grapes were in canned fruit mixtures. The annual consumption of frozen grapes (including grape pulp) averaged an estimated 14 million pounds (product weight) in 1963-67, roughly double that of the 1950's.

U.S. producers and production

The U.S. production of grapes during the 1963-67 period averaged 7,362 million pounds annually, of which most was used for products such as raisins and wine, which are discussed in other summaries. About 15 percent of the total output was sold for fresh use and a much smaller share for canned and frozen grapes. During 1963-67 California,

with 486,000 acres devoted to the production of grapes, produced 91 percent of the total U.S. crop, 96 percent of the grapes sold fresh, and virtually all of the canned grapes. The bulk of the frozen grapes (including grape pulp) is produced in Michigan.

Production of grapes for fresh market sales averaged 1,075 million pounds annually in the years 1963-67, slightly less than the level prevailing 10 years earlier.

The California Thompson Seedless variety, which is classified as a raisin-variety grape, is the leading table grape, accounting for an estimated 40 percent of all fresh grape sales. This variety accounts for the bulk of the U.S. production of raisins, virtually all of the production of canned grapes, and exceeds all other varieties in quantity crushed for wine. Thompson Seedless grapevines used for producing fresh market grapes are treated to produce larger fruit, which results in a lower sugar content than that required for good quality raisins and wine. Such fresh market grapes not actually sold for fresh market use (for example, packing house culls and surplus supplies) are generally suitable only for the production of high-proof grape alcohol and bring relatively low prices.

In addition to the large quantities of the Tokay variety produced for fresh market sale, substantial quantities are crushed for wine. Additional quantities of Tokay, as well as Emperor and other table varieties, are also crushed as a salvage operation each year.

Cold storage holdings of California fresh grapes begin in August, reach their peak in November, then steadily decline to the end of the marketing period, which usually is in April. Emperor grapes comprise the bulk of the cold storage holdings, although most varieties of table grapes are stored to some extent.

During 1963-67 the annual U.S. production of canned grapes averaged 110 million pounds (fresh weight) and the production of frozen grapes (including grape pulp) averaged 14 million pounds (product weight).

U.S. exports

U.S. exports of fresh grapes averaged 228 million pounds annually during 1963-67, which was 21 percent of the total production sold fresh and double the level of the early 1950's. Canada has taken four-fifths of such exports in recent years. The balance went to many other countries, the principal ones of which were Venezuela, Hong Kong, the United Kingdom, and Sweden. Under the Export Grape and Plum Act (7 U.S.C. 591), Emperor grapes must meet certain quality requirements prior to exportation.

U.S. exports of canned grapes are believed to consist almost entirely of California Thompson Seedless grapes in canned fruit mixtures. The quantity of canned grapes exported in this form in recent years is estimated at roughly 20 million pounds (fresh weight) per year. Exports of frozen grapes (including pulp) are believed to have been negligible or nil in recent years.

U.S. imports

U.S. imports of fresh grapes averaged 39 million pounds annually in 1963-67--sufficient to supply about 4 percent of the consumption of fresh market grapes. Despite substantial year-to-year fluctuations, average annual imports have changed very little since the early 1950's.

In recent years about one-half of the annual U.S. imports of fresh grapes, all believed to have been table grapes, entered during the February 15-June 30 tariff period (former item 147.62, table 2). More than 80 percent of the February 15-June 30 imports entered during April, May, and June, the preferential rate period established January 1, 1968. Chile is the predominant supplier and the Republic of South Africa accounts for most of the rest of the imports of fresh grapes entered during the February 15-June 30 period. Nearly all of the imports of fresh grapes entered during the remainder of the year are grapes for processing supplied by Canada during the late fall and early winter months. U.S. imports of hothouse grapes, which are nearly all supplied by Belgium and enter in midwinter, ranged from none to 11,000 pounds per year during 1963-67.

U.S. imports of prepared or preserved (except dried) grapes, which were not separately reported prior to August 31, 1963, averaged 80,000 pounds annually during 1964-67. Such imports came mainly from Spain, Italy, and Japan.

World production and trade

Italy and Bulgaria are the world's largest table grape producers, followed by the United States and several other Mediterranean countries. While the bulk of the grapes produced in most countries is consumed domestically, fresh grape exports are particularly important for certain countries such as Italy, Spain, Bulgaria, the Republic of South Africa, and Chile.

Table 1.--Grapes, fresh: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1963-67

Year	Production 1/	Imports 2/	Exports	Apparent consumption
	Quantity (1,000 pounds)			
1963	1,048,874	31,409	197,449	882,834
1964	1,091,886	51,268	195,369	947,785
1965	1,187,058	40,388	247,539	979,907
1966	1,183,288	34,545	252,950	964,883
1967	861,460	39,320	246,877	653,903
	Value (1,000 dollars)			
1963	3/	3,165	18,265	3/
1964	3/	4,754	19,166	3/
1965	3/	3,454	22,712	3/
1966	3/	3,166	25,252	3/
1967	3/	3,451	25,666	3/

1/ Consists only of grapes sold through fresh market outlets.
2/ From table 2, where certain quantity determinations are noted.
3/ Not available.

Source: Production compiled from official statistics of the U.S. Department of Agriculture; imports and exports compiled from official statistics of the U.S. Department of Commerce.

Table 2.--Grapes, fresh: U.S. imports for consumption, by tariff periods, 1963-67

Year	Grapes other than hothouse 1/		Total 2/
	Entered Feb. 15-June 30	Entered any other time	
	Quantity (1,000 pounds)		
1963	14,875	16,532	31,409
1964	21,992	29,276	51,268
1965	21,872	18,515	40,388
1966	19,388	15,156	34,545
1967	15,846	23,474	39,320
	Value (1,000 dollars)		
1963	2,143	1,020	3,165
1964	3,176	1,578	4,754
1965	2,680	772	3,454
1966	2,572	593	3,166
1967	2,304	1,146	3,450

1/ Quantities imported prior to Sept. 1, 1963, which were reported only in cubic feet, have been converted to pounds at the following rates per cubic foot: Canada and Mexico, 40 pounds; Chile and Argentina, 22 pounds; the Republic of South Africa, 16 pounds; and Belgium and Japan, 10 pounds. A few entries since that time (i.e., in late 1963 and in 1964) have also been adjusted using these rates.

2/ Includes small quantities of hothouse grapes in some years.

Source: Compiled from official statistics of the U.S. Department of Commerce, as noted.

Commodity	TSUS item
Grapes:	
Dried:	
Raisins:	
Made from seedless grapes:	
Currants	147.66
Sultana	147.68
Other	147.70
Other	147.72
Other dried grapes	147.75

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969).

U.S. trade position

The United States is the world's largest producer and a substantial exporter of raisins. Imports are generally negligible.

Description and uses

Raisins are dried grapes. They vary in size and shape and range in color from greenish white or yellow to nearly black. Only a few varieties of grapes are used extensively for making raisins. They are: (1) the Thompson Seedless or Sultanina; (2) the similar, but slightly smaller and more round Sultana; (3) the Corinth, which dries to a raisin known as a currant; and (4) the Muscat. In the United States the Thompson Seedless grape is generally sun dried in the vineyard to produce a dark brown raisin. It is also used to produce golden seedless raisins by rapid artificial dehydration combined with the bleaching action of sulphur fumes. The Sultana raisin, which is common in world trade (but not generally produced in the United States), is a light-colored, seedless raisin produced in various ways from both Sultana grapes and Thompson Seedless grapes. The currant is a small very dark-colored, mostly seedless, raisin while the Muscat is a large brown raisin with prominent seeds.

At times grapes are dried as a method of preserving them for later use in making wine. Although production and trade in such dried grapes are insignificant, a tariff distinction between raisins and other dried grapes has existed for many years.

Raisins are used extensively for eating out-of-hand, and in baked goods, confections, and many other food preparations. The Muscat

raisin is often marketed with the seeds removed. It is also sold in clusters on the stem as a holiday specialty.

U.S. tariff treatment

The column 1 rates of duty applicable to imports (see general headnote 3 in the TSUSA-1969) are as follows:

TSUS item	Commodity	Rate prior to Jan. 1, 1968	U.S. concessions granted in 1964-67 trade conference (Kennedy Round)	
			Second stage, effective Jan. 1, 1969	Final stage, effective Jan. 1, 1972
	Grapes:			
	Dried:			
	Raisins:			
	Made from seedless grapes:			
147.66	Currants	1¢ per lb.	1/	1/
147.68	Sultana	1¢ per lb.	1/	1/
147.70	Other	1.5¢ per lb.	1.3¢ per lb.	1¢ per lb.
147.72	Other	2¢ per lb.	1/	1/
147.75	Other dried grapes	2.5¢ per lb.	1/	1/

1/ Rate of duty not affected by the trade conference.

The tabulation above shows the column 1 rates of duty in effect prior to January 1, 1968, and modifications therein as a result of concessions granted by the United States in the sixth round of trade negotiations under the General Agreement on Tariffs and Trade. Only the second (that in effect during 1969) and final (fifth) stages of the annual rate modifications are shown (see the TSUSA-1969 for the other stages). During the period from August 31, 1963, when the TSUS became effective, to December 31, 1967, the prior rates shown above did not change. The rate for items 147.72 and 147.75 are those provided for in the Tariff Act of 1930, as originally enacted.

The average ad valorem equivalents of the specific rates of duty in effect on December 31, 1967, based on dutiable imports during calendar year 1967, were as follows:

TSUS item	Percent
147.66---------	13.0
147.68---------	8.3
147.72---------	5.8
147.75---------	16.1

There were no imports under item 147.70 (other raisins made from seedless grapes) in 1967.

U.S. consumption

Annual U.S. raisin consumption, which is characterized by moderate fluctuations, averaged 144,820 tons in 1962-66 1/ (table 1)--- about the same as during the 1950's. On a per capita basis, however, consumption has declined from 1.73 pounds in 1955 to 1.54 pounds in 1965.

Nearly all of the raisins consumed in the United States consist of natural (i.e., sun dried) Thompson Seedless. The other raisins consumed include golden seedless, currants, Muscats, and a few Sultanas and other varieties. The United States is the only market where the dark-colored, natural Thompson Seedless raisin predominates. The demand for golden seedless, currant, and Muscat raisins is generally limited to special uses. There is no significant demand in the United States for the light-colored Sultana raisin which is used extensively in Europe.

U.S. producers

All of the U.S. raisin output is produced in the San Joaquin Valley of California where production is centered in Fresno County. About 4,600 grape growers produced natural Thompson Seedless raisins in 1964, compared with 5,250 ten years earlier. Probably a similar number of growers sold raisin-variety grapes to wine producers or fresh market packers. Some growers switch market outlets from one year to the next, but the bulk of the raisin producers make raisins every year. While the number of raisin producers declined moderately during the past decade, the annual average production of each increased substantially from about 27 tons in 1954 to 50 tons in 1964.

1/ Unless otherwise indicated, all years referred to are crop years beginning Sept. 1 of the year specified.

There are about a dozen firms that process and pack significant quantities of raisins on a regular basis. Of these, a large cooperative reportedly handles well over a third of the crop and the five largest firms account for about three-quarters of the raisin production.

In addition there are about 20 dehydrators scattered through the raisin producing area. These firms buy Thompson Seedless grapes from growers and process them into golden seedless raisins, which are then sold to packers for further processing and distribution. The dehydrators do not have facilities for packing raisins, but a few are owned by, or are associated with, packers.

U.S. production

In recent years U.S. raisin production has consisted of about 90 percent natural Thompson Seedless, 6 percent golden seedless, 2 percent Muscats, and 2 percent currants.

In the years 1962-66 raisin production averaged 244,800 tons per year compared with an average of 198,500 tons in the late 1950's This reflects heavy planting of raisin-variety grapes during 1958-60. New plantings have fallen off sharply since that time. Increasing yields, however, from the heavy plantings of 1958-60 could result in increased total grape production during the next several years.

About two-thirds of the grapes produced in California consist of raisin varieties, mostly Thompson Seedless. In recent years about one-half of the California raisin-variety grapes have been dried, a little over one-third have been crushed, and the balance have been marketed through fresh market outlets or canned.

The two predominant outlets for raisin-variety grapes--raisins and crushing for wine--are complementary. Raisin production, therefore, is influenced by conditions in the wine market. Since World War II producer net returns from raisins have consistently exceeded net returns from grapes sold for crushing. The higher net returns from raisins appear to reflect the greater risks involved (e.g., rain during the drying period); more supervision associated with making raisins; and perhaps the inconvenience attendant to such operations.

Considerable risk and substantial costs are inherent in present raisin production methods. Natural Thompson Seedless raisins, for example, are produced by cutting the grapes from the vines and spreading them on heavy paper "trays" between the rows of vines to dry. Drying generally takes about 3 weeks, but drying time can vary considerably. Half way through the drying process the grapes are turned

for more exposure and when drying is almost complete the raisins are rolled up in the paper trays where drying continues until they are placed in sweat boxes for curing. After 3 or 4 weeks in the sweat box, moisture equalization is complete and the raisins are ready for packing. All of these operations require substantial amounts of hand labor.

Raisin packing involves removal of the raisins from the stems, cleaning, grading, and packaging. The raisins are marketed in two sizes: large or "select" and small or "midget." Most retail packages (the 15-ounce size predominates) contain select raisins, while midget raisins are preferred by bakers and bring a slightly higher price than the larger size. Domestic distribution of raisins is almost equally divided between retail and institutional (mostly 30 pound) size packages.

The marketing of raisins in the United States has been regulated under a Federal marketing order since 1949. The order allocates sufficient raisins to the domestic market to meet normal requirements. The balance is allocated to a reserve pool in which each producer holds a proportionate share. Raisins in the pool are normally exported at world market prices that are below domestic prices. Since 1955 the order has also regulated quality through a system of inspection and certification prior to shipment.

In addition to the Federal program, a California State marketing order is used by raisin producers for both foreign and domestic sales promotion. The activities under the State order complement the Federal program which has no provision for domestic market promotion but does seek foreign markets in connection with disposition of its reserve pool raisins. In recent years the California program has had the benefit of Federal foreign market development funds, in addition to its own, in carrying out its foreign raisin promotion program which covers several European countries and Japan.

U.S. exports and imports

During the 1962-66 period, U.S. raisin exports averaged 59,000 tons annually--about one-fourth of annual average production. With domestic shipments limited to normal market requirements by the Federal marketing order, production increases have been reflected in substantially increased exports.

U.S. raisins are marketed throughout the world with Europe taking one-half or more of the total (table 2). Historically, the United Kingdom had been by far the largest single foreign user of U.S. raisins, followed by West Germany and the Scandinavian countries.

Since 1960, however, Japan has been the leading export market. During the late 1950's domestic raisin producers in cooperation with U.S. wheat producers carried out a market development program that, aided by the liberalization of import restrictions by the Japanese Government, resulted in an increase in raisin exports to Japan from an annual average of 665 tons in 1955-59 to 15,800 tons in 1962-66.

While shipments of raisins in bulk containers predominate, nearly a third of the U.S. exports are shipped in retail-size packages for distribution through well-established outlets. U.S. raisins generally bring higher prices in all foreign markets than raisins from other producing countries despite the traditional preference for light-colored raisins in most countries.

U.S. imports of raisins have been very small, usually less than 1 percent of consumption. They normally consist of high-priced specialty packs which are not competitive with domestic production, but in some years importers bring in competitive types of raisins in response to uncertain supplies and high domestic prices. Entries under the tariff category "other dried grapes" have been negligible or nil for many years.

World production and trade

In recent years five countries have accounted for 95 percent of the reported free-world raisin production (table 3). Following the United States, which produced about one-third of the total, the leading producers were Greece, Australia, Turkey, and Iran.

Thompson Seedless and the similar Sultana are the dominant varieties in all major producing countries except Greece where currants predominate. The Muscat, including Australian Lexias and Spanish cluster Malagas and stemmed Valencias, follows currants in volume of production. The markets for currants and Muscats are distinct. Such raisins are not readily substituted for other types.

Over half of the world's raisin production is exported. The United States exports only about one-fourth of its production, but the bulk of the production of the other major producing countries is exported.

In recent years the Greek, Turkish, and Australian raisin industries have together entered into minimum export pricing agreements designed to achieve market stability in the face of frequent surplus production. While not a party to the minimum price agreements, U.S. raisin producers have supported these countries by releasing reserve pool raisins at compatible prices. The minimum export prices are established under the auspices of the International Raisin Council.

Table 1.--Raisins (including currants) and other dried grapes: U.S. production, imports for consumption, exports of domestic merchandise, and consumption, crop years 1962-66

Year beginning Sept. 1--	Production 1/	Imports	Exports	Consumption 2/
	Quantity (tons)			
1962	191,000	860	45,046	140,534
1963	266,000	489	56,069	134,290
1964	231,000	151	55,560	139,715
1965	270,000	158	70,591	149,694
1966	280,000	242	66,527	159,867
	Value (1,000 dollars)			
1962	50,806	188	16,743	3/
1963	51,408	144	20,324	3/
1964	54,285	49	19,593	3/
1965	54,000	51	24,298	3/
1966	58,167	67	21,791	3/

1/ Production, which is shown on a "sweat box" basis (i.e., as delivered to packers) should be reduced by 7 percent for comparison with other columns which are shown on a packed basis.

2/ Consists of shipments to domestic outlets plus imports. Shipments derived from statistics of the Raisin Administrative Committee.

3/ Not available.

Source: Production compiled from official statistics of the U.S. Department of Agriculture; imports and exports compiled from official statistics of the U.S. Department of Commerce; consumption compiled as noted.

Table 2.--Raisins: U.S. exports, by principal markets, crop years 1962-66

(In tons)

Market	Year beginning Sept. 1--				
	1962	1963	1964	1965	1966
Japan	11,772	14,797	15,234	19,281	17,706
United Kingdom	5,444	6,846	8,042	9,591	9,743
Canada	6,476	7,151	6,080	6,662	7,355
Denmark	2,509	3,230	3,438	4,405	3,678
Sweden	2,944	3,341	3,124	4,278	3,279
Finland	1,349	2,796	2,126	3,481	3,026
West Germany	1,653	2,093	2,262	2,289	2,370
Norway	1,091	1,707	1,886	2,385	2,100
Mexico	2,191	1,843	1,926	2,581	1,721
Netherlands	789	1,631	769	1,228	1,089
All other	8,828	10,634	10,673	14,410	14,460
Total	45,046	56,069	55,560	70,591	66,527

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table 3.--Raisins: Production in specified countries, calendar years 1962-66

(In tons)

Country	1962	1963	1964	1965	1966
United States	191,000	266,000	231,000	270,000	280,000
Greece	212,000	144,000	163,500	193,500	195,500
Australia	107,100	77,100	115,900	117,000	98,800
Turkey	105,000	66,000	78,300	132,000	81,000
Iran	55,000	65,000	39,000	47,000	70,000
Other 1/	23,800	22,900	31,500	30,600	26,400
Total	693,900	641,000	659,200	790,100	751,700

1/ Production in Cyprus, Spain, and the Republic of South Africa. Data are not available from the U.S.S.R. and Afghanistan, both substantial raisin producers, and many other countries that produce insufficient raisins to be important in international trade.

Source: Compiled from official statistics of the U.S. Department of Agriculture.

Commodity	TSUS item
Guavas:	
Fresh, dried, in brine, or pickled	147.80, -.81
Otherwise prepared or preserved	147.85
Paste or pulp	152.54, -.55

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969).

U.S. trade position

Virtually all of the trade in guavas consists of fruit in the processed form. In recent years imports have probably accounted for about a fourth of consumption, which is estimated at about 9 million pounds.

Description and uses

Guavas are the fruit of small trees or shrubs grown in tropical or subtropical climates. The fruit, which generally is about the size and shape of an orange, consists of a layer of fine granular flesh surrounding a soft pulp in which small seeds are imbedded. Most guavas have a characteristic strong odor when ripe that, for many people, makes them objectionable to eat as a fresh fruit.

Prepared or preserved guavas (item 147.85) consist chiefly of canned guava shells, which are halves of peeled and deseeded guavas. Canned guava shells are used principally for dessert and salad purposes. Guava paste or pulp (item 152.54) consist of paste, which is generally used as a confection, and pulp which is used in the manufacture of jelly, dessert topping, juice, and other products. Guavas, if in the form of jelly, jam, marmalade, or fruit butter, are provided for in item 153.08, which is covered in another summary in this volume.

U.S. tariff treatment and other import requirements

The column 1 rates of duty applicable to imports (see general headnote 3 in the TSUSA-1969) are as follows:

TSUS item	Commodity	Rate prior to Jan. 1, 1968	U.S. concessions granted in 1964-67 trade conference (Kennedy Round)	
			Second stage, effective Jan. 1, 1969	Final stage, effective Jan. 1, 1972
	Guavas:			
147.80	Fresh, dried, in brine, or pickled.	15% ad val.	12% ad val.	7% ad val.
147.81	If product of Cuba.	10% ad val.	1/	2/
147.85	Otherwise prepared or preserved.	8.75% ad val.	7% ad val.	4% ad val.
152.54	Paste or pulp----------	14% ad val.	11% ad val.	7% ad val.
152.55	If product of Cuba---	10% ad val.	1/	2/

1/ Rate of duty not affected by the trade conference.
2/ Subordinate Cuban provisions deleted effective Jan. 1, 1970.

The tabulation above shows the column 1 rates of duty in effect prior to January 1, 1968, and modifications therein as a result of concessions granted by the United States in the sixth round of trade negotiations under the General Agreement on Tariffs and Trade. Only the second (that in effect during 1969) and final stages of the annual rate modifications are shown (see the TSUSA-1969 for the other stages). During the period from August 31, 1963, when the TSUS became effective, to December 31, 1967, the prior rates shown above did not change.

The rates shown for items 147.81 and 152.55 are preferential rates for products of Cuba, which were suspended on May 24, 1962. Imports from Cuba have been prohibited since February 7, 1962.

Under plant quarantine regulations administered by the U.S. Department of Agriculture, fresh guavas are prohibited entry into the United States.

U.S. consumption, production, and producers

Almost all guavas are consumed in a processed form. The annual U.S. and Puerto Rican consumption of guava products is estimated to have been equivalent to about 9 million pounds of fresh guavas in recent years. Imports probably accounted for about a fourth of this consumption. Consumption of guava products is largest in the areas where the fresh fruit is produced, that is, in Hawaii, Puerto Rico, and Florida.

Hawaii and Puerto Rico account for about 90 percent of the fresh guavas produced within the U.S. customs area. In recent years annual fresh production ranged from 2 million to 4 million pounds in Hawaii and from 2 million to 3 million pounds in Puerto Rico.

U.S. exports and imports

U.S. exports of guavas and guava products are not separately reported, but such exports, if any, are insignificant.

U.S. imports (including entries into Puerto Rico) during 1964-67 of the guava products covered in this summary are shown in the following tabulation:

Commodity	1964	1965	1966	1967
	Quantity (1,000 pounds)			
Guavas:				
Otherwise prepared or preserved	433	495	526	770
Paste or pulp	1,277	1,093	1,109	1,788
	Value (1,000 dollars)			
Guavas:				
Otherwise prepared or preserved	63	82	75	96
Paste or pulp	111	94	81	120
	Unit value (cents per pound)			
Guavas:				
Otherwise prepared or preserved	14.5	16.6	14.3	12.5
Paste or pulp	8.7	8.6	7.3	6.7

Dried, brined, or pickled guavas are not normally articles of commerce and none were imported during 1964-67.

In recent years imports of otherwise prepared or preserved guavas have consisted principally of canned guava shells from the Republic of South Africa and Venezuela. U.S. imports of guava paste and pulp are believed to have consisted largely of guava paste. During 1964-67, more than half of such imports entered Puerto Rico, a customs district of the United States. Imports of guava paste and pulp have been supplied chiefly by the Dominican Republic, Venezuela, Haiti, and Costa Rica.

Commodity	TSUS item
Mangoes, fresh or prepared or preserved--	147.90, -.91
Mango paste or pulp----------	152.58, -.59

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969).

U.S. trade position

Domestic production supplies more than one-half of the fresh mangoes consumed in the United States. The mango products consumed domestically are primarily supplied by imports. Exports are negligible or nil.

Description and uses

The mango is the fruit of a large, broadleafed, evergreen tree that is common in many tropical regions. The fruit ranges in size from several ounces to several pounds each and has a single flattened seed, typically kidney shaped. Mangoes generally have a peach-like flesh but have their own distinctive flavor. There are hundreds of mango varieties in the world. Virtually all of the mangoes commercially harvested in the United States are from vegetatively propagated trees of varieties selected for having fruit of good flavor and smooth flesh. Much of the production in other parts of the world is harvested from trees grown from seed. Many of these trees produce fruit which have a strong turpentine flavor and fibrous flesh that makes them unappealing as a fresh fruit.

Ripe mangoes are used principally as fresh fruit, but some are marketed canned in sirup, canned in fruit salads, or frozen. Unripe mangoes are used in the preparation of mango chutney, mango pickles, mango curry, and a variety of other spiced preparations. Brined, unripe mangoes, not suitable for immediate consumption, are sometimes used for making chutney. There are many recipes for the preparation of mango chutney, which is used as a condiment. In addition to mango slices, most mango chutneys usually include salt, sugar, vinegar, spices, and sometimes other fruit and vegetables. Mango slices in spiced heavy sirup is a traditional Indian export item (called sweet mango chutney) that is used to prepare various chutneys, pickles, and fruit sauces.

Mango paste and pulp are not very important commercially. They are used as a base for chutney, fruit sirups, and beverages,

and sometimes as a confection. Mango nectar, a beverage, is produced in Puerto Rico.

U.S. tariff treatment

The column 1 rates of duty applicable to imports (see general headnote 3 in the TSUSA-1969) are as follows:

TSUS item	Commodity	Rate prior to Jan. 1, 1968	U.S. concessions granted in 1964-67 trade conference (Kennedy Round)	
			Second stage, effective Jan. 1, 1969	Final stage, effective Jan. 1, 1972
	Mangoes:			
147.90	Fresh, or prepared or preserved.	3.75¢ per lb.	1/	1/
147.91	If product of Cuba.	3¢ per lb.	1/	1/
152.58	Paste or pulp	14% ad val.	11% ad val.	7% ad val.
152.59	If product of Cuba	10% ad val.	1/	2/

1/ Rate of duty not affected by the trade conference.
2/ Subordinate Cuban provision will be deleted, effective Jan. 1, 1970.

The tabulation above shows the column 1 rates of duty in effect prior to January 1, 1968, and modifications therein as a result of concessions granted by the United States in the sixth round of trade negotiations under the General Agreement on Tariffs and Trade. Only the second (that in effect during 1969) and final (fifth) stages of the annual modifications are shown (see the TSUSA-1969 for the other stages). During the period from August 31, 1963, when the TSUS became effective, to December 31, 1967, the prior rates shown above did not change. The rates shown for items 147.91 and 152.59 are preferential rates for products of Cuba, which were suspended on May 24, 1962. Imports from Cuba have been prohibited since February 7, 1962.

The average ad valorem equivalent of the specific rate of duty in effect on December 31, 1967 on item 147.90 was 21.9 percent, based on dutiable imports during 1967.

U.S. consumption, production, producers, and exports

U.S. consumption of mangoes is estimated to have ranged from 7 million to 9 million pounds annually in recent years. Of such consumption, domestic production supplied an estimated 4 million to 6 million pounds, imports about 2 million pounds, and shipments from Puerto Rico to the United States about 1 million pounds. A substantial quantity of mangoes is also consumed in Puerto Rico.

Nearly all of the U.S. production of mangoes is grown in Florida, but small quantities are produced and consumed in Hawaii. Probably a fifth of the Florida production is consumed in that State and the remainder is shipped out-of-State. These out-of-State shipments, which constitute virtually the only supply of domestically grown fresh mangoes for areas outside of Florida and Hawaii, increased from an average of 1.5 million pounds annually during the late 1950's to 3.2 million pounds annually during 1963-67. Annual shipments during the latter period were as follows:

Year	1,000 pounds
1963------	3,024
1964------	3,836
1965------	4,144
1966------	2,800
1967------	2,268

The United States Census of Agriculture indicated that 42 million mangoes were produced in Puerto Rico in 1964. This production, nearly all of which was consumed on the island, probably totaled from 15 million to 20 million pounds. Shipments of fresh mangoes from Puerto Rico to the United States have totaled about 1 million pounds annually in recent years.

U.S. exports of mangoes are negligible or nil.

U.S. imports

Annual imports of mangoes have ranged from 1.5 million to 2.0 million pounds in most years of the past decade but reached a record 3.4 million pounds in 1967, when domestic supplies were low. Prior to the embargo of products of Cuba in 1962, Cuba was the principal supplier of imported mangoes. In recent years Mexico has been the principal supplier (see table).

A plant quarantine, designed to exclude certain injurious fruit and melon flies, prohibits the importation of fresh mangoes into the

United States except from Mexico and islands of the West Indies. Mangoes from those areas may be imported only after being treated as prescribed by the U.S. Department of Agriculture. It is estimated that 80 to 90 percent of the imports from Mexico and virtually all of the imports from Haiti, Jamaica, and other West Indian suppliers have been fresh mangoes in recent years. Imports of prepared or preserved mangoes supplied mainly by Taiwan and Mexico, are estimated to have ranged from 300,000 to 400,000 pounds annually in recent years.

Annual U.S. imports of mango paste and pulp during 1964-67 averaged 145,000 pounds. The major supplier was Venezuela.

World production and trade

World mango production is large but production data are not available for most areas. The mango is as common in India and Southeast Asia as the apple is in America and Europe. An estimated 10,000 million pounds of mangoes are harvested annually in India. More than 2 million acres of land are presently used to produce the Indian crop. Production in the Republic of South Africa, an exporter of fresh mangoes, is estimated to be in excess of 20 million pounds annually.

World trade in fresh mangoes is small because of difficulties in shipping and a general unfamiliarity with the fruit in many temperate zone countries. World trade in mango products is small partly because the supply of quality processed fruit is small. In 1965 India exported about 3 million pounds of mango chutney and pickles, principally to the United Kingdom.

Mangoes: U.S. imports for consumption, by principal sources, 1963-67

Source	1963	1964	1965	1966	1967
	Quantity (1,000 pounds)				
Mexico	1,165	1,349	1,038	1,137	1,783
Haiti	223	272	249	273	1,194
Taiwan	200	146	181	177	149
Jamaica	140	216	173	230	200
Other	28	74	70	84	123
Total	1,756	2,057	1,711	1,901	3,449
	Value (1,000 dollars)				
Mexico	285	255	233	270	354
Haiti	49	33	28	30	121
Taiwan	80	65	79	76	63
Jamaica	13	21	19	25	23
Other	7	20	16	19	28
Total	434	394	375	420	589
	Unit value (cents per pound) 1/				
Mexico	24.5	18.9	22.5	23.7	19.8
Haiti	22.1	12.2	11.3	11.0	10.1
Taiwan	40.2	44.6	43.7	43.0	42.0
Jamaica	9.1	9.6	11.2	11.0	11.3
Other	23.3	26.9	22.4	22.2	23.5
Average	24.7	19.2	21.9	22.1	17.1

1/ Calculated from unrounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Commodity	TSUS item
Cantaloupes, fresh:	
If entered August 1-September 15--	148.10, -.11
If entered any other time----------	148.15, -.16

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969).

U.S. trade position

Domestic production supplies about 90 percent of the U.S. consumption of cantaloupes; however, during January through May nearly all consumption is supplied by imports. Domestic and imported cantaloupes are in the market at the same time, mainly during May and June. Exports are small.

Description and uses

There are about half-a-dozen different botanical varieties of muskmelons, with numerous subtypes, that range widely in shape, size, and appearance and that will hybridize readily with each other. The predominant member of these melons produced in the United States is known as a cantaloupe. The cantaloupe is a melon grown on an annual trailing vine in temperate climates. This melon is round to oval, usually 5 or 6 inches in diameter, has a salmon-orange colored flesh and the skin is overlain with a heavy, sandy tan-colored surface netting. Another melon which has a rough-warty, nonnetted surface is grown mostly in European countries; it is botanically known as the "true cantaloupe." In this summary only cantaloupes of the type grown in the United States are discussed. Melons other than cantaloupes and watermelons (items 148.25 and 148.30) are discussed in another summary.

Cantaloupes are generally used fresh as an appetizer, salad, or fruit dessert. Small quantities of cantaloupes are prepared in the form of frozen cantaloupe balls. Such products are classed as prepared or preserved melons (item 148.35), which are discussed in another summary.

U.S. tariff treatment

The current column 1 rates of duty applicable to imports (see general headnote 3 in the TSUSA-1969) are as follows:

TSUS item	Commodity	Rate of duty
	Cantaloupes, fresh:	
148.10	If entered August 1-September 15	20% ad val.
148.11	If product of Cuba	14% ad val.
148.15	If entered any other time	35% ad val.
148.16	If product of Cuba	14% ad val.

The United States granted no concessions in the sixth round of trade negotiations under the General Agreement on Tariffs and Trade on the items covered by this summary. For the period since the TSUS became effective on August 31, 1963, the rates of duty shown above have not changed. The rate shown for item 148.15 is that provided for in the Tariff Act of 1930, as originally enacted.

The rates shown for items 148.11 and 148.16 are preferential rates for products of Cuba, which were suspended on May 24, 1962. Imports from Cuba have been prohibited since February 7, 1962.

U.S. consumption

U.S. consumption of cantaloupes averaged 1.3 billion pounds annually during 1963-67, of which about 10 percent was supplied by imports (see table). Consumption during March, April, and most of May is nearly all supplied by imports. During the balance of the year it is nearly all supplied by domestic production.

U.S. producers

Although cantaloupes are produced commercially in at least 25 States, nearly three-fourths of the crop is harvested in California and Arizona. In the main western producing districts, acreages in cantaloupes range up to several hundred acres per producer. This is generally larger than in other States. A number of melon packing firms also grow substantial acreages. Cantaloupe growers also often produce other melons, vegetables, field crops, or livestock.

U.S. production

U.S. cantaloupe production averaged 1.2 billion pounds annually during 1963-67, about the same level as during the 1950's. Data compiled by the U.S. Department of Agriculture indicates that the annual average production of cantaloupes, by seasons, was as follows during 1963-67.

Season	Million pounds	Percent
Spring	365	31
Early summer	73	6
Midsummer	630	53
Late summer	87	8
Early fall	27	2
Total	1,182	100

The cantaloupe harvest is highly seasonal, lasting only a few weeks in each district. Spring season harvests begin in mid-April but are most active during June. The midsummer harvests are most active from mid-July to the end of August. The early fall harvests are primarily during October and end in November. The bulk of the spring crop is produced in the Arizona and California desert area. Some spring cantaloupes are also produced in the lower Rio Grande valley of Texas. Most of the early summer crop is harvested in Georgia and South Carolina. Central California produces about 85 percent of the midsummer crop, and Colorado and Michigan are the largest producers of the late summer crop. The early fall crop is produced in the Imperial Valley of California and around Yuma, Arizona.

Cantaloupes require a long growing season and are susceptible to a number of diseases that effectively limit the areas where they can be grown commercially. Disease problems in the West generally require crop rotation and after a number of years of heavy production, cantaloupes have been largely phased out of some localities. A large temporary labor force is needed for harvesting and packing cantaloupes inasmuch as the fields must be hand harvested at regular intervals to obtain melons of the proper maturity and since packing operations are not highly mechanized.

The cantaloupe varieties grown in the West can withstand the rigors of being shipped long distances and western packing operations are geared to distribute such melons nationwide. Under various State regulations, most shipments of western cantaloupes are subject to U.S. quality standards, or their equivalent, prior to shipment to eastern markets. Cantaloupes too ripe to be shipped to eastern markets are distributed to western markets. Cantaloupes grown in the Eastern States are distributed over a limited area.

U.S. exports

There has been an upward trend in the volume of domestic cantaloupes exported. During 1963-67 annual exports averaged 35 million pounds, or 3 percent of production, compared with an average of 17 million pounds during the early 1950's. The bulk of the exports go to Canada.

U.S. imports

U.S. imports of cantaloupes increased from 6 million pounds in 1950 to a peak of 149 million pounds in 1965. During 1963-67 such imports averaged 131 million pounds annually, or 10 percent of consumption. Nearly all imports come from Mexico and enter the U.S. market largely before substantial domestic production is available. While some imports are competitive with early season U.S. production, imports are largely excluded from the domestic market by low prices during that part of the year when domestic cantaloupes are available in quantity.

The seasonal pattern of imports during 1963-67 was as follows:

Specified months	Percent of annual imports
January-February	1
March	10
April	30
May	42
June	16
July-December	1
Total	100

In recent years the main import period has been extended as imports during June accounted for 16 percent of the annual total compared with 5 percent of the annual total in the late 1950's.

Cantaloupes, fresh: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1963-67

(Quantity in millions of pounds, value in thousands of dollars)

Year	Production 1/	Imports	Exports 2/	Apparent consumption	Ratio (percent) of imports to consumption
	Quantity				
1963	1,327	111	30	1,408	7.9
1964	1,204	132	25	1,310	10.0
1965	1,160	149	34	1,275	11.7
1966	1,067	138	33	1,172	11.8
1967	1,174	123	53	1,244	9.9
	Value				
1963	65,884	4,892	1,464	3/	3/
1964	60,368	6,750	1,232	3/	3/
1965	62,558	7,529	1,893	3/	3/
1966	66,874	5,960	1,992	3/	3/
1967	75,219	6,326	2,880	3/	3/

1/ Includes small quantities not marketed.
2/ Includes exports of all fresh melons, except watermelons. Over 90 percent of such exports are estimated to be cantaloupes.
3/ Not available.

Source: Production compiled from official statistics of the U.S. Department of Agriculture; imports and exports compiled from official statistics of the U.S. Department of Commerce.

Commodity	TSUS item
Watermelons, fresh----------	148.20, -.21

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969).

U.S. trade position

Watermelons are a nonstorable, seasonal crop. In recent years, about four-fifths of the U.S. imports and one-half of the exports have occurred during the months of April, May, and June. Annual imports have supplied about 2 percent of domestic consumption. Exports have slightly exceeded imports.

Description and uses

Watermelons are the fruit of a vining annual plant which is a member of the cucurbit family. Most members of the cucurbit family, such as cucumbers and squash, are dutiable as vegetables for tariff purposes; however, melons are included with fruit for tariff purposes. The watermelons of commerce are usually elliptical in shape and light to dark green in color. They usually weigh from 10 to 35 pounds each. The flesh, which in most varieties is interspersed with seeds, is usually red in color and sweet and juicy; it contains about 95 percent water.

Watermelons are consumed almost exclusively in the fresh state; the fruit is usually served chilled as a dessert or snack. Prepared or preserved melons (item 148.35), including watermelons, are considered in a separate summary. Watermelon rind is sometimes candied or pickled, but watermelons usually are not produced commercially for that purpose. Rind so used is usually the byproduct of another enterprise such as seed production.

U.S. tariff treatment

The column 1 rates of duty applicable to imports (see general headnote 3 in the TSUSA-1969) are as follows:

TSUS item	Commodity	Rate of duty
148.20	Watermelons, fresh----------	20% ad val.
148.21	If product of Cuba----------	Free

The United States granted no concessions in the sixth round of trade negotiations under the General Agreement on Tariffs and Trade on the items covered by this summary. For the period since the TSUS became effective, on August 31, 1963, the rates of duty shown above have not changed. The rate shown for item 148.21 is the preferential rate for products of Cuba, which was suspended on May 24, 1962. Imports from Cuba have been prohibited since February 7, 1962.

U.S. consumption, production, and producers

Consumption of watermelons in the United States is virtually equivalent to domestic production. During 1963-67 both production and consumption of watermelons averaged 2,900 million pounds annually (see table). The small volume of watermelons consumed during the months of December through April is nearly all supplied by imports.

Watermelons require a long growing season but only are harvested over a short period of time in each growing area. Harvests begin in Florida in April, in California and Texas in May, and in Arizona and the Southern States in June. The peak volume of production in each area is reached somewhat later than these dates. Late harvests are usually completed in October. The U.S. Department of Agriculture divides watermelon production into three harvest seasons. The late spring season includes the Florida and part of the California output. The early summer season includes production in Texas, Georgia, South Carolina, Alabama, Arizona, most of California, and a number of other States, and the late summer season includes production in the Northern States, led by Indiana, Missouri, and Maryland. The following tabulation shows the share of U.S. watermelon production that was harvested during each of the seasonal harvest periods during 1963-67:

Season	Share (percent)
Late spring---------	35
Early summer--------	53
Late summer---------	12
Total----------	100

The annual production of watermelons in Florida during 1963-67 averaged about 40 percent more than during the early 1950's, but production in nearly all of the other States had declined since the earlier period. Total U.S. production, therefore, remained about the same. Florida, which is by far the most important producing State, accounted for about a third of the domestic watermelon production during 1963-67. In 1964 watermelons were grown on about 22,500 U.S. farms, 1,500 of them in Florida.

U.S. exports

U.S. exports of watermelons, virtually all to Canada, ranged from 68 million pounds to 106 million pounds annually during 1963-67 (see table) and took an average of about 3 percent of the annual domestic production. In recent years about half of exports occurred during the months of April, May, and June.

U.S. imports

U.S. imports of fresh watermelons, virtually all from Mexico, averaged 64 million pounds during 1963-67 compared with about 9 million pounds annually during the early 1950's. Such imports were sufficient to supply about 2 percent of the annual domestic consumption during 1963-67 (see table). U.S. imports of watermelons are highly seasonal as is indicated by the following tabulation which shows the share of such imports entered in specified months during 1963-67:

Specified months	Share (percent)
January-March	17
April	23
May	37
June	22
July-December	1
Total	100

Watermelons, fresh: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1963-67

(Quantity in millions of pounds; value in thousands of dollars)

Year	Production 1/	Imports	Exports	Apparent consumption	Ratio (percent) of imports to consumption
	Quantity				
1963	3,110	63	84	3,089	2.0
1964	2,762	57	68	2,751	2.1
1965	2,967	71	83	2,955	2.4
1966	2,894	62	103	2,853	2.2
1967	2,767	68	106	2,729	2.5
	Value				
1963	41,885	1,059	1,952	2/	2/
1964	46,880	1,339	2,274	2/	2/
1965	47,355	1,324	2,390	2/	2/
1966	52,965	1,358	2,918	2/	2/
1967	58,006	1,338	3,107	2/	2/

1/ Includes some quantities not marketed.
2/ Not available.

Source: Production compiled from official statistics of the U.S. Department of Agriculture; imports and exports compiled from official statistics of the U.S. Department of Commerce.

Commodity	TSUS item
Other melons (excludes cantaloupes and watermelons), fresh:	
If entered December 1-May 31	148.25
If entered at any other time	148.30, -.31

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969).

U.S. trade position

About two-thirds of the production and trade in other melons consist of honeydew melons. Imports, which supply about 18 percent of consumption, enter primarily during December-May when the duty is lowest and when domestic supplies are not generally available. Exports are not significant.

Description and uses

This summary covers melons other than cantaloupes and watermelons. In this summary the term "other melons" is used to identify such melons. All of these other melons are produced on annual trailing vines. In the United States their commercial culture is largely limited to warm dry areas of the Southwest. They are nearly always consumed fresh as an appetizer or dessert.

The more common domestically produced other melons are described below. Some of the imported other melons vary considerably from these. The honeydew is a smooth-skinned round, cream-colored melon, usually 6 to 8 inches in diameter. The flesh is pale green to white in color. The Persian melon has a netted skin and orange flesh similar to a cantaloupe but is darker in color and generally larger than the cantaloupe. The casaba melon has a deeply wrinkled, yellow to green colored skin without netting and white flesh. It is nearly round with an elongated end and is similar in size to the honeydew melon. The crenshaw melon is similar in skin appearance to the casaba but is oval in shape and has light, salmon-colored flesh. These other melons are sometimes referred to as winter melons, perhaps because most of them require a longer growing season and ripen later than cantaloupes and watermelons, or because some, such as the casaba, can be harvested in the fall and stored well into the winter. U.S. production of other melons other than those described above is negligible.

U.S. tariff treatment

The column 1 rates of duty applicable to imports (see general headnote 3 in the TSUSA-1969) are as follows:

TSUS item	Commodity	Rate prior to Jan. 1, 1968	U.S. concessions granted in 1964-67 trade conference (Kennedy Round)	
			Second stage, effective Jan. 1, 1969	Final stage, effective Jan. 1, 1972
	Other melons (excludes cantaloupes and watermelons), fresh:			
148.25	If entered December 1-May 31.	17.5% ad val.	14% ad val.	8.5% ad val.
148.30	If entered at any other time.	35% ad val.	1/	1/
148.31	If product of Cuba.	14% ad val.	1/	1/

1/ Rate of duty not affected by the trade conference.

The tabulation above shows the column 1 rates of duty in effect prior to January 1, 1968, and modifications therein as a result of concessions granted by the United States in the sixth round of trade negotiations under the General Agreement on Tariffs and Trade. Only the second (that in effect during 1969) and final (fifth) stages of the annual rate modifications are shown above (see the TSUSA-1969 for the other stages). During the period from August 31, 1963, when the TSUS became effective, to December 31, 1967, the prior rates shown above did not change. The rate for item 148.30 is that provided for in the Tariff Act of 1930, as originally enacted.

The rate shown for item 148.31 is a preferential rate for products of Cuba, which was suspended on May 24, 1962. Imports from Cuba have been prohibited since February 7, 1962.

U.S. consumption

U.S. consumption of other melons averaged nearly 240 million pounds annually during 1963-67--about the same as 10 years earlier. In recent years imports have accounted for an estimated 18 percent of such consumption (table 1).

U.S. producers, production, and exports

The U.S. production of other melons is estimated to have averaged almost 200 million pounds annually in recent years, a decline of roughly 10 percent from the estimated production of the early 1950's. During 1963-67, the annual U.S. production of honeydew melons averaged 137 million pounds compared with an average of about 150 million pounds during the early 1950's. Production of Persian, casaba, crenshaw, and miscellaneous other melons combined is estimated to have averaged 60 million pounds annually in recent years (table 1).

The bulk of the other melons are produced in California. Nearly all of the California production is harvested in late summer in the Central Valley. The honeydew melon is the only one of the other melons produced in significant commercial quantities in other States. Texas, with the earliest harvest of the season, produces an average of about 13 percent of the honeydews and Arizona, the only other important producing State, about 7 percent.

Separate export statistics are not available for other melons. It is believed, however, that exports of such melons range from 1 million to 5 million pounds annually, or less than 10 percent of the export class covering cantaloupes and all other melons except watermelons.

U.S. imports

U.S. imports of other melons increased from an average of 15 million pounds annually during the late 1950's to 42 million pounds annually during 1963-67.

In recent years about 85 percent of the other melon imports have entered during the December 1-May 31 period (item 148.25) when the duty is lowest and when domestic supplies are not generally available. Imports during this period have consisted predominantly of honeydew melons from Chile. The remainder have come largely from Spain and Mexico (table 2). Imports during the June 1-November 30 period (item 148.30) have come predominantly from Spain.

Table 1.--Melons, other than cantaloupes and watermelons, fresh: U.S. production, imports for consumption, and apparent consumption, 1963-67

Year	Production			Imports 2/	Apparent consumption 3/	Ratio of imports to consumption
	Honeydews	Persians, casabas, crenshaws, etc. 1/	Total			
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	Percent
1963----	129,900	57,000	186,900	37,533	224,433	16.7
1964----	131,200	54,000	185,200	42,769	227,969	18.8
1965----	149,600	62,000	211,600	49,831	261,431	19.1
1966----	121,600	57,000	178,600	44,261	222,861	19.9
1967----	152,700	72,000	224,700	34,785	259,485	13.4

1/ Estimated, based on rail and truck unloads in 41 U.S. cities.
2/ Data shown include imports entered from Dec. 1 of the preceding year to Nov. 30 of year shown.
3/ Includes small quantities exported. Exports are not separately reported.

Source: Production compiled from official statistics of the U.S. Department of Agriculture, as noted; imports compiled from official statistics of the U.S. Department of Commerce.

Table 2.--Melons, other than cantaloupes and watermelons, fresh: U.S. imports, by rate of duty season, and principal sources, 1963-67

Year	Quantity from--					Total value
	Chile	Spain	Mexico	Other	All sources	
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 dollars
Entered Dec. 1 of preceding year to May 31--						
1963	22,463	5,031	4,231	713	32,438	1,144
1964	25,650	5,914	2,135	535	34,234	1,270
1965	32,610	4,653	4,172	182	41,617	1,443
1966	26,753	8,387	4,168	605	39,913	1,410
1967	18,621	4,008	4,412	990	28,031	971
Entered June 1 to Nov. 30--						
1963	44	4,823	187	41	5,095	230
1964	-	6,739	1,444	352	8,535	404
1965	-	7,284	691	239	8,214	378
1966	-	4,111	231	6	4,348	189
1967	-	6,641	91	22	6,754	315
Entered Dec. 1 of preceding year to Nov. 30--						
1963	22,507	9,854	4,418	754	37,533	1,374
1964	25,650	12,653	3,579	887	42,769	1,674
1965	32,610	11,937	4,863	421	49,831	1,821
1966	26,753	12,498	4,399	611	44,261	1,599
1967	18,621	10,649	4,503	1,012	34,785	1,286

Source: Compiled from official statistics of the U.S. Department of Commerce.

Commodity	TSUS item
Melons, prepared or preserved	148.35, -.36
Tamarinds, fresh, or prepared or preserved	149.40
Other fruit, fresh, or prepared or preserved:	
Chinese gooseberries, fresh	149.48
Other fruit, fresh	149.50
Prepared or preserved	149.60, -.61

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969).

U.S. trade position

The fruit covered by this summary are not produced in large quantities in the United States. Aggregate imports have totaled less than $200,000 annually. Exports of these fruit are negligible.

Comment

There are more than 100 different kinds of edible fruit which would, if imported, be subject to the U.S. tariff provisions covered by this summary. Few of these kinds of fruit, most of which require subtropical or tropical growing conditions, are marketed commercially and even fewer are grown commercially in the United States or are imported into the United States. The only kinds of "other fruit" (items 149.50 and 149.60) discussed in this summary are those produced in commercial quantities in the United States or imported into the United States in more than token quantities. Some kinds of fruit, which are dutiable here if fresh or prepared or preserved, are more often traded in the form of fruit paste, pulp, jelly, jam, marmalade, juice, or juice concentrate. Fruit in such forms are covered in other summaries in this volume or, in the cases of fruit juices or juice concentrates, in volume 10 of these summaries.

Prepared or preserved melons.--Generally, melons do not lend themselves well to preserving owing to the high percentage of water to solids in the fruit, and canning is usually unsatisfactory because of the heating involved. Frozen melon balls or melon chunks, used as a dessert dish, are produced to some extent in the United States. Data are not available but domestic production of frozen melons probably has not exceeded 1 million pounds annually in recent years. Imports, which were separately reported for the first time in 1963, have been negligible. Fresh melons are considered in three separate summaries in this volume.

Tamarinds.--Tamarinds are the fruit of a large tropical evergreen tree frequently used as a shade tree. The tamarind fruit, when ripe, consists of a brittle, brown pod from 2 to 6 inches long containing a sticky pulp surrounding from 2 to 5 brown seeds. The pulp, the principal edible part of the fruit, is both very high in sugar and in tartaric acid, making the tamarind both one of the sweetest and sourest kinds of fruit. In the United States the tamarind is used principally in the preparation of chutneys and meat sauces. In some countries it is also used to make tamarind sirup for seasoning, tamarindade (a beverage), a brine for pickling fish, tamarind paste, an acid jelly, and is occasionally consumed fresh. Tarmarinds grow in Hawaii and Florida but there is no commercial U.S. production. Commercial production in Puerto Rico is small. Annual U.S. imports during 1964-67 ranged from 132,000 pounds to 790,000 pounds, valued at from $12,000 to $43,000 (table 1). The principal suppliers were India, the Leeward and Windward Islands, and Mexico.

Rhubarb.--Rhubarb, the fleshy leafstalk of a large-leafed perennial plant, is included with fruit for tariff purposes. Rhubarb is used principally for pies and in dessert dishes. The Census of Agriculture reported that in 1964 rhubarb was harvested from 2,650 acres on 850 farms. Rhubarb is produced in nearly all of the Northeastern and Lake States and in the Pacific Coast States. One-third or more of production is hothouse grown. Michigan and Washington States are the chief producers of hothouse-grown rhubarb which, in general, is harvested earlier (March to May) in the season and commands higher prices than field-grown rhubarb.

Annual domestic production of rhubarb is estimated to have totaled about 25 million pounds in recent years. About one-fourth of this amount has been frozen and small quantities have been canned; the rest has been marketed fresh. Imports, nearly all of which are believed to consist of fresh rhubarb from Canada, are estimated to have ranged from 1.0 million pounds to 1.5 million pounds annually during 1964-67 or about 5 percent of estimated domestic consumption.

Persimmon.--The persimmon is a soft, pulpy tree fruit, usually orange in color and somewhat conical in shape. The oriental persimmon, about the size of an orange, is produced in commercial quantities in California, Texas, Florida, and Hawaii. Production in California, which accounted for 92 percent of U.S. production in 1964, averaged more than 4 million pounds annually during 1963-67 (table 2). Persimmons are used primarily as a fresh dessert fruit, although some are dried. Annual imports, if any, have been negligible while small quantities have been exported to Canada. The persimmon is one of the more popular fruits in Japan, where production in 1966 totaled more than 900 million pounds.

Pomegranate.--The pomegranate is the fruit of a subtropical shrub or small tree. The fruit has a smooth, leathery, red peel surrounding many individual angular grains arranged in segments, each containing juicy pulp and one seed. The pomegranate is eaten fresh, used in salads, or pressed for juice--usually for use in mixed fruit drinks. U.S. production, nearly all of which is harvested in California, averaged about 7 million pounds annually during 1963-67 (table 2), an increase of about 10 percent from the previous 5 years. Imports and exports have been negligible in recent years.

Quince.--The quince is used primarily in the preparation of jellies and marmalades. U.S. production, which has been declining, totaled 880,000 pounds in 1964. The crop was harvested on about 1,500 farms in that year. New York was the most important producing State. Imports and exports, if any, have been negligible.

Passion fruit.--The passion fruit, which is 2 to 3 inches long and has a hard rind, is produced on a woody perennial vine. The fruit consists of a layer of aromatic pulp surrounding a cavity of pulp-enclosed seeds. Passion fruit is used chiefly to prepare fruit drinks and dessert flavorings, although it is sometimes used as a dessert fruit by itself or in salads. Hawaiian production, equivalent to U.S. production, is chiefly processed into frozen passion fruit juice. The quantity processed in Hawaii increased from 1.4 million pounds in 1963 to 3.8 million pounds in 1967 (table 2). Imports and exports are believed to have been negligible.

Chinese gooseberry.--The Chinese gooseberry is the fruit of a deciduous vine reported to be native to mild-wintered parts of China. The fruit is oval in shape, from 2 to 4 inches in length, has a greenish-brown hairy outer appearance, a bright green flesh, and inconspicuous seeds. It is used chiefly as a fresh dessert fruit but may be canned. When exported from New Zealand it is sometimes called kiwi fruit.

The Chinese gooseberry is not related botanically to gooseberries dutiable under the tariff provisions for berries, nor is it used in a manner like such gooseberries (see summary on berries in this volume).

U.S. production is harvested from about 60 acres of Chinese gooseberry vines in California. Annual imports, which come from New Zealand, have increased in recent years. In 1967 such imports totaled an estimated 166,000 pounds, valued at $40,000 (table 1).

Other fruit.--Other kinds of fruit grown in Puerto Rico (a U.S. Customs District) or in the United States (principally Hawaii and Florida), which are believed to be dutiable under provisions covered by this summary, include acerolas (also called Barbados cherries), carambolas, cherimoyas, genips (also called Spanish limes), loquats, mamey apples, and mountain apples. Other kinds of fruit that are

imported in small quantities and which are classified under the tariff provisions covered by this summary include the larm or Chinese olive from Southeast Asia, honey berries (from Haiti), and preserved wong pei (from Hong Kong).

U.S. tariff treatment

The column 1 rates of duty applicable to imports (see general headnote 3 in the TSUSA-1969) are as follows:

TSUS item	Commodity	Rate prior to Jan. 1, 1968	U.S. concessions granted in 1964-67 trade conference (Kennedy Round)	
			Second stage, effective Jan. 1, 1969	Final stage, effective Jan. 1, 1972
148.35	Melons, prepared or preserved.	35% ad val.	1/	1/
148.36	If products of Cuba--	14% ad val.	1/	1/
149.40	Tamarinds, fresh, or prepared or preserved.	Free	1/	1/
	Other fruit, fresh, or prepared or preserved:			
149.48	Chinese gooseberries, fresh. 2/	17.5% ad val.	0.4¢ per lb.	Free
149.50	Other fruit, fresh-----	17.5% ad val.	14% ad val.	8.5% ad val.
149.60	Prepared or preserved--	35% ad val.	28% ad val.	17.5% ad val.
149.61	If products of Cuba--	14% ad val.	1/	1/

1/ Rate of duty not affected by the trade conference.
2/ This item was established effective Nov. 11, 1968.

The tabulation above shows the column 1 rates of duty in effect prior to January 1, 1968, and modifications therein as a result of concessions granted by the United States in the sixth round of trade negotiations under the General Agreement on Tariffs and Trade (GATT), or in the case of item 149.48 as a result of legislation. Only the second (that in effect during 1969) and final stages of the annual rate modifications are shown above (see the TSUSA-1969 for the other stages). During the period from August 31, 1963, when the TSUS became effective, to December 31, 1967, the prior rates shown above did

not change. The rate of duty for item 148.35 was provided for in the Tariff Act of 1930 as originally enacted. The duty-free status for tamarinds, item 149.40, was provided for in the Tariff Act of 1930 as originally enacted and was bound in the GATT effective January 1, 1948.

The rate modifications shown for item 149.48, fresh Chinese gooseberries, were established by Public Law 90-564, effective November 11, 1968. This law provides for specific rates of duty, whereas this product was formerly dutiable under item 149.50 at an ad valorem rate. The staged rates in the tabulation above for item 149.48 were not proclaimed as part of the trade negotiations under the GATT but were established by the legislation which provides that they shall be treated as having been proclaimed by the President as being required or appropriate to carry out foreign trade agreements to which the United States is a party.

The rates shown for items 148.36 and 149.61 are preferential rates for products of Cuba, which were suspended on May 24, 1962. Imports from Cuba have been prohibited since February 7, 1962.

Table 1.--Miscellaneous fruit, fresh or prepared or preserved: U.S. imports for consumption, by tariff items, 1964-67

Year	Prepared or preserved melons (148.35)	Tamarinds (149.40)	Fresh Chinese gooseberries (149.48) 1/	"Other fresh fruit" (149.50) 1/	"Other prepared or preserved fruit" (149.60)	Total of items shown
	Quantity (1,000 pounds)					
1964	13	790	8	970	298	2/
1965	3/ -	720	91	1,041	323	2/
1966	-	132	162	1,590	157	2/
1967	-	144	166	2,055	187	2/
	Value (1,000 dollars)					
1964	2	41	2	24	80	149
1965	3/ -	43	22	24	105	194
1966	-	12	39	47	62	160
1967	-	13	40	77	67	197
	Unit value (cents per pound) 4/					
1964	6.8	5.2	20.8	2.4	27.0	2/
1965	3/ -	6.0	24.1	2.4	32.5	2/
1966	-	9.3	24.4	3.0	39.5	2/
1967	-	8.9	24.4	3.7	35.7	2/

1/ Estimated. Prior to Nov. 11, 1968, imports of Chinese gooseberries were reported with "other fresh fruit."

2/ Not meaningful.

3/ Reported imports in 1965 were not prepared or preserved melons.

4/ Computed from the unrounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

March 1969
1:8

Table 2.--Passion fruit, persimmons, and pomegranates, fresh: U.S. production, 1963-67

Commodity	1963	1964	1965	1966	1967
	Quantity (1,000 pounds)				
Passion fruit 1/	1,402	2,082	3,374	4,562	3,961
Persimmons 2/	5,200	4,400	4,200	4,600	2,400
Pomegranates 2/	7,200	8,000	6,600	6,800	4,800
Total	13,802	14,482	14,174	15,962	11,161
	Value (1,000 dollars)				
Passion fruit 1/	79	117	186	228	182
Persimmons 2/	398	354	342	292	288
Pomegranates 2/	353	400	304	340	283
Total	830	871	832	860	753

1/ Hawaiian production for processing.
2/ California production.

Source: Compiled from official statistics of the U.S. Department of Agriculture.

Note.--Data on U.S. production of other fruit covered by this summary are not available on an annual basis.

Commodity	TSUS item
Olives, fresh, or prepared or preserved:	
Fresh	148.40
In brine, whether or not pitted or stuffed:	
Not ripe and not pitted or stuffed:	
Not green in color and not packed in airtight containers of glass, metal, or glass and metal	148.42
Other	148.44
Ripe, but not pitted or stuffed:	
Not green in color and not packed in airtight containers of glass, metal, or glass and metal	148.46
Other	148.48
Pitted or stuffed	148.50
Dried:	
Not ripe	148.52
Ripe	148.54
Otherwise prepared or preserved	148.56

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969).

U.S. trade position

In recent years nearly one-half of U.S. olive consumption has been supplied by domestic producers. Most U.S. output consists of California-style canned olives, whereas the bulk of the imports consist of Spanish-style green olives in brine. Historically most imported olives have entered in bulk and have been repackaged in the United States, but recently increasing quantities of olives have entered in retail-size containers.

Description and uses

Fresh olives (item 148.40), being very bitter, are either processed before they are consumed as fruit, or are crushed for oil. Olives to be crushed for oil are ripened on the tree. Those to be preserved for table use are picked at various stages of maturity, depending on the final product desired.

Spanish-style olives (item 148.44) are prepared from fully developed (but not ripe) fruit, which is green to straw yellow in color

when picked. The olives are first treated with a weak caustic solution of sodium or potassium hydroxide to remove most of the bitter flavor. After a series of rinses to wash away the caustic solution, the fruit is packed in casks or barrels, covered with salt brine, and fermented for a period extending from 2 to 12 months. Thereafter, the olives may be pitted and stuffed with pimientos, almonds, or other delicacies (item 148.50). Spanish-style olives are always greenish in color when marketed. In the United States such olives are generally marketed either as Manzanilla olives or Queen olives. The Manzanilla grouping includes small- to medium-sized olives, which are most often the fruit of the Manzanilla variety, while the Queen grouping includes large-sized olives, which are most frequently the fruit of the Sevillana variety.

California-style olives (item 148.56), like Spanish-style olives, are prepared from fully developed (but not ripe) olives which are green to straw yellow in color when picked. The fruit is treated with a caustic solution to remove the bitter flavor; most of those so treated are then aerated to develop a deep brownish-black color, packed in a mild salt solution, and heat sterilized in hermetically sealed containers. The small share of California-style olives that is not aerated is green in color (frequently mottled) when marketed.

Greek-style olives (items 148.42 and 148.44) are also prepared from fully developed (but not ripe) olives, which are picked when reddish in color. The fruit is packed in vats or barrels with salt, which draws the juice from the olives and forms a brine. The olives are left to ferment in this brine for 60 days or more; they are then rebrined and packed in kegs. Greek-stype olives are somewhat bitter; their color ranges from black (the most characteristic) to pale pink, depending on the extent of oxidation during processing.

Fully developed (but not ripe) olives are also used to prepare Sicilian-style olives (item 148.44). Such olives are prepared in a manner similar to that of preparing Spanish-style olives, except that the treatment with a caustic solution is omitted. They are green in color when marketed and have a somewhat bitter flavor, similar to that of the Greek style.

Mature olives preserved in brine (items 148.46 and 148.48) are prepared from olives picked after they have acquired a cherry-red to black color, but before they have become very soft. A caustic solution is used to remove most of the bitter flavor, after which the fruit is washed and preserved in a strong brine solution, which inhibits fermentation.

Dried olives (items 148.52 and 148.54) are prepared by mixing fresh olives in salt to remove part of their natural bitterness.

During this process moisture is removed; after several weeks the olives become dried and shriveled. Frequently such olives are coated with olive oil to enhance their appearance.

Still other processed olives are preserved in oil or vinegar (item 148.56).

Olives sold in retail containers are either placed packed in such containers (e.g., positioned in the container in a definite, symmetrical pattern that adds sales appeal) or are thrown packed (e.g., packed without regard to placement or arrangement within the container). Spanish-style olives are the only style of olives that are frequently placed packed. In recent years about 15 percent of the olives sold in the United States in retail containers have been placed packed. Placed-packed olives are more costly to produce than thrown-packed olives inasmuch as substantially more labor is required to pack them.

U.S. tariff treatment

The current column 1 rates of duty applicable to imports (see general headnote 3 in the TSUSA-1969) are as follows:

TSUS item	Commodity	Rate of duty
	Olives, fresh, or prepared or preserved:	
148.40	Fresh	5¢ per lb.
	In brine, whether or not pitted or stuffed:	
	Not ripe and not pitted or stuffed:	
148.42	Not green in color and not packed in airtight containers of glass, metal, or glass and metal.	15¢ per gal.
148.44	Other	20¢ per gal.
	Ripe, but not pitted or stuffed:	
148.46	Not green in color and not packed in airtight containers of glass, metal, or glass and metal.	15¢ per gal.
148.48	Other	30¢ per gal.
148.50	Pitted or stuffed	30¢ per gal.
	Dried:	
148.52	Not ripe	5¢ per lb.
148.54	Ripe	2.5¢ per lb.
148.56	Otherwise prepared or preserved	5¢ per lb.

For the period since the TSUS became effective on August 31, 1963, the rates of duty shown above have not changed. The rates for items 148.42, 148.46, and 148.54 represent concessions granted under the

General Agreement on Tariffs and Trade (GATT). The remaining rates are those provided in the Tariff Act of 1930 as originally enacted. The United States granted no concessions in the sixth round of trade negotiations under the GATT on the items covered by this summary except for items 148.44 and 148.50 the rates for which were bound.

The average ad valorem equivalents of the specific rates of duty in effect on December 31, 1967, based on dutiable imports during calendar year 1967, were as follows:

TSUS item	Percent
148.40--------	1/
148.42--------	8.2
148.44--------	10.7
148.46--------	8.2
148.48--------	22.4
148.50--------	11.5
148.52--------	2/
148.54--------	13.3
148.56--------	6.8

1/ In 1965, the last year in which entries were reported, 3,903 pounds of imports, valued at $6,431, were entered under this item number; however, information available to the Tariff Commission indicates that most, or possibly all, of these imports were not "fresh" olives and were incorrectly reported.

2/ No imports in recent years.

U.S. consumption

U.S. consumption of table olives has increased substantially since World War II--reflecting the increased population, increased per capita disposable income, greater appreciation of relishes, and intensified promotional efforts by domestic processors. The annual quantity of Spanish-style olives consumed has increased by about 60 percent, and that of California-style olives has approximately doubled.

During 1963-67, 1/ annual U.S. consumption of olives averaged 150 million pounds (table 1). Spanish-style olives (supplied largely from foreign sources) accounted for roughly 50 percent of the total during this period; California-style olives (supplied exclusively by domestic processors) for about 45 percent, and Greek, dried, and other styles combined, for about 5 percent.

1/ Unless otherwise indicated, all years referred to are marketing years beginning Dec. 1 of the year specified.

U.S. producers

Three distinct groups of producers are responsible for most of the olives produced in the United States--namely, the U.S. growers of olives, the processors of domestically grown olives, and the importer-repackers, who prepare imported olives for distribution.

Virtually all olives grown comercially in the United States are grown in California, where about 2,500 growers devote approximately 32,000 acres to olives. Most olive growers derive a substantial part of their income from olives; they obtain much of the remainder from such crops as citrus fruits, nuts, cotton, and grapes. Many of the growers belong to one of three cooperatives which process, pack, and sell California olives; the rest sell to independent processors. During 1963-67 the olive crop averaged 86 million pounds annually, having an average farm value of $10 million. During this period farm employment ranged from some 2,000 permanent employees to a harvest peak of about 10,000 employees.

Largely as a result of mergers aimed to achieve economies of scale, the number of firms processing domestic olives declined from about 30 in the late 1950's to 17 in 1966 (3 grower-owned cooperatives and 14 independent canners). The trend toward mergers is expected to continue. Processing table olives is the main source of income for most of these firms, but a minor source for two large food processing firms. Of the 17 processors, all of which are located in California, 12 sold California-style olives during 1965; the 3 cooperatives accounted for approximately half of the quantity sold. In 1965 Spanish-style olives were produced by the 3 cooperatives, and 7 other processors. Spanish-style olives accounted for the major share of the sales of only 1 small processor.

Importer-repackers generally receive olives in bulk containers and repackage them in retail and institutional containers; some, however, also repackage small quantities of domestically grown olives. In 1965 about 60 firms operated more than 70 establishments in which imported bulk olives were repacked. The establishments were generally located near major U.S. population centers. About a third of the imported olives are repacked in the New York City metropolitan area; large quantities are also put up in Chicago, Cincinnati, Detroit, Houston, and Philadelphia. More than three-fourths of the importer-repackers deal in products other than olives, such as maraschino cherries, olive oil, pickled onions, and capers. The repacking of imported olives was the principal source of income for about one-third of the importer-repackers.

Spanish-style olives accounted for most of the olives sold by importer-repackers in 1965. About three-fourths of their sales of this style of olive were packed in retail containers; the remainder

were packed in institutional and bulk containers. Other styles of olives, mostly Greek-style and dried olives, accounted for about 5 percent of the olives sold by importer-repackers.

U.S. production of fresh olives

Annual U.S. production of fresh olives ranged from 28 million pounds to 126 million pounds and averaged 95 million pounds during 1963-67 (table 2). During these years an average of more than 70 percent of the crop was used for California-style olives, 10 percent for oil, 8 percent for Spanish-style olives, and the remainder for other styles and uses.

As occurs with many tree fruit crops, olive crops tend to be small following those that are large. This alternate-bearing tendency was overcome to some extent in the years 1960-66 by favorable weather and by the use of chemical-spray thinning, irrigation, and other improved practices employed by the growers. In 1967, however, rain and cold weather at blooming time resulted in poor pollination and a crop of only 28 million pounds--the smallest in more than 3 decades. The 1968 crop is estimated at 172 million pounds--the largest ever harvested.

U.S. sales of processed olives

Annual U.S. sales of both domestic and imported processed olives have increased substantially since World War II. Annual sales of California-style olives have approximately doubled, while those of imported olives have increased by about 60 percent. The relative importance of Spanish-style olives (domestic and imported), therefore, declined. Sales of other processed table olives, notably Greek style, Sicilian style, and dried, have been small. Annual sales of all styles of olives ranged from 135 million to 160 million pounds and averaged 153 million pounds during 1963-67 (table 1). During these years exports accounted for about 3 million pounds of such sales.

Annual U.S. sales of domestically grown processed olives during 1963-67 ranged from 55 million pounds to 85 million pounds and averaged 73 million pounds (table 1). Annual sales of California-style olives averaged about 63 million pounds during those years and accounted for more than 85 percent of the sales of domestically processed olives. Spanish-, Sicilian-, and Greek-style olives accounted for most of the other sales of domestically processed olives.

Sales of Spanish-style olives processed from domestically grown fruit have been small relative to those either of imported olives of that style or of California-style olives. Spanish-style olives were not processed commercially in California until about 1935, and annual

sales have not changed materially since 1940. In the period 1963-67, annual sales of such domestically grown olives by domestic processors probably ranged from about 4 million to 7 million pounds. About 60 percent of the domestic Spanish-style olives are sold in bulk containers; 30 percent, in retail containers; and 10 percent, in institutional containers. Virtually all of the domestic Spanish-style olives sold in retail containers are thrown packed rather than placed packed.

During recent years, annual U.S. sales of Sicilian-style and Greek-style olives processed from domestically grown fruit are estimated to have averaged some 2 million pounds, about two-thirds of which were of the Sicilian style.

Annual sales of imported olives in the period 1963-67 ranged from 75 million pounds to 84 million pounds and averaged about 80 million pounds (table 1). About 90 percent of such sales consisted of Spanish-style olives. Olives packed in retail containers accounted for more than four-fifths of the total sales of imported olives in this period. About 85 percent of the imported Spanish-style olives sold in retail containers were thrown packed and the remainder were placed packed.

Sales of miscellaneous styles of processed imported olives (mostly Greek-style and dried olives) have been small compared with sales of Spanish-style olives.

U.S. exports

Annual U.S. exports of processed olives have varied little in recent years. In the years 1963-67 annual exports averaged about 3 million pounds (table 1). During this period, exports were equivalent, in terms of quantity, to about 4 percent of the sales of processed domestically grown olives. The exports consisted predominantly of California-style olives, those of the Spanish-style being negligible. Canada, the principal market for U.S. exports of olives, took 67 percent of such exports during 1963-67.

U.S. imports

U.S. imports of olives vary considerably from year to year. Annual imports were materially higher in the years immediately following World War II than they had been during and before it; they remained fairly steady during the 1950's when they averaged about 71 million pounds. During 1963-67, annual imports ranged from 70 million to 95 million pounds (table 3) and averaged 82 million pounds, valued at $29 million. Olives prepared or preserved in brine accounted for nearly all of the olives imported. Pitted or stuffed olives in brine

(item 148.50) and not-ripe whole olives in brine (item 148.44) normally account for about 75 percent and 20 percent, respectively, of such imports.

Spain, and to a lesser extent Greece, have generally supplied most of the U.S. imports of olives. In the period 1963-67 imports from Spain accounted for 90 percent of the total U.S. imports, 97 percent of the pitted or stuffed olives in brine (almost entirely Spanish-style) (item 148.50), and 91 percent of the whole olives in brine that are green in color (almost entirely Spanish-style) or packed in airtight containers (items 148.44 and 148.48). Imports from Greece supplied the preponderant share of the whole olives in brine that are neither green in color nor packed in airtight containers (items 148.42 and 148.46). Virtually all imports of dried olives came from Morocco (items 148.52 and 148.54). Most of the processed olives not preserved in brine or dried (largely olives in oil and vinegar) (item 148.56) were imported from Greece and Spain.

For many years imports of olives (all styles) have supplied about half of the olives consumed domestically. Whereas imports have supplied most of the Spanish-style olives so consumed, domestic processors have supplied all of the California style and about one-third of the miscellaneous styles of table olives.

The following tabulation shows the relationship of U.S. imports of Spanish-style olives packed in small containers to total imports of Spanish-style olives 1/ in recent years (in millions of pounds):

Marketing year beginning Dec. 1--	Total	In containers of 0.3 gallon or less	Ratio of imports in small containers to total imports
			Percent
1963	83.5	1/ 0.2	0.2
1964	65.5	1/ .3	.5
1965	79.3	1/ 1.2	1.5
1966	64.4	3.4	5.3
1967	88.3	1/ 8.9	10.1

1/ Estimated.

The small imports of Spanish-style olives put up in retail containers before 1965 consisted chiefly of specialty packs and sample shipments. In 1965, however, and in each year since then imports of Spanish-style olives packed abroad in retail containers increased significantly.

1/ Total imports reported under TSUS items 148.44 and 148.50.

Such imports accounts for about 10 percent of the Spanish-style olives imported in the 1967 marketing year and were equivalent to about 5 percent of the aggregate domestic consumption of both Spanish- and California-style olives. The increased imports reflect primarily shipments which began in September 1966 from a new American-owned Spanish plant; increased shipments from an established Spanish plant, especially during 1967 and 1968; and large shipments beginning in the spring of 1968 from a large new Spanish plant. Most of the Spanish-style olives imported in retail containers prior to the spring of 1968 were placed packed. Trade sources indicate that only about half of such imports entered during the 1967 marketing year were placed packed. This reflects the sizable shipments (all reported to have been thrown packed) from the large new Spanish plant during the last half of that year.

World production and trade

Annual world production of olives for all uses has ranged from 12 billion to 22 billion pounds and averaged 16 billion pounds during the period 1962-66, the latest years for which data are available. Spain, Italy, Greece, and Portugal produced about 75 percent of the total. Most of the world output was crushed for oil; less than 5 percent was processed as table olives.

Spain, Greece, Italy, and the United States produce the preponderant share of the world output of olives for table use (415 million pounds in 1965); only Spain and Greece, however, are important exporters of olives. The major producing countries also are the primary consumers. The United States, Italy, France, and Australia import large quantities of table olives to supplement domestic production. Other major importing nations are Canada, Rumania, Bulgaria, the U.S.S.R., Yugoslavia, Great Britain, Germany, and the United Arab Republic.

Table 1.--Olives, processed: U.S. sales of the domestic and the imported product, exports of domestic merchandise, and apparent consumption, marketing years 1963-67

Year beginning Dec. 1--	Sales of U.S. product	Sales of imported product 1/	Exports	Apparent consumption 2/	Ratio of sales of imported olives to consumption
	Million pounds	Million pounds	Million pounds	Million pounds	Percent
1963	70	84	3	151	56
1964	75	80	2	153	52
1965	80	80	3	157	51
1966	3/ 85	3/ 75	3	157	48
1967	3/ 55	3/ 80	2	133	60

1/ Partly estimated.
2/ Sales of U.S. and imported products minus exports.
3/ Estimated.

Source: Sales compiled from data supplied by domestic processors and importer-repackers, except as noted; exports compiled from official statistics of the U.S. Department of Commerce.

Table 2.--Olives, fresh: Production and use of the crop grown in California, crop years 1963-67

(In millions of pounds)

Item	Year beginning Sept. 1--				
	1963	1964	1965	1966	1967
Farm production, total	114	108	100	126	28
Shipped fresh 1/	1	1	1	1	2/
Processed, total	113	107	99	125	28
California-style	78	75	76	91	20
Oil	15	12	8	10	3
Spanish style	9	10	6	13	2
Sicilian style	3	2	2	2	1
Greek style	1	2	1	2	2/
Other 3/	7	6	6	7	2

1/ Most of these olives were shipped to markets outside California for processing.

2/ Less than 0.5 million pounds.

3/ Includes miscellaneous styles and quantities used on farms where grown.

Source: Compiled from official statistics of the California Crop and Livestock Reporting Service.

Note.--Olives are grown commercially in the United States only in California and Arizona; output in Arizona is negligible.

Table 3.--Olives: U.S. imports for consumption, by kinds, marketing years 1963-67

Item	Year beginning Dec. 1--				
	1963	1964	1965	1966	1967
	Quantity (1,000 pounds) 1/				
In brine:					
Whole, not ripe:					
Not green in color (item 148.42)	3,911	2,787	2,547	3,408	4,083
Other (item 148.44)	17,467	12,291	17,323	11,139	19,933
Whole, ripe:					
Not green in color (item 148.46)	622	493	387	359	184
Other (item 148.48)	1,543	810	1,491	996	672
Pitted or stuffed (item 148.50)	66,030	53,242	61,940	53,277	68,401
Dried, not ripe (item 148.52)	-	-	-	-	1
Dried, ripe (item 148.54)	1,117	717	1,018	1,103	1,502
Otherwise prepared or preserved (item 148.56)	16	28	70	59	61
Total	90,706	70,368	84,776	70,341	94,837

See footnote at end of table.

Table 3.--Olives: U.S. imports for consumption, by kinds, marketing years 1963-67--Continued

Item	Year beginning Dec. 1--				
	1963	1964	1965	1966	1967
	Value (1,000 dollars)				
In brine:					
Whole, not ripe:					
Not green in color (item 148.42)	878	716	711	971	1,175
Other (item 148.44)	2,730	3,160	3,664	3,746	4,976
Whole, ripe:					
Not green in color (item 148.46)	149	131	109	101	46
Other (item 148.48)	380	239	486	238	160
Pitted or stuffed (item 148.50)	17,458	20,467	23,013	25,775	31,999
Dried, not ripe (item 148.52)	-	-	-	-	1
Dried, ripe (item 148.54)	195	130	182	206	263
Otherwise prepared or preserved (item 148.56)	7	14	31	20	27
Total	21,797	24,857	28,196	31,057	38,647

1/ Imports converted from gallons to pounds using the following factors:

TSUS item	Pounds per gallon
148.42	6.5
148.44	5.7
148.46	6.5
148.48	5.7
148.50	5.4

Source: Compiled from official statistics of the U.S. Department of Commerce.

Note.--During the period under review there were no imports of fresh olives (item 148.40).

Commodity	TSUS item
Peaches:	
Fresh or in brine:	
Entered June 1-November 30----------	148.70
Entered any other time----------	148.72
Otherwise prepared or preserved (except dried):	
White fleshed----------	148.77
Other----------	148.78

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969).

U.S. trade position

The United States accounts for more than 40 percent of the reported world production of peaches. Significant quantities of canned peaches are exported, but exports of fresh peaches are small. Imports are negligible.

Description and uses

The peach, the fruit of a deciduous tree, usually has yellow to orange colored flesh and is about 2 to 3 inches in diameter. A few commercial varieties have white flesh. The skin is ordinarily the same color as the flesh except that, in most varieties, a pronounced red blush develops at maturity. The fruit is generally characterized by a fuzz that covers the skin. The absence of fuzz is the main distinguishing feature of the nectarine which is included for tariff purposes with the peach. Most commercially grown varieties of peaches are of the "freestone" type, meaning that the pit is easily removable when the fruit is opened. An important exception is the California "clingstone" type peach, the source of the bulk of the canned peaches produced in the United States. Peach kernels are dutiable under item 175.03 which is discussed in volume 12 of these summaries.

Forty percent of the U.S. peach crop (including nearly all of the nectarines) is sold in fresh fruit form while 54 percent is canned. The balance is dried or frozen. Dried peaches (item 148.74) are discussed in the summary entitled "Certain Dried Fruit."

The bulk of the domestic peaches for canning are marketed as canned peaches (including spiced peaches); however, about one-fifth of the output is marketed in combination with pears, grapes, and other fruit as canned mixed fruit, chiefly fruit cocktail. Such canned fruit mixtures, which are dutiable under item 150.00, are discussed elsewhere

in this volume. Spiced peaches, which are marketed in small quantities, have spices added to the sugar sirup in which they are canned. The various forms of canned peaches are used in desserts, salads, and baking and as condiments.

Frozen peaches are used largely in the manufacture of ice cream and preserves. Small quantities of frozen peaches are also packed in retail-size containers for household use.

U.S. tariff treatment

The column 1 rates of duty applicable to imports (see general headnote 3 in the TSUSA-1969) are as follows:

TSUS item	Commodity	Rate prior to Jan. 1, 1968	U.S. concessions granted in 1964-67 trade conference (Kennedy Round)	
			Second stage, effective Jan. 1, 1969	Final stage, effective Jan. 1, 1972
	Peaches:			
	Fresh or in brine:			
148.70	Entered June 1-November 30.	0.5¢ per lb.	0.2¢ per lb. 1/	0.2¢ per lb. 1/
148.72	Entered at any other time.	0.25¢ per lb.	0.2¢ per lb. 2/	0.1¢ per lb. 3/
	Otherwise prepared or preserved (except dried):			
148.77	White fleshed 4/----	20% ad val.	16% ad val.	10% ad val.
148.78	Other 4/----------	20% ad val.	5/	5/

1/ The final rate for this item became effective Jan. 1, 1968.
2/ Rate of duty became effective Jan. 1, 1968 and remains in effect until Jan. 1, 1970.
3/ The final rate for this item becomes effective Jan. 1, 1971.
4/ Item 148.76 (otherwise prepared or preserved (except dried) peaches) was superseded by items 148.77 and 148.78 on Jan. 1, 1968.
5/ Rate of duty not affected by the trade conference.

The tabulation above shows the column 1 rate of duty in effect prior to January 1, 1968, and modifications therein as a result of concessions granted by the United States in the sixth round of trade negotiations under the General Agreement on Tariffs and Trade. Only

the current (that in effect during 1969) and final stages of the rate modifications are shown (see the TSUSA-1969 for the other stages). During the period from August 31, 1963, when the TSUS became effective, to December 31, 1967, the prior rates shown did not change.

The average ad valorem equivalents of the specific rates of duty in effect on December 31, 1967, based on dutiable imports during 1967, were as follows:

TSUS item	Percent
148.70-------	5.4
148.72-------	2.1

U.S. consumption

The annual aggregate consumption of peaches (all forms) was larger in the 1963-67 period than in the early 1950's. The annual consumption of canned peaches averaged 1,228 million pounds during 1963-67 (table 1), which was about 45 percent larger than in the early 1950's; however, the consumption of fresh peaches fell about 5 percent from the level of the early 1950's to 1,297 million pounds annually in 1963-67 (table 2). Frozen peach consumption averaged an estimated 68 million pounds annually in 1963-67--nearly double the average of the early 1950's.

U.S. producers and production

Peaches are produced commercially in at least 35 States, but California, with 114,000 acres under cultivation in 1967, produces over half of the domestic crop. South Carolina is the next largest producer followed by Georgia, Michigan, Pennsylvania, New Jersey, Washington, and Colorado. These eight States account for roughly 90 percent of U.S. peach production. In central California, 9,600 acres are devoted to the commercial production of nectarines. They are not grown in significant quantities elsewhere.

The U.S. annual production of peaches and nectarines averaged 3,269 million pounds in 1963-67 (table 3) compared with about 2,900 million pounds in the early 1950's. Most of the important peach producing States participated in the modest upward trend. Annual nectarine production increased sharply from 28 million pounds in the early 1950's to 128 million pounds in 1963-67.

Except in California, virtually all peaches grown in the United States are freestone varieties for fresh market distribution. Annual production of peaches sold fresh (excluding nectarines) during

1963-67 averaged 1,193 million pounds--about 12 percent less than in the early 1950's. Practically all nectarines are marketed fresh.

The annual production of canned peaches (not including that in canned fruit mixtures) has increased significantly in recent years. Such production averaged 1,430 million pounds in 1963-67, an increase of nearly 65 percent from the level of the early 1950's. During 1963-67 peaches contained in the output of canned fruit mixtures are estimated to have totaled 282 million pounds annually compared with 164 million pounds annually during the early 1950's. California clingstone peaches, which comprise about 40 percent of the U.S. peach crop, are virtually all canned. Also, over half of the large California freestone peach crop is canned. Although small quantities of peaches are canned in other important producing States, such production is largely incidental to fresh sales. In the Southeast a little over 10 percent of the peach crop is canned.

Small quantities of frozen peaches are produced in a number of States; however, California accounts for about two-thirds of the total. Although small relative to canned and fresh peaches, the annual production of frozen peaches, which averaged 68 million pounds in 1963-67, was almost double that of the early 1950's.

To improve the quality of peaches marketed through fresh market outlets, producers in California, Washington, Utah, Colorado, and Georgia have adopted various quality requirements under the authority of Federal marketing orders. Both the quality and volume of California clingstone peaches for canning and freezing are regulated by means of State marketing orders. Another California State marketing order provides market promotion services for fresh freestone peaches.

U.S. exports

Canned peaches are the leading canned fruit export. During 1963-67 annual exports of canned peaches averaged 203 million pounds which accounted for 14 percent of the U.S. production of canned peaches. Such exports were twice the level of the late 1950's. In recent years the principal foreign markets for canned peaches have been Canada and the northern European countries, particularly West Germany. In addition, an average of 56 million pounds of peaches are estimated to have been exported annually during 1963-67 in canned fruit mixtures.

California clingstone peach growers, through their State marketing order, carry on a canned peach market promotion program in Europe with the cooperation of the Foreign Agricultural Service of the U.S. Department of Agriculture.

Fresh peach exports during 1963-67 accounted for about 2 percent of the production sold fresh. Such exports, which go largely to Canada, have increased from an annual average of 17 million pounds in the early 1950's to 27 million pounds in 1963-67.

U.S. imports

U.S. imports of both fresh and canned peaches are negligible. The bulk of the imports of fresh peaches are from Chile and enter during the winter months. Small quantities of fresh peaches are also imported from Canada during the summer months. The bulk of the imports of canned peaches are from Japan and consist of white fleshed peaches packed in sirup.

World production and trade

The United States, which accounts for more than 40 percent of the reported total, is by far the world's largest peach producer. Italy, France, Japan, and Argentina also produce substantial quantities of peaches. Canned peaches are the predominant form in which peaches enter international trade, but fresh peaches are also exported to some extent. Exports account for a large portion of the production of some of the smaller producing countries such as Australia and Chile.

Table 1.--Peaches, canned: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1963-67

Year	Production 1/	Imports 2/	Exports	Apparent consumption
	Quantity (1,000 pounds)			
1963	1,443,200	218	230,530	1,212,888
1964	1,643,604	617	211,157	1,433,064
1965	1,303,478	377	243,669	1,060,186
1966	1,597,102	716	201,501	1,396,317
1967	1,164,278	459	128,906	1,035,831
	Value (1,000 dollars)			
1963	3/	37	25,210	3/
1964	3/	86	23,410	3/
1965	3/	67	26,179	3/
1966	3/	124	21,834	3/
1967	3/	83	15,141	3/

1/ Does not include peaches used in canned fruit mixtures, estimated at an average of about 280,000 thousand pounds annually during 1963-67.
2/ Imports of prepared or preserved peaches, except those in brine or dried. 3/ Not available.

Source: Production compiled from official statistics of the National Canners Association; imports and exports compiled from official statistics of the U.S. Department of Commerce.

Table 2.--Peaches (including nectarines), fresh: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1963-67

Year	Production 1/	Imports	Exports	Apparent consumption
	Quantity (1,000 pounds)			
1963	1,522,600	3,284	31,382	1,494,520
1964	1,260,000	4,047	17,997	1,246,050
1965	1,441,300	3,624	34,750	1,410,174
1966	1,332,100	2,961	29,154	1,305,907
1967	1,046,200	2,655	22,979	1,025,876
	Value (1,000 dollars)			
1963	84,569	501	2,379	2/
1964	77,458	829	1,810	2/
1965	78,979	447	3,712	2/
1966	98,331	334	3,497	2/
1967	92,425	312	3,699	2/

1/ Includes all nectarines and peach production sold through fresh market outlets. Value is based on price "as sold" by growers.
2/ Not available.

Source: Production compiled from official statistics of the U.S. Department of Agriculture; imports and exports compiled from official statistics of the U.S. Department of Commerce.

Table 3.--Peaches (including nectarines): U.S. production and utilization, 1963-67

Year	Production 1/	Utilization				
		Sold fresh	Canned		Dried 3/	Other 4/
			As peaches 2/	In fruit mixtures 2/ 3/		
	Quantity (million pounds, fresh weight basis)					
1963--	3,532	1,523	1,516	268	77	102
1964--	3,426	1,260	1,630	310	67	118
1965--	3,401	1,441	1,351	297	71	98
1966--	3,346	1,332	1,536	293	44	98
1967--	2,639	1,046	1,173	241	26	119

1/ Production having value, excludes some quantities not marketed because of economic conditions.

2/ Canned utilization breakdown based on pack statistics of the National Canners Association.

3/ Mixed fruit and dried peaches are discussed in separate summaries in this volume.

4/ Chiefly frozen peaches.

Source: Compiled from official statistics of the U.S. Department of Agriculture, except as noted.

Commodity	TSUS item
Pears:	
Fresh or in brine:	
Entered April 1-June 30----	148.81
Entered any other time-----	148.82
Otherwise prepared or preserved, except dried----	148.86

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969).

U.S. trade position

The United States is one of the world's largest pear producers. In recent years domestic production has supplied nearly all of the fresh pears consumed in the United States and substantial quantities for export. Imports of canned pears, which historically have been negligible, have increased recently and supplied nearly 3 percent of the canned pears consumed in 1967. Exports of such pears have declined sharply.

Description and uses

The pear is the fruit of a deciduous tree grown in many countries in temperate areas of the world. It is grown throughout the United States, but the bulk of the commercial production is harvested in the Pacific Coast States. About three-fourths of the domestic crop consists of the Bartlett variety, a high-quality pear, well suited to both fresh use and canning. Most of the rest of the crop consists of several varieties, generally known as winter pears. Fresh pears are usually harvested before they become fully ripe and highly perishable. They must be picked at the proper stage of maturity if they are to be successfully stored and ripened later. After removal from storage, where temperatures are maintained near freezing, the fruit must be ripened at 60-70° F. Bartlett pears may be stored for only a month or two, while some of the winter varieties are stored for many months. The marketing season for domestic pears generally extends from midsummer through the following May.

In the years 1963-67, 39 percent of the U.S. production of pears was sold through fresh market outlets, 35 percent was canned as pears, 25 percent was canned with other fruits, and 1 percent was dried. Dried pears (item 148.83) are covered in another summary. Nearly all of the pears for canning are Bartletts, and nearly all are canned in sirup while small quantities are pickled or spiced. Over a third of the pears for canning go into fruit cocktail or other canned mixed fruit, where they comprise about 35 percent of the total volume of such canned fruit mixtures (see summary on item 150.00).

U.S. tariff treatment

The column 1 rates of duty applicable to imports (see general headnote 3 of the TSUSA-1969) are as follows:

TSUS item	Commodity	Rate prior to Jan. 1, 1968	U.S. concessions granted in 1964-67 trade conference (Kennedy Round)	
			Second stage, effective Jan. 1, 1969	Final stage, effective Jan. 1,1972
	Pears:			
	Fresh or in brine:			
148.81	Entered April 1-June 30. 1/	0.5¢ per lb.	0.4¢ per lb.	0.25¢ per lb.
148.82	Entered any other time. 1/	0.5¢ per lb.	2/	2/
148.86	Otherwise prepared or preserved, except dried.	20% ad val.	19% ad val.	18% ad val. 3/

1/ Item 148.80 (pears, fresh or in brine) was superseded by items 148.81 and 148.82 on Jan. 1, 1968.
2/ Rate of duty not affected by the trade conference.
3/ The final rate for this item becomes effective Jan. 1, 1971.

The tabulation above shows the column 1 rates of duty in effect prior to January 1, 1968, and modifications therein as a result of concessions granted by the United States in the sixth round of trade negotiations under the General Agreement on Tariffs and Trade. Only the second (that in effect during 1969) and final stages of the annual rate modifications are shown above (see the TSUSA-1969 for the other stages). The rate for item 148.82 is that provided for in the Tariff Act of 1930, as originally enacted.

The average ad valorem equivalent of the specific rate of duty in effect on December 31, 1967, for item 148.80 (see footnote 1 above), based on dutiable imports during 1967 was 5.4 percent.

U.S. consumption

Annual consumption of fresh pears averaged 400 million pounds in the years 1963-67 (table 1), a decline from the level of about 545 million pounds in the early 1950's. During the recent period annual consumption of canned pears averaged 346 million pounds (table 2), an increase from the 205 million pound average of the early 1950's.

U.S. producers and production

Nearly 90 percent of the U.S. commercial pear production is harvested in central and northern California and in eastern Oregon and Washington. Michigan produces about half of the remainder. Significant quantities of pears are also grown in several Rocky Mountain and Northeastern States. A disease called "fire blight" precludes profitable pear production in most parts of the country. The disease, however, can be controlled in warm, dry irrigated areas of the West and most pear production occurs there. During 1963-67 annual pear production averaged 1.2 billion pounds, about 15 percent below the level of the early 1950's. Fresh pear shipments, both domestic and export, of 443 million pounds per year in 1963-67 were down nearly 25 percent from the level of the early 1950's despite an increase in exports.

Annual canned pear production, which fluctuates widely, averaged 350 million pounds in the years 1963-67 (table 2), more than 20 percent above the level of the early 1950's.

The quality of winter pears and California Bartletts is regulated through the use of Federal marketing orders adopted by west coast pear growers and fresh pear packers. In addition, California pear growers have adopted three State marketing orders for fresh pears and two for canning pears, under which various quality requirements and market promotion activities are carried out. The Oregon-Washington-California Pear Bureau, an organization created by winter pear growers in the three States, conducts a continuing market promotion program for winter pears.

U.S. exports

Annual U.S. exports of fresh pears averaged 58 million pounds, or 13 percent of total fresh shipments, in the years 1963-67, reflecting an increase of about 60 percent over the level of the early 1950's. Canada takes about a third of all fresh pear exports, including substantial quantities of Bartletts as well as winter varieties. Most of the remaining exports consist of winter pears, which go mainly to northern Europe. The bulk of the fresh pears exported are produced in Oregon and Washington. Exports constitute an important market for pears produced in those States. Under the Export Apple and Pear Act, administered by the U.S. Department of Agriculture, fresh pears must meet certain quality requirements prior to exportation.

U.S. exports of canned pears averaged 7 million pounds annually in the years 1963-67, accounting for 2 percent of production. Canada takes the bulk of the canned pear exports, which have declined sharply in recent years.

U.S. imports

Imports of fresh pears averaged 15 million pounds annually, or 4 percent of consumption, in the years 1963-67, with no apparent trend. Most imports of fresh pears come from Southern Hemisphere countries, notable Argentina. Such imports arrive largely in March through June, the earlier shipments coinciding with the last of the domestic winter pear shipments. About 20 percent of the fresh pear imports come from Canada and, to some extent, they compete directly with the U.S. crop; however, U.S. exports to Canada are over four times imports from that country.

Historically, U.S. imports of canned pears have been negligible, with small quantities entering mostly from Japan. Such imports, however, were sharply higher in 1965-67 when imports ranged from 2 million to 9 million pounds annually. During those years, Italy was by far the most important supplier, followed by Japan and Australia. In 1967 imports of canned pears accounted for nearly 3 percent of consumption.

Foreign production and trade

Italy is the world's largest pear producer, followed by France, the United States, West Germany, and Japan. Substantial quantities of pears are also produced in most other European countries and several Southern Hemisphere countries.

Exports constitute the primary market for pears produced by some of the smaller producing countries such as Argentina, the Republic of South Africa, Australia, and the Netherlands.

Table 1.--Pears, fresh: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1963-67

Year	Production 1/	Imports	Exports	Apparent consumption
	Quantity (1,000 pounds)			
1963	367,992	20,109	40,891	347,210
1964	504,818	18,132	56,596	466,354
1965	396,240	7,592	65,622	338,210
1966	572,418	10,743	68,404	514,757
1967	372,774	17,416	56,333	333,857
	Value (1,000 dollars)			
1963	20,019	1,679	3,997	2/
1964	22,162	1,503	5,274	2/
1965	23,973	568	6,360	2/
1966	26,589	887	6,093	2/
1967	28,890	1,576	5,568	2/

1/ Includes only production sold fresh.
2/ Not available.

Source: Production compiled from official statistics of the U.S. Department of Agriculture; imports and exports compiled from official statistics of the U.S. Department of Commerce.

Table 2.--Pears, canned: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1963-67

Year	Production 1/	Imports	Exports	Apparent consumption
	Quantity (1,000 pounds)			
1963	245,036	15	8,863	236,188
1964	494,638	553	5,585	489,606
1965	278,748	3,309	6,823	275,234
1966	480,240	2,084	7,396	474,928
1967	250,386	8,905	4,550	254,741
	Value (1,000 dollars)			
1963	2/	3	1,509	2/
1964	2/	88	1,073	2/
1965	2/	569	1,299	2/
1966	2/	398	1,283	2/
1967	2/	1,413	875	2/

1/ Does not include pears used in canned fruit mixtures; such usage is estimated to have averaged nearly 250,000 thousand pounds annually during 1963-67.

2/ Not available.

Source: Production compiled from official statistics of the National Canners Association; imports and exports compiled from official statistics of the U.S. Department of Commerce.

Commodity	TSUS item
Pineapples:	
Fresh:	
In bulk	148.90, -.91
In crates	148.93, -.94
In other packages	148.96, -.97
Prepared or preserved	148.98, -.99

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969).

U.S. trade position

The United States is, by far, the world's largest pineapple producer and a large exporter of canned pineapple. Canned pineapple imports, which have been increasing, accounted for 25 percent of domestic consumption in 1963-67, exceeding exports. International trade in fresh pineapples is small.

Description and uses

Pineapples are the fruit of a succulent perennial herb consisting of an elongated rosette of stiff sword-shaped leaves on a thick fleshy stem on which the fruit is borne. The plants are usually about 3 feet high and produce one nearly round to oblong fruit, which usually measures 5 to 10 inches in height and is topped with a crown of short stiff leaves. The first fruit matures 18-24 months after planting and an additional fruit is produced on the same stem each year thereafter. In commercial practice, the plants are usually replaced after the second crop, as yields begin to decline.

Pineapples are widely grown in tropical regions. Fresh fruit account for a relatively small portion of the world trade in pineapples and such shipments as occur are largely to nearby countries. Practically all fresh pineapples now shipped to the continental United States from Hawaii and Puerto Rico, as well as imports, are sold through produce markets for fresh consumption. In earlier years, significant quantities of the U.S. imports of fresh pineapples from Mexico were canned in the United States. The bulk of the pineapple supply entering international trade is in the form of fruit or juice which has been canned in the area of production. Prepared or preserved pineapple consists predominantly of canned pineapple in sirup but also includes pineapple in water, in brine, and frozen or chilled pineapple preparations. A small quantity of prepared or preserved pineapple is marketed in containers that are not airtight. This product consists

of pineapple in brine for further processing into such products as candied or glace pineapple (item 154.45). Candied pineapple, as well as pineapple jam (item 153.24) and pineapple juice (items 165.44 and 165.46) are discussed in other summaries. Pineapple juice accounts for a substantial part of pineapple production.

About 8 percent of domestic canned pineapple production is used in the manufacture of fruit cocktail. The balance is used in salads, desserts, baked goods, and numerous other food preparations. Fresh pineapple, used mainly in salads and desserts, is also used for decorative purposes.

U.S. tariff treatment

The current column 1 rates of duty applicable to imports (see general headnote 3 in the TSUSA-1969) are as follows:

TSUS item	Commodity	Rate of duty
	Pineapples:	
	Fresh:	
148.90	In bulk	1-1/6¢ each
148.91	If product of Cuba	0.84-2/3¢ each
148.93	In crates	35¢ per crate of 2.45 cu.ft.
148.94	If product of Cuba	20¢ per crate of 2.45 cu.ft.
148.96	In other packages	27¢ per 2.45 cu.ft.
148.97	If product of Cuba	20¢ per 2.45 cu.ft.
148.98	Prepared or preserved	0.75¢ per lb.
148.99	If product of Cuba	0.55¢ per lb.

The United States granted no concessions in the sixth round of trade negotiations under the General Agreement on Tariffs and Trade on the items covered by this summary. For the period since the TSUS became effective on August 31, 1963, the rates of duty shown above have not changed. The rates shown for items 148.91, 148.94, 148.97, and 148.99 are preferential rates for products of Cuba, which were suspended on May 24, 1962. Imports from Cuba have been prohibited since February 7, 1962. The rate of duty for fresh pineapples in bulk is that provided for in the Tariff Act of 1930, as originally enacted. It has been in effect since February 28, 1961 as a result of termination of trade-agreement concessions with Honduras. For articles of the Philippine Republic the current rate of duty is 60 percent of the rate for Cuba, see item 3C in the general headnotes mentioned above.

The average ad valorem equivalents of the specific rates of duty in effect on December 31, 1967, based on dutiable imports during 1967, were as follows:

TSUS item	Percent
148.90	17.5
148.96	13.7
148.98	1/ 6.8

1/ Excludes imports from the Philippines, for which the ad valorem equivalent was 2.1 percent.

There were no imports of fresh pineapples in crates (item 148.93) in 1967.

U.S. consumption

U.S. fresh pineapple consumption averaged 123 million pounds annually in the years 1963-67 (table 1). The share of such consumption supplied by imports decreased from about one-half the total to one-quarter during the period. The decrease was due largely to the sharp decline in imports of fresh pineapples destined to be processed in the United States.

In 1963-67, annual consumption of prepared or preserved pineapple averaged 646 million pounds, all but about 5 million pounds of which was canned pineapple (table 2). Canned pineapple consumption during the period was about 10 percent higher than the level of the early 1950's.

U.S. producers

In Hawaii there are six pineapple canneries and eight large pineapple growing plantations. In the last decade some smaller concerns have either gone out of business or merged with larger companies. In addition to the output of pineapples on company-owned plantations, individual planters produce pineapples under contract for canneries. In recent years about 65,000 acres of land in Hawaii have been devoted to the production of pineapple. The Pineapple Growers Association of Hawaii reports that a total of about 21,500 workers were employed in 1966, of whom 6,400 were year round employees. Income from pineapple products, a significant part of the economy of Hawaii, was estimated at about $128 million in 1966.

The pineapple growing and canning operations in Puerto Rico are small in comparison with those in Hawaii.

U.S. production

Shipments of fresh pineapple to the continental United States from Puerto Rico and Hawaii averaged 75 million pounds annually in the years 1963-67, about three times the level of the early 1950's. Fresh market production data, which would include quantities sold within Puerto Rico and Hawaii, are not available. Fresh pineapple shipments from Puerto Rico doubled from the early 1950's to 1963-67 when they averaged 37 million pounds annually. Annual Hawaiian shipments averaged 38 million pounds in 1963-67--about seven times those of the early 1950's. Important factors in the increase in shipments of domestic fresh pineapple in recent years have been the availability of improved handling and shipping facilities and the embargo of imports of Cuban products in 1962.

Hawaii produces more than 95 percent of the U.S. canned pineapple. Nearly all of the balance comes from Puerto Rico while a little has been produced in the continental United States from imported fruit. Total Hawaiian and Puerto Rican production averaged an estimated 578 million pounds annually in the years 1963-67--only slightly more than the 1951-55 level. During 1963-67, the small Puerto Rican production totaled about 11 million pounds annually, an increase of more than 50 percent from the level of the early 1950's.

U.S. exports

Virtually all U.S. exports of fresh pineapples go to Canada, although data are not separately reported. Such exports averaged 2.1 million pounds annually in the years 1963-67, according to official Canadian import statistics.

Exports of canned pineapple averaged 91 million pounds annually in the years 1963-67--about 85 percent more than during the early 1950's. Such exports averaged about 16 percent of domestic production and went mostly to Western Europe and Canada.

U.S. imports

In recent years nearly all imports of fresh pineapples have entered in bulk from Mexico (table 1). Fresh pineapple imports in all forms, converted to pounds, averaged 48 million pounds annually in 1963-67--down 50 percent from the level of the early 1950's. The decline in imports is associated with the cessation of trade with Cuba in early 1962 and a reduction in imports from Mexico following the termination in the mid-1960's of canning operations in Texas which used such fruit. Prior to 1962 substantial quantities of fresh pineapple were imported in crates from Cuba.

In the years 1963-67, annual imports of prepared or preserved pineapple, 97 percent of which was in airtight containers, averaged 159 million pounds (table 2) compared with 88 million pounds in the early 1950's. Such imports supplied 25 percent of consumption in 1963-67. The largest supplier during the period was Taiwan, followed by the Philippine Republic (table 3). The Philippine Republic had been the predominant source of canned pineapple imports during the late 1950's, but increasing shares have come from Taiwan, Mexico, and Malaysia. Much of the Philippine canned pineapple is produced by U.S. firms who have pineapple operations in Hawaii.

Foreign production and trade

The United States produces nearly a third of the world's pineapple and about half the world supply of canned pineapple. Other large pineapple producers include Thailand, Brazil, Taiwan, Malaysia, Mexico, the Philippines, and the Republic of South Africa.

Since the cessation of Cuban-U.S. trade, Mexico and Brazil have accounted for the bulk of the world's fresh pineapple exports. The Mexican fruit goes largely to the United States and the Brazilian exports to Argentina. Thailand's production is largely for domestic consumption.

Taiwan, Malaysia, the Philippines, and the Republic of South Africa are the largest foreign producers of canned pineapple. Each of these countries exports nearly all of its production and the exports of each generally exceed those of the United States. Other producers and exporters of substantial quantities of canned pineapple are Mexico, the Ryukyu Islands, and Australia.

Table 1.--Pineapples, fresh: Shipments to continental United States from Hawaii and Puerto Rico, imports for consumption, and apparent consumption, 1963-67

(Quantity in thousands of pounds; value in thousands of dollars)

Year	Shipments to continental United States from--		Imports 1/			Apparent consumption in continental United States	Ratio (percent) of total imports to consumption
	Hawaii	Puerto Rico	In crates	In containers other than crates	In bulk		
	Quantity						
1963	21,329	32,288	417	625	72,275	126,934	57.8
1964	38,096	39,273	127	1,999	53,665	133,160	41.9
1965	41,400	40,013	1,176	82	44,130	126,801	35.8
1966	47,673	34,545	561	1,050	37,425	121,254	32.2
1967	42,292	37,590	-	223	25,490	105,595	24.4
	Value						
1963	2/	1,911	14	10	911	2/	2/
1964	2/	2,690	3	59	704	2/	2/
1965	2/	2,340	55	3	572	2/	2/
1966	2/	2,123	20	43	493	2/	2/
1967	2/	2,264	-	6	318	2/	2/

1/ Imports in crates and in containers other than crates, reported in terms of crates of 2.45 cubic feet, have been converted to pounds at 70 pounds per crate. Imports in bulk, reported in number of pineapples, have been converted to pounds at 5 pounds per pineapple. Total imports of pineapples in bulk, 98 percent of which were from Mexico during 1963-67, were as follows, in thousands of pineapples:

1963	14,455
1964	10,733
1965	8,826
1966	7,485
1967	5,098

2/ Not available.

Source: Hawaiian shipments from Hawaii State Department of Agriculture; shipments from Puerto Rico and imports compiled from official statistics of the U.S. Department of Commerce.

Note.--Exports are not separately reported, but are believed to have averaged about 2,000 thousand pounds annually in the years 1963-67.

Table 2.--Pineapple, prepared or preserved: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1963-67

(Quantity in thousands of pounds; value in thousands of dollars)

Year	Production 1/	Imports		Exports (canned)	Apparent consumption	Ratio (percent) of imports to consumption
		In airtight containers (canned)	Not in airtight containers			
	Quantity					
1963	584,494	116,059	2,382	86,537	616,398	19.2
1964	528,256	132,351	7,518	109,965	558,160	25.1
1965	576,888	154,705	7,885	100,327	639,151	25.4
1966	600,000	168,886	4,861	91,118	682,629	25.5
1967	600,000	195,666	4,495	67,702	732,459	27.3
	Value					
1963	2/	13,020	376	12,774	2/	2/
1964	2/	14,760	1,317	16,612	2/	2/
1965	2/	17,443	933	15,491	2/	2/
1966	2/	19,099	638	14,712	2/	2/
1967	2/	20,962	737	10,666	2/	2/

1/ Hawaiian production of canned pineapple (for pack year beginning June 1) converted from cases at 45 pounds per case of 24, size 2-1/2 cans, plus shipments of canned pineapple from Puerto Rico; 1966 and 1967 data are estimated. Hawaii accounts for more than 95 percent of the total domestic production.

2/ Not available.

Source: Production compiled from statistics of the Pineapple Growers Association of Hawaii and the U.S. Department of Commerce, except as noted; imports and exports compiled from official statistics of the U.S. Department of Commerce.

Table 3.--Pineapple, prepared or preserved, packed in airtight containers (canned): U.S. imports for consumption, by principal sources, 1963-67

Source	1963	1964	1965	1966	1967
	Quantity (1,000 pounds)				
Taiwan	41,767	48,032	68,943	78,170	83,408
Philippine Republic	28,265	32,927	38,315	32,963	49,094
Mexico	18,849	20,715	19,453	27,075	28,043
Malaysia	17,503	22,944	23,613	21,077	20,732
Republic of South Africa	5,429	5,969	2,429	2,389	2,388
All other	4,246	1,764	1,952	7,212	12,001
Total	116,059	132,351	154,705	168,886	195,666
	Value (1,000 dollars)				
Taiwan	4,454	5,081	7,438	8,343	8,449
Philippine Republic	3,095	3,570	4,101	3,605	5,094
Mexico	2,124	2,509	2,580	3,549	3,361
Malaysia	2,165	2,808	2,804	2,485	2,399
Republic of South Africa	557	610	255	244	261
All other	625	182	265	873	1,398
Total	13,020	14,760	17,443	19,099	20,962

Source: Compiled from official statistics of the U.S. Department of Commerce.

March 1969
1:8

Commodity	TSUS item
Plums, prunes, and prunelles:	
Fresh:	
Entered in January	149.19
Entered February 1-May 31	149.20
Entered any other time	149.21
In brine	149.24
Otherwise prepared or preserved, except dried	149.28

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969).

U.S. trade position

U.S. foreign trade in fresh and canned plums consists chiefly of exports of fresh plums. Such exports, which go mainly to Canada, take about 8 percent of domestic production. Imports account for less than 2 percent of domestic consumption.

Description and uses

There are many varieties of plums varying greatly in size, shape, and color. The European type of plum is the most important commercially and includes nearly all the varieties known as prunes. Prunes have a firm and sweet flesh well adapted to drying. Most prunes are dried, but some are marketed fresh, canned, or frozen. The Japanese varieties of plums are marketed chiefly as fresh fruit. Some plum varieties, e.g., the Damson, are used only for jam and jelly. In recent years there has been no known domestic production or imports of prunelles which are small yellow plums.

Nearly three-fourths of all plums, including prunes, are dried (item 149.26 which is discussed in another summary). Most of the rest are sold fresh; some are canned or frozen (item 149.28). Canned plums are used mainly as a dessert fruit while frozen plums are used primarily by manufacturers of preserves and baked goods. Imports of plums and prunes in brine consist primarily of oriental specialty items. There is no known domestic production of plums in brine.

U.S. tariff treatment

The column 1 rates of duty applicable to imports (see general headnote 3 of the TSUSA-1969) are as follows:

TSUS item	Commodity	Rate prior to Jan. 1, 1968	U.S. concessions granted in 1964-67 trade conference (Kennedy Round)	
			Second stage, effective Jan. 1, 1969	Final stage, effective Jan. 1, 1972
	Plums, prunes, and prunelles:			
	Fresh:			
149.19	Entered in January 1/	0.5¢ per lb.	0.3¢ per lb.	0.1¢ per lb.
149.20	Entered February 1-May 31.	0.25¢ per lb.	0.2¢ per lb. 2/	0.1¢ per lb. 3/
149.21	Entered any other time. 1/	0.5¢ per lb.	4/	4/
149.24	In brine	0.25¢ per lb.	0.1¢ per lb. 5/	0.1¢ per lb. 5/
149.28	Otherwise prepared or preserved, except dried.	35% ad val.	28% ad val.	17.5% ad val.

1/ Item 149.22 (fresh plums entered June 1 to Feb. 1) was superseded by items 147.19 and 147.21 on Jan. 1, 1968.
2/ Rate of duty became effective Jan. 1, 1968 and remains in effect until Jan. 1, 1970.
3/ The final rate for this item becomes effective Jan. 1, 1971.
4/ Rate of duty not affected by the trade conference.
5/ The final rate for this item became effective Jan. 1, 1968.

The above tabulation shows the column 1 rates of duty in effect prior to January 1, 1968, and modifications therein as a result of concessions granted by the United States in the sixth round of trade negotiations under the General Agreement on Tariffs and Trade. Only the current (that in effect during 1969) and final stages of the rate modifications are shown (see the TSUSA-1969 for the other stages). During the period from August 31, 1963, when the TSUS became effective, to December 31, 1967, the prior rates shown did not change. The current rate of duty on fresh plums entered during June 1-December 31 (item 149.21) is that provided for in the Tariff Act of 1930 as originally enacted.

The average ad valorem equivalents of the specific rates of duty in effect on December 31, 1967, based on dutiable imports during 1967, were as follows:

TSUS item	Percent
149.20	2.1
149.22	3.8
149.24	.6

U.S. consumption

Consumption of fresh plums and prunes averaged 237 million pounds annually in 1963-67 (table 1), while consumption of prepared or preserved plums and prunes (including frozen and in brine, but excluding dried) averaged 77 million pounds (table 2). There has been little change in either category compared with the early 1950's.

U.S. producers and production

More than 95 percent of all plums and prunes are produced in the Western United States. Of the reported commercial production during 1963-67 California accounted for 88 percent, Oregon 4 percent, Washington 3 percent, Idaho 3 percent, and Michigan 2 percent. About two-thirds of the total consists of California prunes which are dried. California production of other types of plums, nearly all of which are marketed fresh, exceeds the total production of all the other States.

Production of all plums and prunes, other than California dried prunes, averaged 351 million pounds annually during the year 1963-67. Production of plums for fresh market distribution averaged 256 million pounds per year during 1963-67, up somewhat from the early 1950's. Production of canned plums averaged 67 million pounds annually during the same period, down about 10 percent from the early 1950's. The bulk of these consist of Italian prunes grown in the Northwest. Such prunes are also called purple plums. Some Italian prunes are also canned in Michigan. California canned plum production, which is small, consists largely of other varieties. Frozen plum and prune production average 8 million pounds annually during the years 1963-67.

In California a Federal marketing order controls the quality of the fruit marketed by fresh plum growers and shippers, and the sale of such fruit is promoted under a State marketing order. Federal marketing orders also control the quality of fresh prunes shipped by Oregon, Washington, and Idaho producers.

U.S. exports

In the years 1963-67 annual U.S. exports of fresh plums averaged 22 million pounds or 8 percent of the production sold fresh--nearly double the level of the early 1950's. Over three-fourths of such exports normally go to Canada. Venezuela and, in recent years, the United Kingdom have been the next largest markets.

U.S. export statistics on canned plums and prunes were discontinued after 1964. During 1960-64 such exports averaged 1.4 million pounds annually.

U.S. imports

Imports of fresh plums, which averaged 2.5 million pounds annually during 1963-67 or about 1 percent of consumption, have increased only slightly since the early 1950's. Two-thirds of these imports entered during the February-May period (item 149.20) and most of the remainder during January. Chile has been the main supplier of fresh plum imports during each duty period. Canada has been the main supplier of the small quantities of imports entered during the summer and fall months.

In recent years imports of plums in brine have entered mainly from Japan and nearly all imports of otherwise prepared or preserved (except dried) plums have come from the Orient, particularly Hong Kong. Annual imports of brined and otherwise prepared or preserved plums averaged 1.3 million pounds during 1963-67. Brined plums accounted for 12 percent of such imports during these years.

Foreign production and trade

Yugoslavia and the United States are the world's largest plum producers. In both countries prunes predominate and are used mostly for drying. Many temperate zone countries produce plums. Except for dried prunes, however, there is little international trade.

Table 1.--Plums, prunes, and prunelles, fresh: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1963-67

Year	Production 1/	Imports	Exports	Apparent consumption
	Quantity (1,000 pounds)			
1963	248,070	2,856	17,071	233,855
1964	280,902	2,779	22,545	261,136
1965	274,342	3,181	30,499	247,024
1966	227,320	2,298	16,095	213,523
1967	248,706	1,524	21,959	228,271
	Value (1,000 dollars)			
1963	14,637	443	2,064	2/
1964	13,683	473	2,506	2/
1965	13,030	402	3,432	2/
1966	19,122	255	2,518	2/
1967	20,456	189	3,731	2/

1/ Includes only production sold fresh.
2/ Not available.

Source: Production compiled from official statistics of the U.S. Department of Agriculture; imports and exports compiled from official statistics of the U.S. Department of Commerce.

Table 2.--Plums, prunes, and prunelles, prepared or preserved (except dried): U.S. production, imports for consumption, and apparent consumption, 1963-67

	Production			Imports 1/		Apparent consumption
	Canned 2/	Frozen	Total	Quantity	Value	
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	1,000 dollars	1,000 pounds
1963	50,895	7,626	58,521	1,093	590	59,614
1964	65,120	10,083	75,203	1,340	720	76,543
1965	75,212	7,269	82,481	1,247	673	83,728
1966	64,728	5,614	70,342	1,391	725	71,733
1967	80,823	10,494	91,317	1,302	689	92,619

1/ Includes plums, etc., in brine (item 149.24), which during 1963-67 averaged 12 percent of the quantity and 10 percent of the value shown. The bulk of the imports are otherwise prepared or preserved plums (item 149.28).

2/ Includes only canned purple plums. Data shown were converted from cases of 24 size 2½ cans to pounds at the rate of 43.5 pounds per case.

Source: Production compiled from official statistics of the National Canners Association and the National Association of Frozen Food Packers; imports compiled from official statistics of the U.S. Department of Commerce.

Note.--Exports of canned plums and prunes were last reported in official statistics in 1964. During 1960-64 such exports averaged 1.4 million pounds annually.

Commodity	TSUS item
Dried plums, prunes, and prunelles----	149.26

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969).

U.S. trade position

The United States produces nearly three-fourths of the world's dried prune production. U.S. exports, which take about one-third of U.S. production, account for nearly two-thirds of the world trade. Imports are insignificant.

Description and uses

Prunes are certain varieties of plums, which have a firm flesh and a high sugar content that makes them adaptable to drying. The bulk of the prunes grown in the United States are dried; however, in Oregon, Washington, and Idaho, prunes are grown primarily for the fresh market (see summary on items 149.19-149.21). Virtually all dried prunes are forced-air dried in dehydrating tunnels. About 2-1/2 pounds of fresh prunes yield 1 pound of natural condition dried prunes.

In recent years there has been no production or imports of dried prunelles, which are small yellow plums. Dried plums, other than the prune type, are not normally produced in the United States or imported.

Most dried prunes destined for home use are processed (i.e., softened by the addition of heat and moisture) before they are packed in cartons or packages, which usually hold 2 pounds or less. A small but increasing quantity of prunes is being sold as pitted dried prunes. Dried prunes are canned to some extent and are also pureed for baby food and other products.

Prune juice (item 165.50), a major outlet for dried prunes, is discussed in a separate summary in another volume. Dried prunes generally constitute about half of the domestic exports of mixed dried fruit. Such mixtures are discussed in the summary entitled "Certain Dried Fruit."

U.S. tariff treatment

The rate of duty applicable to dried plums, prunes, and prunelles, item 149.26, is 2 cents per pound as provided for in the Tariff Act of

1930, as originally enacted. The United States granted no concessions on this item in the sixth round of trade negotiations under the General Agreement on Tariffs and Trade. The average ad valorem equivalent of the specific rate of duty, based on dutiable imports during calendar year 1967, was 15 percent.

U.S. consumption

There have been moderate fluctuations in the U.S. annual consumption of dried prunes. Such consumption averaged about 106,000 tons during 1962-66 (table 1). 1/ The consumption of dried prunes has not changed appreciably since the early 1950's, but there have been significant changes in the share of the total accounted for by the various forms in which dried prunes are consumed. In recent years about 47 percent has been used in households and by institutional users in dried form, 41 percent has been converted to prune juice, 5 percent has been canned, 2 percent has been used in puree and baby food, and the remaining 5 percent has been consumed in other uses. Compared with the early 1950's the consumption of whole dried prunes has decreased one-third while the consumption of prune juice has increased proportionately. Consumption of pitted prunes has increased in recent years and during the 1966 crop year amounted to about 5,400 tons.

U.S. producers

Nearly all domestic prunes for drying are harvested in California where there are about 4,000 growers. Their prune orchards range in size from a few to several hundred acres. In Oregon there are also a few growers of prunes for drying. Some growers have drying facilities but the bulk of the crop is dried by packers.

In California there are about 15 firms who process and pack prunes. The four largest firms probably handle nearly 90 percent of the crop, and include a large cooperative that reportedly handles more than 40 percent of the total.

U.S. production

California dried prune production, which averaged 152,000 tons annually during 1962-66, reached 182,000 tons in 1964. There probably is sufficient new bearing acreage to produce larger crops in the

1/ Unless otherwise indicated, all years referred to are crop years beginning on Aug. 1 of the year specified. All references to tons are short tons of 2,000 pounds.

future. California prune bearing acreage, which had been declining for many years, increased from 80,122 acres in 1960 to 92,543 acres in 1967. Associated with the increase is a shift in the production area within the State from areas of urban development to less costly and higher yielding lands in the Sacramento Valley.

Oregon production of dried prunes, which fluctuates sharply from year to year, averaged 2,000 tons per year during 1962-66.

Small-sized, dried prunes and those with various skin blemishes that detract from their appearance as dried fruit are used mainly in the manufacture of prune juice.

A Federal marketing order regulates the quality of California dried prunes marketed and authorizes quantity restrictions during years of oversupply. In addition to the Federal program, a California State marketing order is used for both domestic and foreign sales promotion.

U.S. exports and imports

U.S. exports account for nearly two-thirds of the world trade in dried prunes. During the crop years 1962-66, U.S. dried prune exports averaged 48,508 tons annually, or about one-third of production. Of these exports, 36 percent went to countries in the European Economic Community, mainly France and Italy, 23 percent to the Scandinavian countries of Norway, Sweden, Finland, and Denmark, 16 percent to the United Kingdom, 11 percent to Canada, and the remaining 14 percent went to many other countries (table 2).

The majority of the U.S. exports of dried prunes are packed in bulk containers holding 25 pounds or more. Most of the exports to France and Italy are natural condition dried prunes shipped in bags, while exports to other countries are virtually all processed dried prunes. France imposes a quota which restricts imports of processed dried prunes.

U.S. imports of dried prunes are insignificant in relation to the domestic supply. During the 1962-66 crop years, annual imports averaged 200 tons, valued at about $82,000, and came principally from Yugoslavia, France, Taiwan, and Bulgaria.

World production and trade

During 1962-66, world production of dried prunes averaged 210,000 tons annually, slightly more than during the late 1950's, while world exports averaged 77,000 tons annually, a slight increase from the

earlier period. The United States and Yugoslavia, respectively, accounted for about 73 and 11 percent of the world production of dried prunes and for about 62 and 23 percent of the world exports of such prunes during 1962-66. Other producing countries include France, Argentina, Australia, Chile, Italy, and the Republic of South Africa. France, the largest of these producers, is also a substantial importer of dried prunes.

Table 1.--Prunes, dried: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, crop years 1962-66

Year beginning Aug. 1--	Production	Imports	Exports 1/	Apparent consumption
	Quantity (tons)			
1962	152,641	144	43,426	109,359
1963	133,147	114	40,747	92,514
1964	181,660	81	49,764	131,977
1965	168,716	86	62,530	106,272
1966	134,029	575	46,074	88,530
	Value (1,000 dollars)			
1962	43,537	36	18,647	2/
1963	40,926	26	17,245	2/
1964	42,038	76	18,453	2/
1965	40,759	84	23,393	2/
1966	43,915	189	20,213	2/

1/ Does not include exports of prunes in mixed dried fruit. During 1962-66, such exports are believed to have averaged about 1,750 tons annually, valued at about 2,200 thousand dollars.

2/ Not available.

Source: Production compiled from official statistics of the U.S. Department of Agriculture; imports and exports compiled from official statistics of the U.S. Department of Commerce.

Table 2.--Prunes, dried: U.S. exports of domestic merchandise, by principal markets, crop years 1962-66

(In tons)

Market	Year beginning Aug. 1--				
	1962	1963	1964	1965	1966
EEC 1/ countries:					
Italy	3,240	5,608	7,000	6,960	7,377
France	3,833	3,589	5,775	10,532	4,482
Belgium and Luxembourg	1,950	1,782	1,326	1,768	2,058
West Germany	1,891	1,964	2,487	2,544	1,906
Netherlands	1,844	1,084	1,483	2,489	1,242
Total	12,758	14,027	18,071	24,293	17,065
Scandinavian countries:					
Denmark	3,095	2,432	3,460	4,686	3,711
Sweden	2,710	2,686	2,914	3,672	2,952
Finland	2,654	2,106	2,158	2,912	2,216
Norway	2,277	1,940	2,492	3,003	2,106
Total	10,736	9,164	11,024	14,273	10,984
Other countries:					
United Kingdom	7,924	6,539	7,488	9,674	6,283
Canada	5,786	5,136	5,921	5,753	4,940
All other	6,222	5,881	7,260	8,535	6,802
Total	19,932	17,556	20,669	23,962	18,025
Grand total	43,426	40,747	49,764	62,529	46,074

1/ European Economic Community.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Commodity	TSUS item
Mixtures of two or more fruit, prepared or preserved (except dried)----	150.00(pt.), -.01(pt.)

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969)

U.S. trade position

Canned fruit cocktail is the most important of the mixtures of two or more prepared or preserved fruit covered in this summary. The United States is the world's largest producer and a substantial exporter of canned fruit cocktail. The small volume of imports is of a type not produced domestically.

Description and uses

This summary covers prepared or preserved (except dried) fruit products containing two or more fruits. Such products produced in the United States include fruit cocktail, fruit for salad, mixed fruit, citrus salad (chilled or canned), and mincemeat. Inasmuch as mixed dried fruit, which are not competitive with canned fruit mixtures, are distributed with other dried fruit, they are included in the summary entitled "Certain Dried Fruit."

Canned fruit cocktail consists of diced peaches, diced pears, diced pineapple, grapes, and cherries. Canned fruit for salad consists of similar fruit but cut into wedges, quarters, or halves, with or without grapes added. Canned mixed fruit is usually a combination of grapes with diced peaches and diced pears. Canned citrus salad is usually a mixture of grapefruit and orange sections. Chilled citrus salad consists of fresh citrus sections packed in glass containers and marketed under refrigeration. It also often includes pineapple wedges, cherries, and shredded coconut. Mincemeat is a cooked mixture of fruit, with or without meat, and often includes apples, raisins, citrus, fruit juices, beef, suet, sugar, and spices. Canned and chilled fruit mixtures are used directly as appetizers, in salads, and in dessert dishes. Mincemeat is used almost exclusively in making mincemeat pies.

Imports of prepared or preserved fruit mixtures consist mostly of canned tropical fruit salad or canned mandarin oranges combined with other fruit such as pineapple, peaches, or apples. Tropical fruit salads usually contain papaya, pineapple, banana, and sometimes orange sections.

U.S. tariff treatment

The column 1 rates of duty applicable to imports (see general headnote 3 of the TSUSA-1969) are as follows:

TSUS item	Commodity	Rate of duty
150.00	Mixtures of two or more fruit, prepared or preserved (except dried).	17.5% ad val.
150.01	If products of Cuba----------	14% ad val.

The United States granted no concessions in the sixth round of trade negotiations under the General Agreement on Tariffs and Trade on the items covered by this summary. For the period since the TSUS became effective on August 31, 1963, the rates of duty shown above have not changed. The rate shown for item 150.01 is the preferential rate for products of Cuba, which was suspended on May 24, 1962. Imports from Cuba have been prohibited since February 7, 1962.

For articles of the Philippine Republic, the current rate of duty is 60 percent of the rate for Cuba (see item 3c in the general headnote mentioned above).

U.S. consumption, producers, and production

Annual consumption of the items covered by this summary averaged about 630 million pounds during the period 1963-67, nearly all of it supplied by domestic production (table 1). The fluctuations in apparent consumption during the 1963-67 period are explained, in large part, by fluctuations in carryover stocks. The post World War II trend has been upward.

There are about 20 domestic firms that produce fruit cocktail, fruit for salad, and mixed fruit. Virtually all of the production is in California. Citrus salad, both chilled and canned, is produced in Florida. Most of the processors of the products covered by this summary also produce other canned fruit or vegetable items.

Annual U.S. production of fruit cocktail increased from an average of 370 million pounds during the early 1950's to 652 million pounds during 1963-67 and accounted for roughly 85 percent of the U.S. production of canned and chilled fruit mixtures (excluding mincemeat) (table 2). During 1963-67 annual average production of fruit for salad and mixed fruit, at 33 million and 21 million pounds, respectively, was about the same as in the early 1950's. Annual production of canned and chilled citrus salad, averaging 58 million pounds in

1963-67, has increased since the 1950's. The domestic production of mincemeat, as reported by the Census of Manufactures, declined from 21 million pounds, valued at $6 million, in 1958 to 16 million pounds, valued at $5 million, in 1963, the latest report available.

U.S. exports

U.S. exports of fruit cocktail in 1963-67 accounted for 18 percent of the domestic production of canned mixtures of two or more fruits (table 1). Exports of fruit cocktail, continuing a long upward trend, averaged 140 million pounds annually in 1963-67. The United Kingdom and Canada, each of which took nearly one-quarter of all such exports in 1963-67, are the principal export markets (table 3). A number of other European countries account for most of the balance.

Exports of fruit for salad and mixed fruit, though a small part of the statistical class, are included with the export data for fruit cocktail. Exports of canned or chilled citrus salad are not separately reported but are believed to consist of insignificant quantities of canned citrus salad.

U.S imports and foreign production

In recent years annual U.S. imports of prepared or preserved fruit mixtures have increased substantially from the level of the 1950's. During the years 1963-67 such imports averaged 6.7 million pounds, valued at $1.3 million (table 1). Despite the increase, U.S. imports are negligible in relation to domestic consumption.

An analysis of imports of mixtures of two or more prepared or preserved fruit entered in 1964 indicated that about three-fourths of such imports consisted of tropical fruit salad, and most of the rest consisted of mandarin oranges mixed with other fruit. Other products included mincemeat, citrus salad, canned assorted fruits, and fruits in mustard flavored sirup. Tropical fruit salad has been imported chiefly from the Philippine Republic, Australia, and Taiwan. Mandarin orange mixtures have been imported chiefly from Japan and Taiwan.

Requisites for the production of tropical fruit salad are a climate suitable for growing tropical fruit and a developed canning industry. At present, tropical fruit salad is produced in only a few countries. A U.S. firm has production facilities in the Philippine Republic.

Table 1.--Fruit mixtures, prepared or preserved (except dried): U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1963-67

(Quantity in thousands of pounds; value in thousands of dollars)

Year	Production 1/	Imports 2/	Exports	Apparent consumption	Ratio (percent) of exports to production
	Quantity				
1963	656,965	3/ 3,630	149,509	511,086	23
1964	859,275	7,945	134,025	733,195	16
1965	753,483	12,490	143,447	622,526	19
1966	834,843	3,188	148,301	689,730	18
1967	711,971	6,056	123,098	594,929	17
	Value				
1963	4/	672	22,898	4/	4/
1964	4/	1,574	21,990	4/	4/
1965	4/	2,471	22,999	4/	4/
1966	4/	588	24,418	4/	4/
1967	4/	1,169	20,426	4/	4/

1/ Excludes mincemeat because annual data are not available. In 1963 the production of mincemeat totaled 16,444 thousand pounds, valued at 4,629 thousand dollars. Imports and exports of mincemeat are negligible.

2/ While this import category includes dried fruit mixtures, such imports are believed to have been negligible or nil.

3/ Estimated. Only value of imports reported prior to September 1963.

4/ Not available.

Source: Production from the National Canners Association and the Florida Canners Association; imports and exports compiled from official statistics of the U.S. Department of Commerce.

Table 2.--Fruit mixtures, prepared or preserved (except dried): U.S. production, by types, 1963-67

(Quantity in thousands of pounds) 1/

Type	1963	1964	1965	1966	1967
Fruit cocktail	565,425	727,920	652,725	710,145	602,955
Fruits for salad	37,035	38,160	29,340	36,225	26,415
Mixed fruit	15,885	24,930	22,680	24,075	14,985
Chilled citrus salad	36,070	55,245	40,098	55,758	55,376
Canned citrus salad	2,550	13,020	8,640	8,640	12,240
Total	656,965	859,275	753,483	834,843	711,971

1/ Fruit cocktail, fruit for salad and mixed fruit converted to pounds at the rate of 45 pounds per case of 24 number 2-1/2-size cans; canned citrus salad converted at the rate of 43.5 pounds per case of 24 number 2-1/2-size cans, and chilled citrus salad converted at the rate of 8.7 pounds per gallon.

Source: National Canners Association and Florida Canners Association.

Note.--Annual U.S. production data for mincemeat are not available. Such production in 1963 totaled about 16,400 thousand pounds.

Table 3.--Fruit mixtures, canned: U.S. exports of domestic merchandise, by principal markets, 1963-67 1/

Market	1963	1964	1965	1966	1967
	Quantity (1,000 pounds)				
Canada	36,917	28,987	37,482	36,534	30,469
United Kingdom	45,105	32,493	28,894	34,376	27,258
Belgium	11,317	11,521	12,131	14,063	14,209
West Germany	11,821	16,845	19,614	15,538	10,126
Switzerland	6,050	6,299	7,704	6,571	7,736
Netherlands	9,495	9,581	10,706	11,430	7,585
All other	28,804	28,299	26,916	29,789	25,715
Total	149,509	134,025	143,447	148,301	123,098
	Value (1,000 dollars)				
Canada	5,786	4,992	6,289	6,347	5,415
United Kingdom	6,882	5,431	4,477	5,654	4,342
Belgium	1,903	2,011	2,113	2,466	2,618
West Germany	1,631	2,464	2,862	2,271	1,494
Switzerland	894	977	1,234	1,012	1,175
Netherlands	1,367	1,413	1,645	1,690	1,098
All other	4,435	4,702	4,379	4,978	4,284
Total	22,898	21,990	22,999	24,418	20,426

1/ The description of the export classification is "Fruit cocktail, canned" although some quantities of mixed fruit and fruit for salad are included. Exports of citrus salad are not included; however, such exports, if any, are negligible.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Commodity	TSUS item
Any prepared or preserved fruit products covered by part 9B of schedule 1, containing 0.5 percent or more ethyl alcohol by volume-----	150.50

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969).

U.S. trade position

U.S. production and trade in fruit packed in alcohol are small. Exports probably exceed imports.

Comment

This summary covers prepared or preserved fruit products containing ethyl alcohol, but the duty relates only to the ethyl alcohol. Such products are dutiable under part 9B of schedule 1. The duty on the alcohol, which applies only if the alcohol amounts to one-half percent or more by volume of the container contents of a prepared or preserved fruit product, is $2.50 per proof gallon 1/ and is in addition to any duty applicable to the fruit product. The United States granted no concessions on item 150.50 in the sixth round of trade negotiations under the General Agreement on Tariffs and Trade. The rate of duty on this item has not changed since the Tariff Schedules of the United States became effective on August 31, 1963.

For purposes of this summary, the term "brandied fruit" refers to any prepared or preserved fruit packed in ethyl alcohol, whether or not the alcohol is in the form of brandy or some other alcoholic beverage. Brandy is the predominate medium used in the commercial pack of such products. Consumption of brandied fruit is limited and the amount of alcohol consumed in such fruit is very small. Prices for brandied fruit are much higher than prices for similar canned fruit not containing alcohol.

Domestic production of brandied fruits is estimated by trade sources at less than $500,000 annually. The bulk of this output is produced in New York State. Peaches are the principal brandied fruit packed in the United States; others include cherries, pears, apricots, figs, melon balls, and fruit salad. There are about half a dozen domestic producers of such fruit.

1/ A proof gallon is the alcoholic equivalent of a U.S. gallon of 231 cubic inches at 60° Fahrenheit, containing 50 percent of ethyl alcohol by volume.

The distilled spirits used by domestic producers of brandied fruit are subject to the same internal revenue tax of $10.50 per proof gallon of liquid contents, or per wine gallon 1/ of liquid contents if below proof, as are those contained in imported brandied fruit; however, the producer is eligible to receive a refund of most of this tax if the product is found unfit for beverage use under the same criteria that apply to the classification of imported products (see note at end of summary). Because of these regulations, virtually all of the domestic production is of fruit products containing less than 12 percent of alcohol.

Exports of brandied fruit are not separately reported but probably exceed imports and go to various countries including Sweden, Italy, and the United Kingdom.

Prior to August 31, 1963, imports of alcohol in fruit and fruit juices were reported together. Since that time fruit juices containing alcohol have been reported under item 165.70. Imports for 1964-67 under item 150.50, nearly all from Italy, are shown in the following tabulation:

Year	Proof gallons
1964----------	859
1965----------	1,935
1966----------	222
1967----------	745

The chief imported product has been cherries packed in cherry brandy containing about 30 percent alcohol.

1/ A wine gallon is a U.S. gallon of liquid measure equivalent to the volume of 231 cubic inches.

Note.--Under authority of the Internal Revenue Code of 1954, as amended, the Internal Revenue Service establishes regulations for food products containing alcohol. If any imported fruit product which contains alcohol is classed as fit for use for beverage purposes, the product is subject to an internal revenue tax at the rate of $10.50 per proof gallon, or per wine gallon if below proof. If the product is classed as unfit for use for beverage purposes, no internal revenue tax is collected. To be so classed, the fruit must be solidly packed in the container and include only such alcohol (spirits and wine) as is necessary for flavoring and preserving. When the liquid portion of an imported product contains more than 12 percent alcohol by volume, or when the solids (essentially sugar expressed in grams per 100 ml.) are less than 5 times the percentage of alcohol by volume, the product is subject to analysis by the Internal Revenue Service for classification as to whether such product is fit or unfit for use for beverage purposes.

March 1969
1:8

Commodity	TSUS item
Fruit flours:	
Banana and plantain	152.00, -.01
Other	152.05
Certain fruit pastes and pulps:	
Apricot	152.42
Orange	152.62, -.63
Other, not elsewhere enumerated (except strawberry)	152.74 (pt.), -.75 (pt.)

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969).

U.S. trade position

Apple, apricot, peach, pear, and plum pulps are the major products covered by this summary. In recent years U.S. consumption probably has exceeded 400 million pounds annually, virtually all from domestic supplies. Exports have been negligible. Imports, some of which are of a kind not produced in the United States, have averaged about 1 million pounds annually.

Description and uses

This summary includes all fruit flours and all fruit pastes and pulps, except those made from the cashew apple, mamey colorado, papaya, sapodilla, soursop and sweetsop (item 152.46), fig (item 152.50), guava (item 152.54), mango (item 152.58), banana and plantain (item 152.72), and strawberry (item 152.7420). Such products are included in other summaries in this volume.

Fruit flours and powders (items 152.00 and 152.05) are usually prepared by drying and grinding fruit pulp. The production of these products in the United States has been small. Probably the most important commercial products are banana flour and apple powder, which are used chiefly as food for infants.

Fruit pulps (also called purees) are usually prepared by forcing cooked fruit through an appropriate sized sieve. They are used chiefly in the manufacture of baby foods, but also in such products as ice creams, fruit butters, dessert toppings, pastry and pie fillings and similar products. Orange pulp is often used in the manufacture of marmalade. For tariff purposes, apple and cranberry "sauces" are dutiable as "otherwise prepared or preserved" fruit, rather than as fruit pulp, and are not covered by this summary.

Fruit pastes are usually prepared by concentrating cooked fruit pulps (often with sugar) to obtain a product with a firm consistency. Fruit pastes are generally used as a confection or as a filling in bakery goods.

U.S. tariff treatment

The column 1 rates of duty applicable to imports (see general headnote 3 of the TSUSA-1969) are as follows:

TSUS item	Commodity	Rate prior to Jan. 1, 1968	U.S. concessions granted in 1964-67 trade conference (Kennedy Round)	
			Second stage, effective Jan. 1, 1968	Final stage, effective Jan. 1,1972
	Fruit flours:			
152.00	Banana and plantain-----	14% ad val.	11% ad val.	7% ad val.
152.01	If product of Cuba----	10% ad val.	1/	2/
152.05	Other----------	20% ad val.	18% ad val.	15% ad val.
	Certain fruit pastes and pulps:			
152.42	Apricot----------	17.5% ad val.	3/	3/
152.62	Orange----------	17.5% ad val.	1/	1/
152.63	If product of Cuba----	14% ad val.	1/	1/
152.74 (pt.)	Other 4/ 5/----------	15% ad val.	1/	1/
152.75 (pt.)	If product of Cuba 6/-	14% ad val.	1/	1/

1/ Rate of duty not affected by the trade conference.

2/ Subordinate Cuban provision will be deleted, effective Jan. 1, 1970, as a result of the Kennedy Round.

3/ Rate bound in 1964-67 trade conference.

4/ Does not include fruit paste and pulp of the cashew apple, mamey colorado, papaya, sapodilla, soursop, sweetsop, fig, guava, mango, banana, plantain, or strawberry.

5/ Item 152.70 (other fruit pastes and pulps) was superseded by items 152.72 (banana and plantain pastes and pulps) and 152.74 on Jan. 1, 1968.

6/ Part of item 152.71 prior to Jan. 1, 1968.

The preceding tabulation shows the column 1 rates of duty in effect prior to January 1, 1968, and modifications therein as a result of concessions granted by the United States in the sixth round of trade negotiations under the General Agreement on Tariffs and Trade. Only the second (that in effect during 1969) and final (fifth) stages of the annual rate modifications are shown (see the TSUSA-1969 for the other stages). During the period from August 31, 1963, when the TSUS became effective, to December 31, 1967, the prior rates shown did not change.

The rates shown for items 152.01, 152.63, and 152.75 are preferential rates for products of Cuba, which were suspended on May 24, 1962. Imports from Cuba have been prohibited since February 7, 1962.

U.S. consumption, production, and exports

Virtually all of the U.S. consumption of the fruit pulps included in this summary is supplied by domestic production. While data on the annual domestic production of fruit pulp are not available, the Census of Manufactures indicated that in 1963 the domestic production of baby foods consisting of 100 percent fruit was about 400 million pounds, valued at $75 million. It is believed that such production consisted chiefly of peach, apple, apricot, plum, and pear pulps, all included in this summary, and some quantities of banana pulp. Banana pulp is discussed in another summary in this volume. In addition to baby foods, fruit pulps are used in ice cream, dessert toppings, and similar products. Some manufacturers produce their own fruit pulps for making such products. Exports of fruit pulps are believed to be small.

The domestic consumption and production of fruit pastes compared with fruit pulps is insignificant.

U.S. imports

During 1964-67, annual U.S. imports of fruit paste and pulp not elsewhere enumerated (except strawberry) (item 152.7440) 1/ are estimated to have averaged 1,200,000 pounds, valued at about $180,000. Such imports included apple, pear, peach, lemon, currant, blueberry, and tamarind pulps, and quince and other pastes. Major suppliers of such pastes and pulps were Argentina, Canada, Spain, Italy, and the Netherlands.

Annual U.S. imports of apricot and orange pastes and pulps have been small and erratic in recent years. In 1964-67 imports of apricot paste and pulp, chiefly from Argentina and Spain, averaged 44,000

1/ This was part of item 152.70 from Aug. 31, 1963, through December 1966 and part of item 152.7040 in 1967. Item 152.7440 became effective Jan. 1, 1968.

pounds annually. Imports of orange paste and pulp, chiefly supplied by Spain and Jamaica, averaged 58,000 pounds annually during the same period.

The only recent year in which banana and plantain flours were imported was 1965 when less than 1,000 pounds entered. During 1964-67 imports of all other fruit flours totaled about 25,000 pounds, most of which were supplied by Italy.

Commodity	TSUS item
Jellies, jams, marmalades, and fruit butters:	
Currant and other berry	153.04
Guava	153.08
Orange marmalade	153.16
Pineapple	153.24
Quince	153.28
Other	153.32

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969).

U.S. trade position

Virtually all of the domestic consumption of the items covered in this summary is supplied by domestic production, which has probably averaged about 900 million pounds annually in recent years. Imports have averaged about 10 million pounds and exports about 2 million pounds annually.

Description and uses

This summary includes all jellies, jams, marmalades, and fruit butters, except those made from the cashew apple, mango, mamey colorado, papaya, sapodilla, soursop, and sweetsop (item 153.00), which are covered in another summary in this volume.

The U.S. Food and Drug Administration (FDA) has established standards of identity for jellies, preserves or jams, and fruit butters. According to these standards jams or preserves consist (by weight) of 45 percent fruit and 55 percent sugar; jellies, 45 percent fruit juices and 55 percent sugar; and fruit butters, 5 parts of fruit to 2 parts of sugar. No distinction is made between a jam and a preserve by the FDA or by the trade. For tariff purposes, however, a distinction is made. If a fruit is processed and packed in a manner which substantially retains the shape of the fruit, then it is dutiable as a preserve under provisions for "prepared or preserved fruit," and not under the tariff provisions for jams. Conversely, a jam is defined as a product made by boiling fruit and sugar to a thick consistency, without preserving the shape of the fruit. An imported product, properly labeled a jam according to FDA standards, might be dutiable as preserved fruit; similarly, some imported products labeled as a "preserve" (e.g., strawberry preserves) may be dutiable as jam. Generally, the rates of duty for preserved fruits are higher than those for jams.

There are no U.S. standards of identity for marmalades, which are jelly-like spreads containing suspended pieces of fruit or fruit peel and typically consisting of 50 percent or more sugar. There are two principal types of orange marmalade: one prepared from bitter oranges and the other from sweet oranges. Bitter orange marmalade usually commands a premium price compared with sweet orange marmalade.

A product not meeting the U.S. standards of identity for a jelly or jam may not be labeled as such, but may be traded as "imitation jelly" or "imitation jam." Fruit butters, which are sweetened and seasoned fruit pulps, are most commonly made from apples and pears.

Jellies, jams, marmalades, and fruit butters are used primarily as fruit spreads on bread, as fillings in baked goods, and as side dishes with meals.

U.S. tariff treatment and other import requirements

The column 1 rates of duty applicable to imports (see general headnote 3 in the TSUSA-1969) are as follows:

TSUS item	Commodity	Rate prior to Jan. 1, 1968	U.S. concessions granted in 1964-67 trade conference (Kennedy Round)	
			Second stage, effective Jan. 1, 1969	Final stage, effective Jan. 1, 1972
	Jellies, jams, marmalades, and fruit butters:			
153.04	Currant and other berry.	6.5% ad val.	5% ad val.	3% ad val.
153.08	Guava----------	10% ad val.	8% ad val.	5% ad val.
153.16	Orange marmalade-----	11% ad val.	8.5% ad val.	5.5% ad val.
153.24	Pineapple----------	10% ad val.	8% ad val.	5% ad val.
153.28	Quince----------	17.5% ad val.	14% ad val.	8.5% ad val.
153.32	Other----------	14% ad val.	11% ad val.	7% ad val.

The tabulation above shows the column 1 rates of duty in effect prior to January 1, 1968, and modifications therein as a result of concessions granted by the United States in the sixth round of trade negotiations under the General Agreement on Tariffs and Trade. Only the second (that in effect during 1969) and final (fifth) stages of the annual rate modifications are shown (see the TSUSA-1969 for the other stages). During the period from August 31, 1963, when the TSUS became effective, to December 31, 1967, the prior rates shown did not change.

Imported jellies, jams, marmalades, and fruit butters that are in chief value of manufactured sugar are subject to an additional duty of 0.53 cent per pound on the total sugar content, pursuant to an Internal Revenue tax (see TSUS item 901.00).

U.S. consumption and production

Consumption of the products included in this summary increased from 641 million pounds in 1954 to 898 million pounds in 1963, the latest year for which U.S. production data are available (table 1). Per capita consumption increased about 20 percent during this period from 4.0 pounds in 1954 to 4.8 pounds in 1963. Trade sources indicate that this trend is continuing and that consumption of fruit spreads in 1967 was in excess of 900 million pounds.

U.S. production of fruit spreads supplies virtually all of domestic consumption. Pure strawberry jam (including preserves) and pure grape jelly, the most important kinds of fruit spreads, each accounted for about 15 percent of the 1963 production; other pure jams (including preserves) accounted for about 35 percent; other pure jellies, about 20 percent; and fruit butters, imitation jellies, and marmalades, about 15 percent (table 2). Aggregate production of fruit spreads increased 40 percent between the census years 1954 and 1963. The largest increases in kinds were in pure grape jellies, jams other than strawberry, and marmalades, all of which almost doubled in output as shown in the following tabulation (based on data from the 1954 and 1963 Census of Manufactures):

Kind	Production		
	1963		Increase or (decrease) in quantity 1963 over 1954
	Quantity	Unit value	
	Million pounds	Cents per pound	Percent
Jellies:			
Grape, pure	129	22.6	98
Other, pure	173	22.5	71
Imitation	26	15.2	(23)
Jams (including preserves), pure:			
Strawberry	125	28.4	39
Other	293	24.5	84
Marmalades	22	20.4	83
Fruit butters	53	14.9	9
Not specified 1/	68	23.4	(45)
Total or average	889	23.4	40

1/ Estimated.

The unit values shown above for 1963 production were not significantly different from those for 1954. Such values are believed to be reliable indicators of the current unit value relationships among the various kinds produced.

U.S. producers

Producers of jellies, jams (including preserves), marmalades, and fruit butters are primarily located near metropolitan areas. The most important producing States are California, New York, Illinois, Pennsylvania, and Texas. These States accounted for nearly half of the U.S. production in 1963. The 1963 Census of Manufactures reported that there were 120 establishments with 6,000 employees producing fruit spreads in that year. Trade sources estimate that about 40 of them produce 90 percent of the production. Some of the firms are affiliates of large food processing organizations, and a few are primarily in the business of food retailing. Most firms take delivery of their raw materials (chiefly frozen fruits and sugar) year round and manufacture fruit spreads as needed for distribution.

U.S. exports

Exports of jellies, jams, marmalades, and fruit butters during 1963-67 averaged 1.9 million pounds, valued at about $600,000 annually (table 1). Such exports were insignificant in relation to production.

U.S. imports

During 1963-67 imports of jellies, jams, marmalades, and fruit butters, which accounted for about 1 percent of consumption, averaged 10.2 million pounds, valued at about $2,400,000 annually, a small increase from the level of a decade earlier (table 1).

Of the imported products covered by this summary, orange marmalade was the most important single product imported during 1963-67 (table 3). Imports of orange marmalade, which accounted for one-third of the total, averaged 3.3 million pounds annually--nearly all supplied by the United Kingdom. During the same period imports of currant and other berry jellies and jams, consisting of a number of kinds, accounted for nearly one-half the total imports and averaged about 5 million pounds annually. Canada supplied about 70 percent of these imports. Imports of "other" jellies, jams, marmalades, and fruit butters averaged about 2 million pounds annually during 1963-67, accounting for nearly all of the remaining imports covered by this summary. Imports of guava, pineapple, and quince products have been small in recent years.

In addition to Canada and the United Kingdom, which have been the predominate suppliers of the imports covered by this summary, more than 20 other countries, led by Ireland, West Germany, and Switzerland, have supplied imports in recent years.

Table 1.--Jellies, jams, marmalades, and fruit butters: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1954, 1958, and 1963-67

Year	Production 1/	Imports	Exports	Apparent consumption
	Quantity (1,000 pounds)			
1954	634,383	8,136	1,329	641,190
1958	775,559	7,472	2,019	781,012
1963	889,466	11,115	2,387	898,194
1964	2/	8,365	1,982	2/
1965	2/	8,757	1,688	2/
1966	2/	11,119	1,678	2/
1967	2/	11,642	1,780	2/
	Value (1,000 dollars)			
1954	147,183	2,544	371	149,355
1958	179,892	1,548	558	180,883
1963	207,972	2,441	711	209,702
1964	2/	2,002	607	2/
1965	2/	2,053	533	2/
1966	2/	2,711	515	2/
1967	2/	2,723	578	2/

1/ Quantity partly estimated, see table 2.
2/ Not available.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Note.--Imports were less than 2 percent of apparent consumption in each of the years 1954, 1958, and 1963.

Table 2.--Jellies, jams, marmalades, and fruit butters: U.S. production, by kinds, census years 1954, 1958, and 1963

Kind	1954	1958	1963
	Quantity (1,000 pounds)		
Jellies:			
Grape, pure	65,180	91,370	129,204
Other, pure	101,199	134,646	173,129
Imitation	33,863	22,208	25,933
Jams (including preserves), pure:			
Strawberry	90,323	127,140	125,467
Other	159,278	239,779	293,133
Marmalades	12,073	14,957	22,079
Fruit butters	48,359	47,015	52,487
Subtotal	510,275	677,115	821,432
Jams (including preserves) and jellies not specified by kind 1/	124,108	98,444	2/ 68,034
Total 3/	634,383	775,559	889,466
	Value (1,000 dollars)		
Jellies:			
Grape, pure	15,006	21,288	29,082
Other, pure	23,834	28,184	38,918
Imitation	5,057	3,727	3,948
Jams (including preserves), pure:			
Strawberry	26,674	34,967	35,679
Other	39,856	58,318	71,929
Marmalades	3,006	3,838	4,498
Fruit butters	5,987	6,780	7,845
Subtotal	119,420	157,102	191,899
Jams (including preserves) and jellies not specified by kind	27,763	22,790	2/ 15,961
Total	147,183	179,892	207,860

1/ Quantity estimated based on the average unit value of the total production reported by kind.

2/ Includes dietetic jams, jellies, and preserves first separately reported in 1963 as 7,346,000 pounds valued at $1,959,000.

3/ Quantity partly estimated.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Table 3.--Jellies, jams, marmalades, and fruit butters: U.S. imports for consumption, by tariff items, 1963-67

Year	Currant & other berry (153.04)	Guava (153.08)	Orange marmalade (153.16)	Pineapple (153.24)	Quince (153.28)	Other (153.32)	Total of items shown
	Quantity (1,000 pounds)						
1963 1/	4,506	56	4,275	13	32	2,233	11,115
1964	4,366	5	2,364	5	13	1,612	8,365
1965	3,640	41	3,223	4	14	1,835	8,757
1966	5,550	34	3,562	2	17	1,954	11,119
1967	6,617	10	3,054	4	34	1,923	11,642
	Value (1,000 dollars)						
1963 1/	1,141	10	782	3	7	499	2,442
1964	1,114	1	496	2	5	384	2,002
1965	938	9	644	2	5	455	2,053
1966	1,442	8	777	1	9	474	2,711
1967	1,554	3	672	3	12	479	2,723
	Unit value (cents per pound) 2/						
1963 1/	25.3	17.8	18.3	23.1	21.9	22.3	22.0
1964	25.5	20.0	21.0	40.0	38.5	23.8	23.9
1965	25.8	22.0	20.0	50.1	35.7	24.8	23.4
1966	26.0	23.5	21.8	50.0	52.9	24.3	24.4
1967	23.5	30.0	22.0	75.0	35.3	24.9	23.4

1/ Guava and pineapple partly estimated.
2/ Computed from the unrounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Note.--Jellies, jams, marmalades, and fruit butters of cashew apple, mango, mamey colorado, papaya, sapodilla, soursop, and sweetsop (item 153.00) are covered in another summary. Annual imports of such products during 1963-67 probably averaged less than 4 thousand pounds.

Commodity	TSUS item
Candied, crystallized, or glace nuts, fruits, and vegetable substances:	
Chestnuts	154.10
Ginger root	154.40
Pineapples	154.45
Nuts, other than chestnuts	154.50, -.51
Fruit, not elsewhere enumerated	154.55
Other vegetable substances	154.60
Mixtures of two or more kinds	154.90

Note.--For the statutory description, see the Tariff Schedules of the United States Annotated (TSUSA-1969).

U.S. trade position

Most of the domestic consumption of the candied, crystallized, or glace products considered in this summary is supplied by U.S. production; however, some products consumed in relatively small quantities, such as glace dried fruit, crystallized ginger root, and crystallized flowers, are supplied principally by imports. Exports are small.

Description and uses

This summary includes general information on all candied, crystallized, or glace nuts, fruits, or vegetable substances provided for in part 9D of schedule 1 of the Tariff Schedules of the United States and specific information on the tariff treatment and imports of all such products except cherries (item 154.05), citrons (item 154.15), and fruit peel (items 154.20-154.35). These exceptions, of which cherries are by far the most important imported item, are discussed in other summaries in this volume.

The term "candied" means a product which has been impregnated with sugar, usually to such a degree that 70 percent or more of the weight is sugar. "Crystallized" refers to sugar crystals formed on the surface of the product resulting in a rough crystalline appearance. "Glace" refers to a coating of sugar sirup on the surface of the product resulting in a smooth, shiny appearance. Products may be crystallized or glaced whether or not they are candied. In this summary the three forms are collectively referred to as candied.

The principal use for candied fruit and fruit peel is in fruit cakes for the Thanksgiving and Christmas holidays. Other uses are as ingredients in special bakery goods, as confectionery, and as food

garnishes. Manufacturers of candied products usually mix various candied fruit and fruit peels together in either standard or made-to-order combinations for use by commercial bakers and institutions. Such mixtures may include all or most of the following: diced citron, orange, lemon, and grapefruit peel; diced citron melon; cherries; and diced pineapple. Mixes, as well as their individual components, are also marketed through retail outlets for home use. Other candied products, which are usually sold through retail outlets for confectionery or garnish purposes, include glace nuts, crystallized ginger root, candied pineapple slices, orange slices, apricots, figs, strawberries, and crystallized flowers.

U.S. tariff treatment and other import requirements

The column 1 rates of duty applicable to imports (see general headnote 3 in the TSUSA-1969) are as follows:

TSUS item	Commodity	Rate prior to Jan. 1, 1968	U.S. concessions granted in 1964-67 trade conference (Kennedy Round)	
			Second stage, effective Jan. 1, 1969	Final stage, effective Jan. 1, 1972
	Candied, crystallized, or glace nuts, fruit, and vegetable substances:			
154.10	Chestnuts, including marrons.	5¢ per lb.	4¢ per lb. 1/	2.5¢ per lb.
154.40	Ginger root	13.5% ad val.	2/	2/
154.45	Pineapples	17.5% ad val.	14% ad val.	8.5% ad val.
154.50	Nuts, other than chestnuts.	14% ad val.	11% ad val.	7% ad val.
154.51	If product of Cuba.	10% ad val.	2/	3/
154.55	Fruit, not elsewhere enumerated.	10% ad val.	2/	2/
154.60	Other vegetable substances.	20% ad val.	2/	2/
154.90	Mixtures of two or more kinds of candied, crystallized, or glace nuts, fruit, or vegetable substances.	The highest rate applicable to any of the components.	4/	4/

1/ Rate of duty became effective Jan. 1, 1968 and remains in effect until Jan. 1, 1970.
2/ Rate of duty not affected by the trade conference.
3/ Subordinate Cuban provision deleted effective Jan. 1, 1970.
4/ Rate provision not affected by the trade conference.

The tabulation above shows the column 1 rates of duty in effect prior to January 1, 1968, and modifications therein as a result of concessions granted by the United States in the sixth round of trade negotiations under the General Agreement on Tariffs and Trade. Only the second and final stages of the rate modifications are shown (see the TSUSA-1969 for the other stages). During the period from August 31, 1963, when the TSUS became effective, to December 31, 1967, the prior

rates shown did not change. The rates for items 154.60 and 154.90 are those provided for in the Tariff Act of 1930, as originally enacted.

The rate shown for item 154.51 is a preferential rate for products of Cuba, which was suspended on May 24, 1962. Imports from Cuba have been prohibited since February 7, 1962.

The average ad valorem equivalent of the specific rate of duty in effect on December 31, 1967 for item 154.10, based on dutiable imports during 1967, was 5.5 percent. The duty collected on imports of item 154.90 during the first 6 months of 1965, the latest period for which data were collected, was equivalent to 14.1 percent of the value of these imports.

Imported candied products in which the manufactured sugar content accounts for over half the total value are subject to an additional duty of 0.53 cent per pound on the total sugar content (see item 901.00 of the TSUS). Candied ginger root, pineapple, and marrons are examples of products which have paid such additional duties in recent years.

Certain products imported from Australia containing manufactured sugar have been subject to countervailing duties equal to the export sugar rebate paid by the Australian Government, as determined by the U.S. Secretary of the Treasury, pursuant to section 303 of the Tariff Act of 1930. Countervailing duties on the sugar content of certain Australian products were first applied in 1922. In 1967 the equivalent U.S. value of the Australian export rebate ranged from 4 to 6 cents per pound of sugar contained in fruit products eligible for such rebate. In recent years countervailing duties have been paid on some imports entered under item 154.55 (see imports section).

U.S. consumption, producers, and production

Annual consumption of all candied products is estimated to have averaged about 65 million pounds during recent years--probably double the annual consumption of two decades ago. The consumption of the articles covered in this summary is estimated at about 30 million pounds annually, consisting mostly of candied pineapple which is estimated at about 20 million pounds annually. Nearly all such pineapple is domestically produced, chiefly from prepared or preserved pineapple imported under item 148.98, which is discussed in another summary in this volume.

The following tabulation shows the estimated range in the quantity of the various candied products consumed annually in the United States in recent years:

Candied product	Estimated consumption (million pounds)
Fruit peel 1/	20-25
Pineapple	18-22
Cherries 1/	12-14
Other fruit	7-11
Nuts	1- 2
Ginger root and other vegetable substances	1

1/ Discussed in other summaries.

About 20 firms produce candied fruit in the United States. The six largest probably account for 80 percent of the total production. Producers are located principally in Florida, New York, Illinois, Ohio, Kentucky, Oregon, and California. Trade sources estimate that approximately 60 million pounds of candied fruit and fruit peel were produced and sold in the United States in 1965. About one-third of this was sold in bulk to bakers and two-thirds was distributed through retail firms for home baking, confectionery, and specialty food uses.

U.S. exports

Exports of candied products, which were first separately reported in 1965, averaged 2.1 million pounds annually during 1965-67, according to reported data. It is believed, however, that many of these exports were not candied, crystallized, or glaced articles. Actual exports of all candied products during 1965-67 probably averaged only about 300,000 pounds annually.

U.S. imports

During 1963-67 the annual imports of the candied products covered by this summary (excludes candied cherries, citron, and fruit peel) averaged 1.4 million pounds, valued at $425,000 (table 1). In 1967 such imports totaled 2.3 million pounds, valued at $616,000, a substantial increase from the 1963-67 average. The increase was primarily due to increased imports of item 154.55 from France (tables 1 and 2).

During 1963-67 more than 90 percent of the imports of the candied products covered by this summary entered under items 154.40 (ginger root) and 154.55 ("other fruit"). During those years, imports of

candied ginger root, mostly from Taiwan, averaged 518,000 pounds annually, valued at $141,000, and imports of candied "other fruit," mostly from France and Australia, averaged about 795,000 pounds annually, valued at $219,000. In 1967 imports of candied "other fruit" totaled 1,632,000 pounds--substantially more than in earlier years during the 1963-67 period. Most of the increase consisted of melon cubes from France. Imports of "other fruit" from Australia consist chiefly of candied dried fruit such as apricots, peaches, and pears. Even though such products from Australia are subject to a countervailing duty, U.S. imports from that country increased from 187,000 pounds in 1963 to 457,000 pounds in 1967. In recent years imports of "other fruit" have also included candied orange slices, dates, figs, papayas, plums, mangoes, quince, and strawberries.

Imports of candied pineapple (item 154.45), which were small and sporadic, averaged 35,000 pounds annually during 1963-67. Such imports came principally from the Republic of South Africa.

During 1963-67 annual U.S. imports of the other candied products considered in this summary (items 154.10, 154.50, 154.60, and 154.90) averaged 94,000 pounds, valued at $60,000 (table 1). Imports of chestnuts, including marrons, have come principally from France and accounted for about 40,000 pounds of the group total. Most of the remaining imports were account for by "other nuts," which were supplied chiefly by France and Portugal, and by "other vegetable substances." Imports of "other vegetable substances" included lotus root and cucumber from Hong Kong, flowers from France, and chickpeas from Syria. Small quantities of mixed candied products were imported during 1963-67, principally from France and Italy.

Products like those imported under the provisions for candied chestnuts, ginger root, "other nuts," "other fruit," and "other vegetable substances" are not produced in significant quantities in the United States.

Table 1.--Candied, crystallized, or glace nuts, fruit, and vegetable substances (except cherries, citron and fruit peel): U.S. imports for consumption, by types, 1963-67

Type (TSUS item)	1963	1964	1965	1966	1967
	Quantity (1,000 pounds)				
Chestnuts (154.10)	1/ 48	34	18	55	39
Ginger root (154.40)	2/ 719	673	329	428	440
Pineapples (154.45)	81	23	16	12	43
Other nuts (154.50)	1/ 7	5	7	17	10
Other fruit (154.55)	1,097	425	479	344	1,632
Other vegetable substances (154.60)	3/	13	39	46	67
Mixtures (154.90) 4/	3/	9	6	25	23
Total	1,952	1,182	894	927	2,253
	Value (1,000 dollars)				
Chestnuts (154.10)	1/ 27	21	20	33	35
Ginger root (154.40)	2/ 196	176	102	118	112
Pineapples (154.45)	16	4	2	2	7
Other nuts (154.50)	1/ 5	3	6	11	9
Other fruit (154.55)	237	134	180	136	406
Other vegetable substances (154.60)	3/	12	19	25	34
Mixtures (154.90) 4/	3/	6	4	16	13
Total	481	356	333	341	616
	Unit value (cents per pound) 5/				
Chestnuts (154.10)	1/ 55	62	111	59	91
Ginger root (154.40)	2/ 27	26	31	28	26
Pineapples (154.45)	16	16	14	20	17
Other nuts (154.50)	1/ 78	58	79	69	84
Other fruit (154.55)	22	32	38	40	25
Other vegetable substances (154.60)	3/	93	49	55	50
Mixtures (154.90) 4/	3/	69	71	61	58

1/ Estimated.

2/ Includes "otherwise prepared or preserved" ginger root during January-August 1963. Imports of such ginger root is now reported under items 141.75 or 141.81.

3/ Not available.

4/ Mixtures of candied, crystallized, or glace nuts, fruit, or vegetable substances, including cherries, fruit peel and citron.

5/ Computed from the unrounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

March 1969
1:8

Table 2.--Candied, crystallized, or glace fruit, other: U.S. imports for consumption, by principal sources, 1963-67

Source	1963	1964	1965	1966	1967
	Quantity (1,000 pounds)				
Australia	187	195	345	257	457
France	869	179	98	68	1,122
Switzerland	27	25	28	14	26
Other	14	26	9	5	28
Total	1,097	425	479	344	1,632
	Value (1,000 dollars)				
Australia	82	83	140	110	207
France	137	31	22	16	171
Switzerland	14	14	16	8	15
Other	5	6	3	2	13
Total	238	134	180	136	406
	Unit value (cents per pound) 1/				
Australia	44	43	41	43	45
France	16	17	22	24	15
Switzerland	51	55	57	57	59
Other	33	24	35	41	46
Average	22	32	38	40	25

1/ Computed from the unrounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce.

March 1969
1:8

A P P E N D I X A

Tariff Schedules of the United States Annotated (1969): General headnotes and rules of interpretation, and excerpts relating to the items included in this volume.

NOTE: The shaded areas in this appendix cover headnotes and TSUS items not included in the summaries in this volume.

TARIFF SCHEDULES OF THE UNITED STATES ANNOTATED (1969)

GENERAL HEADNOTES AND RULES OF INTERPRETATION

1. Tariff Treatment of Imported Articles. All articles imported into the customs territory of the United States from outside thereof are subject to duty or exempt therefrom as prescribed in general headnote 3.

2. Customs Territory of the United States. The term "customs territory of the United States", as used in the schedules, includes only the States, the District of Columbia, and Puerto Rico.

3. Rates of Duty. The rates of duty in the "Rates of Duty" columns numbered 1 and 2 of the schedules apply to articles imported into the customs territory of the United States as hereinafter provided in this headnote:

(a) Products of Insular Possessions.

(i) Except as provided in headnote 6 of schedule 7, part 2, subpart E, [and] except as provided in headnote 4 of schedule 7, part 7, subpart A, articles imported from insular possessions of the United States which are outside the customs territory of the United States are subject to the rates of duty set forth in column numbered 1 of the schedules, except that all such articles the growth or product of any such possession, or manufactured or produced in any such possession from materials the growth, product, or manufacture of any such possession or of the customs territory of the United States, or of both, which do not contain foreign materials to the value of more than 50 percent of their total value, coming to the customs territory of the United States directly from any such possession, and all articles previously imported into the customs territory of the United States with payment of all applicable duties and taxes imposed upon or by reason of importation which were shipped from the United States, without remission, refund, or drawback of such duties or taxes, directly to the possession from which they are being returned by direct shipment, are exempt from duty.

(ii) In determining whether an article produced or manufactured in any such insular possession contains foreign materials to the value of more than 50 percent, no material shall be considered foreign which, at the time such article is entered, may be imported into the customs territory from a foreign country, other than Cuba or the Philippine Republic, and entered free of duty.

(b) Products of Cuba. Products of Cuba imported into the customs territory of the United States, whether imported directly or indirectly, are subject to the rates of duty set forth in column numbered 1 of the schedules. Preferential rates of duty for such products apply only as shown in the said column 1. 1/

(c) Products of the Philippine Republic.

(i) Products of the Philippine Republic imported into the customs territory of the United States, whether imported directly or indirectly, are subject to the rates of duty which are set forth in column numbered 1 of the schedules or to fractional parts of the rates in the said column 1, as hereinafter prescribed in subdivisions (c)(ii) and (c)(iii) of this headnote.

(ii) Except as otherwise prescribed in the schedules, a Philippine article, as defined in subdivision (c)(iv) of this headnote, imported into the customs territory of the United States and entered on or before July 3, 1974, is subject to that rate which results from the application of the following percentages to the most favorable rate of duty (i.e., including a preferential rate prescribed for any product of Cuba) set forth in column numbered 1 of the schedules:

(A) 20 percent, during calendar years 1963 through 1964,

(B) 40 percent, during calendar years 1965 through 1967,

(C) 60 percent, during calendar years 1968 through 1970,

(D) 80 percent, during calendar years 1971 through 1973,

(E) 100 percent, during the period from January 1, 1974, through July 3, 1974.

(iii) Except as otherwise prescribed in the schedules, products of the Philippine Republic, other than Philippine articles, are subject to the rates of duty (except any preferential rates prescribed for products of Cuba) set forth in column numbered 1 of the schedules.

(iv) The term "Philippine article", as used in the schedules, means an article which is the product of the Philippines, but does not include any article produced with the use of materials imported into the Philippines which are products of any foreign country (except materials produced within the customs territory of the United States) if the aggregate value of such imported materials when landed at the Philippine port of entry, exclusive of any landing cost and Philippine duty, was more than 20 percent of the appraised customs value of the article imported into the customs territory of the United States.

(d) Products of Canada.

(i) Products of Canada imported into the customs territory of the United States, whether imported directly or indirectly, are subject to the rates of duty set forth in column numbered 1 of the schedules. The rates of duty for a Canadian article, as defined in subdivision (d)(ii) of this headnote, apply only as shown in the said column numbered 1.

(ii) The term "Canadian article", as used in the schedules, means an article which is the product of Canada, but does not include any article produced with the use of materials imported into Canada which are products of any foreign country (except materials produced within the customs territory of the United States), if the aggregate value of such imported materials when landed at the Canadian port of entry (that is, the actual purchase price, or if not purchased, the export value, of such materials, plus, if not included therein, the cost of transporting such materials to Canada but exclusive of any landing cost and Canadian duty) was --

(A) with regard to any motor vehicle or automobile truck tractor entered on or before December 31, 1967, more than 60 percent of the appraised value of the article imported into the customs territory of the United States; and

(B) with regard to any other article (including any motor vehicle or automobile truck tractor entered after December 31, 1967), more than 50 percent of the appraised value of the article imported into the customs territory of the United States.

(e) Products of Communist Countries. Notwithstanding any of the foregoing provisions of this headnote, the rates of duty shown in column numbered 2 shall apply to products, whether imported directly or indirectly, of the following countries and areas pursuant to section 401 of the Tariff Classification Act of 1962, to section 231 or 257(e) (2) of the Trade Expansion Act of 1962, or to

1/ By virtue of section 401 of the Tariff Classification Act of 1962, the application to products of Cuba of either a preferential or other reduced rate of duty in column 1 is suspended. See general headnote 3(e), infra. The provisions for preferential Cuban rates continue to be reflected in the schedules because, under section 401, the rates therefor in column 1 still form the bases for determining the rates of duty applicable to certain products, including "Philippine articles".

APPENDIX A

TARIFF SCHEDULES OF THE UNITED STATES ANNOTATED (1969)

General Headnotes and Rules of Interpretation

action taken by the President thereunder:
Albania
Bulgaria
China (any part of which may be under Communist domination or control)
Cuba 1/
Czechoslovakia
Estonia
Germany (the Soviet zone and the Soviet sector of Berlin)
Hungary
Indochina (any part of Cambodia, Laos, or Vietnam which may be under Communist domination or control)
Korea (any part of which may be under Communist domination or control)
Kurile Islands
Latvia
Lithuania
Outer Mongolia
Rumania
Southern Sakhalin
Tanna Tuva
Tibet
Union of Soviet Socialist Republics and the area in East Prussia under the provisional administration of the Union of Soviet Socialist Republics.

(f) Products of All Other Countries. Products of all countries not previously mentioned in this headnote imported into the customs territory of the United States are subject to the rates of duty set forth in column numbered 1 of the schedules.

(g) Effective Date; Exceptions - Staged Rates of Duty. 2/ Except as specified below or as may be specified elsewhere, pursuant to section 501(a) of the Tariff Classification Act of 1962 (P.L. 87-456, approved May 24, 1962), the rates of duty in columns numbered 1 and 2 become effective with respect to articles entered on or after the 10th day following the date of the President's proclamation provided for in section 102 of the said Act. If, in column numbered 1, any rate of duty or part thereof is set forth in parenthesis, the effective date shall be governed as follows:

(i) If the rate in column numbered 1 has only one part (i.e., 8¢ (10¢) per lb.), the parenthetical rate (viz., 10¢ per lb.) shall be effective as to articles entered before July 1, 1964, and the other rate (viz., 8¢ per lb.) shall be effective as to articles entered on or after July 1, 1964.

(ii) If the rate in column numbered 1 has two or more parts (i.e., 5¢ per lb. + 50% ad val.) and has a parenthetical rate for either or both parts, each part of the rate shall be governed as if it were a one-part rate. For example, if a rate is expressed as "4¢ (4.5¢) per lb. + 8% (9%) ad val.", the rate applicable to articles entered before July 1, 1964, would be "4.5¢ per lb. + 9% ad val."; the rate applicable to articles entered on or after July 1, 1964, would be "4¢ per lb. + 8% ad val.".

(iii) If the rate in column numbered 1 is marked with an asterisk (*), the foregoing provisions of (i) and (ii) shall apply except that "January 1, 1964" shall be substituted for "July 1, 1964", wherever this latter date appears.

1/ In Proclamation 3447, dated February 3, 1962, the President, acting under authority of section 620(a) of the Foreign Assistance Act of 1961 (75 Stat. 445), as amended, prohibited the importation into the United States of all goods of Cuban origin and all goods imported from or through Cuba, subject to such exceptions as the Secretary of the Treasury determines to be consistent with the effective operation of the embargo.

2/ The purpose of headnote 3(g) was to provide for an effective date for the rates of duty initially contained in the Tariff Schedules of the United States. By Presidential Proclamation 3548 of August 21, 1963, these rates of duty, except as noted in subparagraphs (i), (ii), and (iii) of headnote 3(g), became effective on August 31, 1963.

4. Modification or Amendment of Rates of Duty. Except as otherwise provided in the Appendix to the Tariff Schedules --

(a) a statutory rate of duty supersedes and terminates the existing rates of duty in both column numbered 1 and column numbered 2 unless otherwise specified in the amending statute;

(b) a rate of duty proclaimed pursuant to a concession granted in a trade agreement shall be reflected in column numbered 1 and, if higher than the then existing rate in column numbered 2, also in the latter column, and shall supersede but not terminate the then existing rate (or rates) in such column (or columns);

(c) a rate of duty proclaimed pursuant to section 336 of the Tariff Act of 1930 shall be reflected in both column numbered 1 and column numbered 2 and shall supersede but not terminate the then existing rates in such columns; and

(d) whenever a proclaimed rate is terminated or suspended, the rate shall revert, unless otherwise provided, to the next intervening proclaimed rate previously superseded but not terminated or, if none, to the statutory rate.

5. Intangibles. For the purposes of headnote 1 --
(a) corpses, together with their coffins and accompanying flowers,
(b) currency (metal or paper) in current circulation in any country and imported for monetary purposes,
(c) electricity,
(d) securities and similar evidences of value, and
(e) vessels which are not "yachts or pleasure boats" within the purview of subpart D, part 6, of schedule 6,
are not articles subject to the provisions of these schedules.

6. Containers or Holders for Imported Merchandise. For the purposes of the tariff schedules, containers or holders are subject to tariff treatment as follows:

(a) Imported Empty: Containers or holders if imported empty are subject to tariff treatment as imported articles and as such are subject to duty unless they are within the purview of a provision which specifically exempts them from duty.

(b) Not Imported Empty: Containers or holders if imported containing or holding articles are subject to tariff treatment as follows:

(i) The usual or ordinary types of shipping or transportation containers or holders, if not designed for, or capable of, reuse, and containers of usual types ordinarily sold at retail with their contents, are not subject to treatment as imported articles. Their cost, however, is, under section 402 or section 402a of the tariff act, a part of the value of their contents and if their contents are subject to an ad valorem rate of duty such containers or holders are, in effect, dutiable at the same rate as their contents, except that their cost is deductible from dutiable value upon submission of satisfactory proof that they are products of the United States which are being returned without having been advanced in value or improved in condition by any means while abroad.

(ii) The usual or ordinary types of shipping or transportation containers or holders, if designed for, or capable of, reuse, are subject to treatment as imported articles separate and distinct from their contents. Such holders or containers are not part of the dutiable value of their contents and are separately subject to duty upon each and every importation into the customs territory of the United States unless within the scope of a provision specifically exempting them from duty.

(iii) In the absence of context which requires otherwise, all other containers or holders are subject to the same treatment as specified in (ii) above for usual or ordinary types of shipping or transportation containers or holders designed for, or capable of, reuse.

7. Commingling of Articles. (a) Whenever articles subject to different rates of duty are so packed together or mingled that the quantity or value of each class of articles cannot be readily ascertained by customs officers (without physical segregation of the shipment or the contents of any entire package thereof), by one or more of the following means:

(i) sampling,

(ii) verification of packing lists or other documents filed at the time of entry, or

(iii) evidence showing performance of commercial settlement tests generally accepted in the trade and filed in such time and manner as may be prescribed by regulations of the Secretary of the Treasury,

the commingled articles shall be subject to the highest rate of duty applicable to any part thereof unless the consignee or his agent segregates the articles pursuant to subdivision (b) hereof.

(b) Every segregation of articles made pursuant to this headnote shall be accomplished by the consignee or his agent at the risk and expense of the consignee within 30 days (unless the Secretary authorizes in writing a longer time) after the date of personal delivery or mailing, by such employee as the Secretary of the Treasury shall designate, of written notice to the consignee that the articles are commingled and that the quantity or value of each class of articles cannot be readily ascertained by customs officers. Every such segregation shall be accomplished under customs supervision, and the compensation and expenses of the supervising customs officers shall be reimbursed to the Government by the consignee under such regulations as the Secretary of the Treasury may prescribe.

(c) The foregoing provisions of this headnote do not apply with respect to any part of a shipment if the consignee or his agent furnishes, in such time and manner as may be prescribed by regulations of the Secretary of the Treasury, satisfactory proof --

(i) that such part (A) is commercially negligible, (B) is not capable of segregation without excessive cost, and (C) will not be segregated prior to its use in a manufacturing process or otherwise, and

(ii) that the commingling was not intended to avoid the payment of lawful duties.

Any article with respect to which such proof is furnished shall be considered for all customs purposes as a part of the article, subject to the next lower rate of duty, with which it is commingled.

(d) The foregoing provisions of this headnote do not apply with respect to any shipment if the consignee or his agent shall furnish, in such time and manner as may be prescribed by regulations of the Secretary of the Treasury, satisfactory proof --

(i) that the value of the commingled articles is less than the aggregate value would be if the shipment were segregated;

(ii) that the shipment is not capable of segregation without excessive cost and will not be segregated prior to its use in a manufacturing process or otherwise; and

(iii) that the commingling was not intended to avoid the payment of lawful duties.

Any merchandise with respect to which such proof is furnished shall be considered for all customs purposes to be dutiable at the rate applicable to the material present in greater quantity than any other material.

(e) The provisions of this headnote shall apply only in cases where the schedules do not expressly provide a particular tariff treatment for commingled articles.

8. Abbreviations. In the schedules the following symbols and abbreviations are used with the meanings respectively indicated below:

$	-	dollars
¢	-	cents
%	-	percent
+	-	plus
ad val.	-	ad valorem
bu.	-	bushel
cu.	-	cubic
doz.	-	dozen
ft.	-	feet
gal.	-	gallon
in.	-	inches
lb.	-	pounds
oz.	-	ounces
sq.	-	square
wt.	-	weight
yd.	-	yard
pcs.	-	pieces
prs.	-	pairs
lin.	-	linear
I.R.C.	-	Internal Revenue Code

9. Definitions. For the purposes of the schedules, unless the context otherwise requires --

(a) the term "entered" means entered, or withdrawn from warehouse, for consumption in the customs territory of the United States;

(b) the term "entered for consumption" does not include withdrawals from warehouse for consumption;

(c) the term "withdrawn for consumption" means withdrawn from warehouse for consumption and does not include articles entered for consumption;

(d) the term "rate of duty" includes a free rate of duty; rates of duty proclaimed by the President shall be referred to as "proclaimed" rates of duty; rates of duty enacted by the Congress shall be referred to as "statutory" rates of duty; and the rates of duty in column numbered 2 at the time the schedules become effective shall be referred to as "original statutory" rates of duty;

(e) the term "ton" means 2,240 pounds, and the term "short ton" means 2,000 pounds;

(f) the terms "of", "wholly of", "almost wholly of", "in part of" and "containing", when used between the description of an article and a material (e.g., "furniture of wood", "woven fabrics, wholly of cotton", etc.), have the following meanings:

(i) "of" means that the article is wholly or in chief value of the named material;

(ii) "wholly of" means that the article is, except for negligible or insignificant quantities of some other material or materials, composed completely of the named material;

(iii) "almost wholly of" means that the essential character of the article is imparted by the named material, notwithstanding the fact that significant quantities of some other material or materials may be present; and

(iv) "in part of" or "containing" mean that the article contains a significant quantity of the named material.

With regard to the application of the quantitative concepts specified in subparagraphs (ii) and (iv) above, it is intended that the de minimis rule apply.

TARIFF SCHEDULES OF THE UNITED STATES ANNOTATED (1969)

General Headnotes and Rules of Interpretation

Page 6

10. General Interpretative Rules. For the purposes of these schedules --

(a) the general, schedule, part, and subpart headnotes, and the provisions describing the classes of imported articles and specifying the rates of duty or other import restrictions to be imposed thereon are subject to the rules of interpretation set forth herein and to such other rules of statutory interpretation, not inconsistent therewith, as have been or may be developed under administrative or judicial rulings;

(b) the titles of the various schedules, parts, and subparts and the footnotes therein are intended for convenience in reference only and have no legal or interpretative significance;

(c) an imported article which is described in two or more provisions of the schedules is classifiable in the provision which most specifically describes it; but, in applying this rule of interpretation, the following considerations shall govern:

(i) a superior heading cannot be enlarged by inferior headings indented under it but can be limited thereby;

(ii) comparisons are to be made only between provisions of coordinate or equal status, i.e., between the primary or main superior headings of the schedules or between coordinate inferior headings which are subordinate to the same superior heading;

(d) if two or more tariff descriptions are equally applicable to an article, such article shall be subject to duty under the description for which the original statutory rate is highest, and, should the highest original statutory rate be applicable to two or more of such descriptions, the article shall be subject to duty under that one of such descriptions which first appears in the schedules;

(e) in the absence of special language or context which otherwise requires --

(i) a tariff classification controlled by use (other than actual use) is to be determined in accordance with the use in the United States at, or immediately prior to, the date of importation, of articles of that class or kind to which the imported articles belong, and the controlling use is the chief use, i.e., the use which exceeds all other uses (if any) combined;

(ii) a tariff classification controlled by the actual use to which an imported article is put in the United States is satisfied only if such use is intended at the time of importation, the article is so used, and proof thereof is furnished within 3 years after the date the article is entered;

(f) an article is in chief value of a material if such material exceeds in value each other single component material of the article;

(g) a headnote provision which enumerates articles not included in a schedule, part, or subpart is not necessarily exhaustive, and the absence of a particular article from such headnote provision shall not be given weight in determining the relative specificity of competing provisions which describe such article;

(h) unless the context requires otherwise, a tariff description for an article covers such article, whether assembled or not assembled, and whether finished or not finished;

(ij) a provision for "parts" of an article covers a product solely or chiefly used as a part of such article, but does not prevail over a specific provision for such part.

11. Issuance of Rules and Regulations. The Secretary of the Treasury is hereby authorized to issue rules and regulations governing the admission of articles under the provisions of the schedules. The allowance of an importer's claim for classification, under any of the provisions of the schedules which provide for total or partial relief from duty or other import restrictions on the basis of facts which are not determinable from an examination of the article itself in its condition as imported, is dependent upon his complying with any rules or regulations which may be issued pursuant to this headnote.

12. The Secretary of the Treasury is authorized to prescribe methods of analyzing, testing, sampling, weighing, gauging, measuring, or other methods of ascertainment whenever he finds that such methods are necessary to determine the physical, chemical, or other properties or characteristics of articles for purposes of any law administered by the Customs Service.

General statistical headnotes:

1. Statistical Requirements for Imported Articles. Persons making customs entry or withdrawal of articles imported into the customs territory of the United States shall complete the entry or withdrawal forms, as provided herein and in regulations issued pursuant to law, to provide for statistical purposes information as follows:

(a) the number of the Customs district and of the port where the articles are being entered for consumption or warehouse, as shown in Statistical Annex A of these schedules;

(b) the name of the carrier or the means of transportation by which the articles were transported to the first port of unloading in the United States;

(c) the foreign port of lading;

(d) the United States port of unlading;

(e) the date of importation;

(f) the country of origin of the articles expressed in terms of the designation therefor in Statistical Annex B of these schedules;

(g) a description of the articles in sufficient detail to permit the classification thereof under the proper statistical reporting number in these schedules;

(h) the statistical reporting number under which the articles are classifiable;

(ij) gross weight in pounds for the articles covered by each reporting number when imported in vessels or aircraft;

(k) the net quantity in the units specified herein for the classification involved;

(l) the U.S. dollar value in accordance with the definition in Section 402 or 402a of the Tariff Act of 1930, as amended, for all merchandise including that free of duty or dutiable at specific rates; and

(m) such other information with respect to the imported articles as is provided for elsewhere in these schedules.

2. Statistical Annotations. (a) The statistical annotations to the Tariff Schedules of the United States consist of --

(i) the 2-digit statistical suffixes,
(ii) the indicated units of quantity,
(iii) the statistical headnotes and annexes, and
(iv) the italicized article descriptions.

(b) The legal text of the Tariff Schedules of the United States consists of the remaining text as more specifically identified in headnote 10(a) of the general headnotes and rules of interpretation.

(c) The statistical annotations are subordinate to the provisions of the legal text and cannot change their scope.

3. Statistical Reporting Number. (a) General Rule: Except as provided in paragraph (b) of this headnote, and in the absence of specific instructions to the contrary elsewhere, the statistical reporting number for an article consists of the 7-digit number formed by combining the 5-digit item number with the appropriate 2-digit statistical suffix. Thus, the statistical reporting number for live monkeys dutiable under item 100.95 is "100.9520".

(b) Wherever in the tariff schedules an article is classifiable under a provision which derives its rate of duty from a different provision, the statistical reporting number is, in the absence of specific instructions to the contrary elsewhere, the 7-digit number for the basic provision followed by the item number of the provision from which the rate is derived. Thus, the statistical reporting number of mixed apple and grape juices, not containing over 1.0 percent of ethyl alcohol by volume, is "165.6500-165.40".

4. Abbreviations. (a) The following symbols and abbreviations are used with the meanings respectively indicated below:

s. ton	-	short ton
C.	-	one hundred
Cwt.	-	100 lbs.
mg.	-	milligram
M.	-	1,000
bd. ft.	-	board feet
M. bd. ft.	-	1,000 board feet
mc.	-	millicurie
cord	-	128 cubic feet
square	-	amount to cover 100 square feet of surface
sup. ft.	-	superficial foot
oz.	-	ounces avoirdupois
fl. oz.	-	fluid ounce
oz. troy	-	troy ounce
pf. gal.	-	proof gallon

(b) An "X" appearing in the column for units of quantity means that no quantity (other than gross weight) is to be reported.

(c) Whenever two separate units of quantity are shown for the same article, the "v" following one of such units means that the value of the article is to be reported with that quantity.

APPENDIX A

TARIFF SCHEDULES OF THE UNITED STATES ANNOTATED (1969)

HISTORICAL NOTES

Notes p. 1
General
Headnotes

Amendments and Modifications

PROVISIONS	
Gen Hdnte--Language 3(a)(i)	"Except as provided in headnote 6 of schedule 7, part 2, subpart E," added; language "except that all articles" deleted and language "except that all such articles" inserted in lieu thereof. Pub. L. 89-805, Secs. 1(a), (c), Nov. 10, 1966, 80 Stat. 1521, 1522, effective date Jan. 1, 1967.
	Language "Except as provided in headnote 4 of schedule 7, part 7, subpart A," added. Pub. L. 89-806, Secs. 2(b), (c), Nov. 10, 1966, 80 Stat. 1523, effective date March 11, 1967.

PROVISIONS	
Gen Hdnte--Headnotes 3(d), (e), and (f) redosignated as 3(d), (e), (f) and (g)	headnotes 3(e), (f), and (g), respectively, and new headnote 3(d) added. Pub. L. 89-283, Secs. 401(a), 403, Oct. 21, 1965, 79 Stat. 1021, 1022; entered into force Oct. 22, 1965, by Pres. Proc. 3682, Oct. 21, 1965, 3 CFR, 1965 Supp., p. 68.
Gen Hdnte--Language 6(b)(i)	"and containers of usual types ordinarily sold at retail with their contents," added. Pub. L. 89-241, Secs. 2(a), 4, Oct. 7, 1965, 79 Stat. 933, 934, effective date Dec. 7, 1965.

SCHEDULE 1. - ANIMAL AND VEGETABLE PRODUCTS

APPENDIX A

TARIFF SCHEDULES OF THE UNITED STATES ANNOTATED (1969)

SCHEDULE 1. - ANIMAL AND VEGETABLE PRODUCTS

10

Part 1 - Live Animals

Part 2 - Meats
- A. Bird Meat
- B. Meats Other Than Bird Meat

Part 3 - Fish and Shellfish
- A. Fish, Fresh, Chilled, or Frozen
- B. Fish, Dried, Salted, Pickled, Smoked, or Kippered
- C. Fish in Airtight Containers
- D. Other Fish Products
- E. Shellfish

Part 4 - Dairy Products; Birds' Eggs
- A. Milk and Cream
- B. Butter, Oleomargarine, and Butter Substitutes
- C. Cheeses
- D. Other Milk Products
- E. Poultry and Other Birds' Eggs

Part 5 - Hides, Skins, and Leather; Furskins
- A. Hides, Skins, and Leather
- B. Furskins

Part 6 - Live Plants; Seeds
- A. Live Plants
- B. Seeds

Part 7 - Cereal Grains, Milled Grain Products, and Malts and Starches
- A. Grains
- B. Milled Grain Products
- C. Malts and Starches

Part 8 - Vegetables
- A. Vegetables, Fresh, Chilled, or Frozen
- B. Vegetables, Dried, Desiccated, or Dehydrated
- C. Vegetables, Packed in Salt, in Brine, Pickled, or Otherwise Prepared or Preserved
- D. Mushrooms and Truffles

Part 9 - Edible Nuts and Fruits
- A. Edible Nuts
- B. Edible Fruits
- C. Fruit Flours, Peels, Pastes, Pulps, Jellies, Jams, Marmalades, and Butters
- D. Glacé Nuts, Fruits, and Other Vegetable Substances

Part 10 - Sugar, Cocoa; Confectionery
- A. Sugars, Sirups, and Molasses
- B. Cocoa
- C. Confectionery

Part 11 - Coffee, Tea, Maté, and Spices
- A. Coffee and Coffee Substitutes, Tea, Maté
- B. Spices and Spice Seeds

Part 12 - Beverages
- A. Fruit Juices
- B. Non-Alcoholic Beverages
- C. Fermented Alcoholic Beverages
- D. Spirits, Spirituous Beverages and Beverage Preparations

Part 13 - Tobacco and Tobacco Products

Part 14 - Animal and Vegetable Oils, Fats and Greases
- A. Oil-Bearing Vegetable Materials
- B. Vegetable Oils, Crude or Refined
- C. Animal Oils, Fats, and Greases, Crude or Refined
- D. Hardened Oils, Fats, and Greases; Mixtures

Part 15 - Other Animal and Vegetable Products
- A. Products of American Fisheries
- B. Edible Preparations
- C. Animal Feeds
- D. Feathers, Downs, Bristles, and Hair
- E. Shellac and Other Lacs; Natural Gums, Gum Resins, Resins, and Balsams; Turpentine and Rosin
- F. Miscellaneous Animal Products
- G. Miscellaneous Vegetable Products

TARIFF SCHEDULES OF THE UNITED STATES ANNOTATED (1969)

SCHEDULE 1. - ANIMAL AND VEGETABLE PRODUCTS
Part 9. - Edible Nuts and Fruits

Item	Stat. Suffix	Articles	Units of Quantity	Rates of Duty 1	Rates of Duty 2
		PART 9. - EDIBLE NUTS AND FRUITS			
		Part 9 headnote:			
		1. This part covers only edible products.			
		Subpart A. - Edible Nuts 1/			
		Subpart A headnotes:			
		1. No allowance shall be made for dirt or other impurities in nuts of any kind, shelled or not shelled.			
		2. The provisions for prepared or preserved nuts include nut pastes and nut butters but do not include candied, crystallized, or glace nuts (see subpart D of this part).			
		Chestnuts, including marrons, crude, or prepared or preserved:			
145.01	00	Crude, or peeled, dried, or baked	Lb.	Free	Free
145.02	00	Otherwise prepared or preserved	Lb.	4.4¢ per lb.	25¢ per lb.
145.04	00	Coconuts	No.	0.05¢ each	0.5¢ each
145.05		If products of Cuba		Free (s)	
		Coconut meat (except copra), fresh, desiccated, or otherwise prepared or preserved:			
145.07	00	Fresh or frozen, whether or not shredded, grated, or similarly prepared, and whether or not sweetened with not over 10 percent by weight of sugar, but not otherwise prepared or preserved	Lb.	0.6¢ per lb.	2.2¢ per lb.
145.08	00	Shredded and desiccated, or similarly prepared	Lb.	1.4¢ per lb.	3.5¢ per lb.
145.09	00	Otherwise prepared or preserved	Lb.	16% ad val.	20% ad val.
		Other edible nuts, shelled or not shelled, blanched, or otherwise prepared or preserved:			
		Not shelled:			
145.12	00	Almonds	Lb.	5.5¢ per lb.	5.5¢ per lb.
145.14	00	Brazil nuts	Lb.	Free	1.5¢ per lb.
145.16	00	Cashews	Lb.	Free	4¢ per lb.
145.18	00	Filberts	Lb.	5¢ per lb.	5¢ per lb.
145.20	00	Peanuts	Lb.	4.25¢ per lb.	4.25¢ per lb.
145.21		If products of Cuba		3.4¢ per lb. (s)	
145.22	00	Pecans	Lb.	5¢ per lb.	5¢ per lb.
145.24	00	Pignolia	Lb.	0.7¢ per lb.	2.5¢ per lb.
145.26	00	Pistache	Lb.	0.45¢ per lb.	4.5¢ per lb.
145.28	00	Walnuts	Lb.	5¢ per lb.	5¢ per lb.
145.30	00	Other	Lb.	2.5¢ per lb.	2.5¢ per lb.
		(s) = Suspended. See general headnote 3(e).			
		1/ Imports of certain nuts are subject to additional import restrictions. See Appendix to Tariff Schedules.			

TARIFF SCHEDULES OF THE UNITED STATES ANNOTATED (1969)

SCHEDULE 1. - ANIMAL AND VEGETABLE PRODUCTS
Part 9. - Edible Nuts and Fruits

Item	Stat. Suffix	Articles	Units of Quantity	Rates of Duty 1	Rates of Duty 2
		Other edible nuts, shelled or not shelled, etc. (con.): Shelled, blanched, or otherwise prepared or preserved:			
		Almonds:			
145.40	00	Shelled	lb	16.5¢ per lb.	16.5¢ per lb.
145.41	00	Other	lb	18.5¢ per lb.	18.5¢ per lb.
145.42	00	Brazil nuts	lb	Free	4.5¢ per lb.
145.44	00	Cashews	lb	Free	2¢ per lb.
145.46	00	Filberts	lb	8¢ per lb.	10¢ per lb.
145.48		Peanuts:		7¢ per lb.	7¢ per lb.
	40	Peanut butter	lb		
	20	Other	lb		
145.49		If peanut butter the product of Cuba		5.5¢ per lb (a)	
145.50	00	Pecans	lb	10¢ per lb.	10¢ per lb.
145.52	00	Pignolia	lb	1¢ per lb.	5¢ per lb.
145.53	00	Pistache	lb	1¢ per lb.	5¢ per lb.
		Walnuts:			
145.54	00	Pickled, immature walnuts	lb	6.5¢ per lb.	15¢ per lb.
145.55	00	Other	lb	15¢ per lb.	15¢ per lb.
		Other edible nuts:			
145.58	00	Shelled or blanched	lb	5¢ per lb.	5¢ per lb.
145.60	00	Other	lb	20% ad val.	35% ad val.
145.90	00	Mixtures of two or more kinds of edible nuts	lb	The highest rate applicable to any of the component nuts	The highest rate applicable to any of the component nuts

Subpart B. - Edible Fruits

Subpart B headnote:

1. For the purposes of this part --

(a) the term "fresh" covers fruit crude or in its natural state, whether green (immature) or ripe, and whether or not chilled (but not frozen), and includes fruit notwithstanding the use of nonpreservative coloring or other matter to maintain or improve its appearance;

(b) the term "dried" means dried, desiccated, or evaporated;

(c) the term "in brine" means provisionally preserved by packing in a preservative liquid solution such as water impregnated with salt or sulphur dioxide, but not specially prepared for immediate consumption;

(d) the term "pickled" means prepared or preserved in vinegar or acetic acid whether or not packed in oil or containing sugar, salt, or spices; and

(e) the term "prepared or preserved" covers fruit which is dried, in brine, pickled, frozen, or otherwise prepared or preserved, but does not cover fruit juices (see part 12A of this schedule), or fruit flours, peels, pastes, pulps, jellies, jams, marmalades, or butters (see subpart C of this part), or candied, crystallized, or glacé fruits (see subpart D of this part).

(a) A Suspended. See general headnote 3(b).

TARIFF SCHEDULES OF THE UNITED STATES ANNOTATED (1969)

SCHEDULE 1. - ANIMAL AND VEGETABLE PRODUCTS
Part 9. - Edible Nuts and Fruits

Item	Stat. Suf-fix	Articles	Units of Quantity	Rates of Duty	
				1	2
		Apples, fresh, or prepared or preserved:			
146.10	00	Fresh	Lb.	0.15¢ per lb.	0.5¢ per lb.
146.12	00	Dried	Lb.	0.9¢ per lb.	2¢ per lb.
146.14	00	Otherwise prepared or preserved	Lb.	0.85¢ per lb.	2.5¢ per lb.
		Apricots, fresh, or prepared or preserved:			
146.20	00	Fresh or in brine	Lb.	0.4¢ per lb.	0.5¢ per lb.
146.22	00	Dried	Lb.	1¢ per lb.	2¢ per lb.
146.24	00	Otherwise prepared or preserved	Lb.	35% ad val.	35% ad val.
146.30	00	Avocados (alligator pears), fresh, or prepared or preserved	Lb.	7.5¢ per lb.	15¢ per lb.
146.31		If products of Cuba		Free (s)	
		Bananas, fresh, or prepared or preserved:			
146.40	00	Fresh	Lb.	Free	Free
146.42	00	Dried	Lb.	6% ad val.	35% ad val.
146.44	00	Otherwise prepared or preserved	Lb.	12% ad val.	35% ad val.
146.45		If products of Cuba		10% ad val. (s)	
		Berries, fresh, or prepared or preserved:			
		Fresh or in brine:			
146.50	00	Blueberries	Lb.	0.5¢ per lb.	1.25¢ per lb.
146.52	00	Lingon or partridge berries	Lb.	0.2¢ per lb.	1.25¢ per lb.
		Loganberries and raspberries:			
146.54	00	If entered during the period from July 1 to August 31, inclusive, in any year	Lb.	0.3¢ per lb.	1.25¢ per lb.
146.56	00	If entered at any other time	Lb.	0.6¢ per lb.	1.25¢ per lb.
		Strawberries:			
146.58	00	If entered during the period from June 15 to September 15, inclusive, in any year	Lb.	0.4¢ per lb.	1.25¢ per lb.
146.60	00	If entered at any other time	Lb.	0.75¢ per lb.	1.25¢ per lb.
146.62	00	Other berries	Lb.	0.4¢ per lb.	1.25¢ per lb.
		Dried:			
146.64	00	Barberries	Lb.	2.5¢ per lb.	2.5¢ per lb.
146.66	00	Other	Lb.	1.6¢ per lb.	2.5¢ per lb.
		Otherwise prepared or preserved:			
		Blueberries:			
146.68	00	Frozen	Lb.	4.5% ad val.	35% ad val.
146.70	00	Other	Lb.	5.5% ad val.	35% ad val.
146.73	00	Black currants, gooseberries, lingon or partridge berries, and loganberries	Lb.	11% ad val.	35% ad val.
146.75		Other berries		14% ad val.	35% ad val.
	20	*Strawberries, frozen*	*Lb.*		
	40	*Other*	*Lb.*		
146.80	00	Cashew apples, mameyes colorados, sapodillas, sour-sops, and sweetsops, fresh, or prepared or preserved	Lb.	12% ad val.	35% ad val.
146.81		If products of Cuba		10% ad val. (s)	
		Cherries, fresh, or prepared or preserved:			
		Fresh:			
146.90	00	Not in airtight or watertight containers	Lb.	0.4¢ per lb.	2¢ per lb.
146.91	00	In airtight or watertight containers	Lb.	1.5¢ per lb.	2¢ per lb.
146.93	00	Dried	Lb.	6¢ per lb.	6¢ per lb.
		In brine:			
146.95	00	With pits	Lb.	5.5¢ per lb.	5.5¢ per lb.
146.96	00	With pits removed	Lb.	9.5¢ per lb.	9.5¢ per lb.
146.97	00	Frozen	Lb.	5.5¢ per lb. + 8% ad val.	9.5¢ per lb. + 40% ad val.
146.99	00	Otherwise prepared or preserved	Lb.	7¢ per lb. + 10% ad val.	9.5¢ per lb. + 40% ad val.

(s) = Suspended. See general headnote 3(b).

Item	Stat. Suffix	Articles	Units of Quantity	Rates of Duty 1	Rates of Duty 2
		Citrus fruits, fresh, or prepared or preserved:			
		Citrons:			
147.00	00	Fresh, dried, or in brine	Lb.	Free	Free
147.02	00	Otherwise prepared or preserved	Lb.	2.7¢ per lb.	6¢ per lb.
		Grapefruit:			
147.10	00	If entered during the period from August 1 to September 30, inclusive, in any year	Lb.	1.1¢ per lb.	1.5¢ per lb.
147.11		If product of Cuba		0.3¢ per lb. (s)	
147.13	00	If entered during the month of October	Lb.	0.85¢ per lb.	1.5¢ per lb.
147.14		If product of Cuba		0.6¢ per lb. (s)	
147.16	00	If entered during the period from November 1, in any year, to the following July 31, inclusive	Lb.	1.4¢ per lb.	1.5¢ per lb.
147.17		If product of Cuba		1.2¢ per lb. (s)	
		Lemons:			
147.19	00	Fresh	Lb.	1.25¢ per lb.	2.5¢ per lb.
147.21	00	Prepared or preserved	Lb.	1¢ per lb.	2.5¢ per lb.
		Limes:			
147.22	00	Fresh or in brine	Lb.	1¢ per lb.	2¢ per lb.
147.23		If products of Cuba		0.8¢ per lb. (s)	
147.26	00	Otherwise prepared or preserved	Lb.	28% ad val.	35% ad val.
147.27		If products of Cuba		14% ad val. (s)	
		Oranges:			
147.29	00	Mandarin, packed in airtight containers	Lb.	0.4¢ per lb.	1¢ per lb.
147.30	00	Kumquats, packed in airtight containers	Lb.	0.8¢ per lb.	1¢ per lb.
147.31	00	Other	Lb.	1¢ per lb.	1¢ per lb.
147.32		If products of Cuba		0.8¢ per lb. (s)	
		Other citrus fruits:			
147.33	00	Fresh	Lb.	14% ad val.	35% ad val.
147.36	00	Prepared or preserved	Lb.	35% ad val.	35% ad val.
147.37		If products of Cuba		14% ad val. (s)	
		Dates, fresh, or prepared or preserved:			
		Fresh or dried:			
		With pits:			
147.40	00	Packed in units weighing (with the immediate container, if any) not more than 10 pounds each	Lb.	7.5¢ per lb.	7.5¢ per lb.
147.42	00	Other	Lb.	1¢ per lb.	1¢ per lb.
		With pits removed:			
147.44	00	Packed in units weighing (with the immediate container, if any) not more than 10 pounds each	Lb.	7.5¢ per lb.	7.5¢ per lb.
147.46	00	Other	Lb.	2¢ per lb.	2¢ per lb.
147.48	00	Otherwise prepared or preserved	Lb.	35% ad val.	35% ad val.
		Figs, fresh, or prepared or preserved:			
147.50	00	Fresh or in brine	Lb.	1.8¢ per lb.	5¢ per lb.
		Dried:			
147.51	00	In immediate containers weighing with their contents over 1 pound each	Lb.	4.5¢ per lb.	5¢ per lb.
147.53	00	Other	Lb.	4.1¢ per lb.	5¢ per lb.
147.54	00	Otherwise prepared or preserved	Lb.	14% ad val.	40% ad val.
		Grapes, fresh, or prepared or preserved:			
		Fresh (in bulk, or in crates, barrels or other packages):			
147.60	00	Hothouse	Cu. ft.v Lb.	10¢ per cu. ft. of such bulk or the capacity of the package	25¢ per cu. ft. of such bulk or the capacity of the package
		Other than hothouse:			
147.61	00	If entered during the period from February 15 to March 31, inclusive, in any year	Cu. ft.v Lb.	5.25¢ per cu. ft. of such bulk or the capacity of the package	25¢ per cu. ft. of such bulk or the capacity of the package
147.63	00	If entered during the period from April 1 to June 30, inclusive, in any year	Cu. ft.v Lb.	3¢ per cu. ft. of such bulk or the capacity of the package	25¢ per cu. ft. of such bulk or the capacity of the package
147.64	00	If entered at any other time	Cu. ft.v Lb.	10¢ per cu. ft. of such bulk or the capacity of the package	25¢ per cu. ft. of such bulk or the capacity of the package

(s) = Suspended. See general headnote 3(b).

TARIFF SCHEDULES OF THE UNITED STATES ANNOTATED (1969)

SCHEDULE 1. - ANIMAL AND VEGETABLE PRODUCTS
Part 9. - Edible Nuts and Fruits

Item	Stat. Suffix	Articles	Units of Quantity	Rates of Duty 1	Rates of Duty 2
		Grapes, fresh, or prepared or preserved (con.):			
		Dried:			
		Raisins:			
		Made from seedless grapes:			
147.66	00	Currants	Lb.	1¢ per lb.	2¢ per lb.
147.68	00	Sultana	Lb.	1¢ per lb.	2¢ per lb.
147.70	00	Other	Lb.	1.3¢ per lb.	2¢ per lb.
147.72	00	Other raisins	Lb.	2¢ per lb.	2¢ per lb.
147.75	00	Other dried grapes	Lb.	2.5¢ per lb.	2.5¢ per lb.
147.77	00	Otherwise prepared or preserved	Lb.	28% ad val.	35% ad val.
147.78		If products of Cuba		14% ad val. (s)	
		Guavas, fresh, or prepared or preserved:			
147.80	00	Fresh, dried, in brine, or pickled	Lb.	12% ad val.	35% ad val.
147.81		If products of Cuba		10% ad val. (s)	
147.85	00	Otherwise prepared or preserved	Lb.	7% ad val.	35% ad val.
147.90	00	Mangoes, fresh, or prepared or preserved	Lb.	3.75¢ per lb.	15¢ per lb.
147.91		If products of Cuba		3¢ per lb. (s)	
		Melons, fresh, or prepared or preserved:			
		Fresh:			
		Cantaloupes:			
148.10	00	If entered during the period from August 1 to September 15, inclusive, in any year	Lb.	20% ad val.	35% ad val.
148.11		If products of Cuba		14% ad val. (s)	
148.15	00	If entered at any other time	Lb.	35% ad val.	35% ad val.
148.16		If products of Cuba		14% ad val. (s)	
148.20	00	Watermelons	Lb.	20% ad val.	35% ad val.
148.21		If products of Cuba		Free (s)	
		Other melons:			
148.25	00	If entered during the period from December 1, in any year, to the following May 31, inclusive	Lb.	14% ad val.	35% ad val.
148.30	00	If entered at any other time	Lb.	35% ad val.	35% ad val.
148.31		If products of Cuba		14% ad val. (s)	
148.35	00	Prepared or preserved	Lb.	35% ad val.	35% ad val.
148.36		If products of Cuba		14% ad val. (s)	
		Olives, fresh, or prepared or preserved:			
148.40	00	Fresh	Lb.	5¢ per lb.	5¢ per lb.
		In brine, whether or not pitted or stuffed:			
		Not ripe and not pitted or stuffed:			
148.42	00	Not green in color and not packed in airtight containers of glass, metal, or glass and metal	Gal.	15¢ per gal.	20¢ per gal.
148.44		Other		20¢ per gal.	20¢ per gal.
	20	*In containers each holding not more than 0.3 gallon*	*Gal.*		
	40	*In containers each holding more than 0.3 gallon*	*Gal.*		
		Ripe, but not pitted or stuffed:			
148.46	00	Not green in color and not packed in airtight containers of glass, metal, or glass and metal	Gal.	15¢ per gal.	30¢ per gal.
148.48	00	Other	Gal.	30¢ per gal.	30¢ per gal.
148.50		Pitted or stuffed		30¢ per gal.	30¢ per gal.
		Pitted:			
	20	*In containers each holding not more than 0.3 gallon*	*Gal.*		
	40	*In containers each holding more than 0.3 gallon*	*Gal.*		
		Stuffed:			
	60	*In containers each holding not more than 0.3 gallon*	*Gal.*		
	80	*In containers each holding more than 0.3 gallon*	*Gal.*		
		Dried:			
148.52	00	Not ripe	Lb.	5¢ per lb.	5¢ per lb.
148.54	00	Ripe	Lb.	2.5¢ per lb.	5¢ per lb.
148.56	00	Otherwise prepared or preserved	Lb.	5¢ per lb.	5¢ per lb.

(s) = Suspended. See general headnote 3(b).

TARIFF SCHEDULES OF THE UNITED STATES ANNOTATED (1969)

Page 50

1 - 9 - B
148.60-150.50

SCHEDULE 1. - ANIMAL AND VEGETABLE PRODUCTS
Part 9. - Edible Nuts and Fruits

Item	Stat. Suffix	Articles	Units of Quantity	Rates of Duty 1	Rates of Duty 2
		Papayas, fresh, or prepared or preserved:			
148.60	00	Fresh	Lb.	14% ad val.	35% ad val.
148.61		If products of Cuba		Free (s)	
148.65	00	Prepared or preserved	Lb.	12% ad val.	35% ad val.
148.66		If products of Cuba		10% ad val. (s)	
		Peaches, fresh, or prepared or preserved:			
		Fresh or in brine:			
148.70	00	If entered during the period from June 1 to November 30, inclusive, in any year	Lb.	0.2¢ per lb.	0.5¢ per lb.
148.72	00	If entered at any other time	Lb.	0.2¢ per lb.	0.5¢ per lb.
148.74	00	Dried	Lb.	1.6¢ per lb.	2¢ per lb.
		Otherwise prepared or preserved:			
148.77	00	White fleshed	Lb.	16% ad val.	35% ad val.
148.78	00	Other	Lb.	20% ad val.	35% ad val.
		Pears, fresh, or prepared or preserved:			
		Fresh or in brine:			
148.81	00	If entered during the period from April 1 to June 30, inclusive, in any year	Lb.	0.4¢ per lb.	0.5¢ per lb.
148.82	00	If entered at any other time	Lb.	0.5¢ per lb.	0.5¢ per lb.
148.83	00	Dried	Lb.	1.8¢ per lb.	2¢ per lb.
148.86	00	Otherwise prepared or preserved	Lb.	19% ad val.	35% ad val.
		Pineapples, fresh, or prepared or preserved:			
		Fresh:			
148.90	00	In bulk	No.	1-1/6¢ each	1-1/6¢ each
148.91		If products of Cuba		0.84-2/3¢ each (s)	
148.93	00	In crates	Crate of 2.45 cu. ft.	35¢ per crate of 2.45 cu. ft.	50¢ per crate of 2.45 cu. ft.
148.94		If products of Cuba		20¢ per crate of 2.45 cu. ft. (s)	
148.96	00	In packages other than crates	Crate equiv. of 2.45 cu. ft.	27¢ per 2.45 cu. ft.	50¢ per 2.45 cu. ft.
148.97	00	If products of Cuba		20¢ per 2.45 cu. ft. (s)	
148.98		Prepared or preserved		0.75¢ per lb.	2¢ per lb.
	20	*In airtight containers*	*Lb.*		
	40	*Not in airtight containers*	*Lb.*		
148.99		If products of Cuba		0.55¢ per lb. (s)	
		Plantains, fresh, or prepared or preserved:			
149.10	00	Fresh	Lb.	Free	Free
149.15	00	Prepared or preserved	Lb.	12% ad val.	35% ad val.
149.16		If products of Cuba		10% ad val. (s)	
		Plums, prunes, and prunelles, fresh, or prepared or preserved:			
		Fresh:			
149.19	00	If entered during the month of January in any year	Lb.	0.3¢ per lb.	0.5¢ per lb.
149.20	00	If entered during the period from February 1 to May 31, inclusive, in any year	Lb.	0.2¢ per lb.	0.5¢ per lb.
149.21	00	If entered during the period from June 1 to December 31, inclusive, in any year	Lb.	0.5¢ per lb.	0.5¢ per lb.
149.24	00	In brine	Lb.	0.1¢ per lb.	0.5¢ per lb.
149.26	00	Dried	Lb.	2¢ per lb.	2¢ per lb.
149.28	00	Otherwise prepared or preserved	Lb.	28% ad val.	35% ad val.
149.40	00	Tamarinds, fresh, or prepared or preserved	Lb.	Free	Free
		Other fruits, fresh, or prepared or preserved:			
149.48	00	Chinese gooseberries (Actinidia Chinensis Planch.), fresh	Lb.	0.4¢ per lb.	1.25¢ per lb.
149.50	00	Other fruits, fresh	Lb.	14% ad val.	35% ad val.
149.60	00	Prepared or preserved	Lb.	28% ad val.	35% ad val.
149.61		If products of Cuba		14% ad val. (s)	
150.00	00	Mixtures of two or more fruits, prepared or preserved	Lb.	17.5% ad val.	35% ad val.
150.01		If products of Cuba		14% ad val. (s)	
150.50	00	Any of the prepared or preserved products covered by this subpart containing 0.5 percent or more ethyl alcohol by volume	Pf. gal.	An additional duty of $2.50 per proof gal. on such alcohol content	An additional duty of $5 per proof gal. on such alcohol content

TARIFF SCHEDULES OF THE UNITED STATES ANNOTATED (1969)

SCHEDULE 1. - ANIMAL AND VEGETABLE PRODUCTS
Part 9. - Edible Nuts and Fruits

Item	Stat Suf-fix	Articles	Units of Quantity	Rates of Duty 1	Rates of Duty 2
		Subpart C. - Fruit Flours, Peels, Pastes, Pulps, Jellies, Jams, Marmalades, and Butters			
		Fruit flours:			
152.00	00	Banana and plantain	Lb.	11% ad val.	20% ad val.
152.01		If product of Cuba		10% ad val. (s)	
152.05	00	Other	Lb.	18% ad val.	20% ad val.
		Fruit peel, crude, dried, or otherwise prepared or preserved:			
		Crude, dried, or in brine:			
152.10	00	Citron	Lb.	Free	Free
152.14	00	Orange	Lb.	0.7¢ per lb.	2¢ per lb.
152.18	00	Lemon	Lb.	1.05¢ per lb.	2¢ per lb.
152.22	00	Other	Lb.	1.5¢ per lb.	2¢ per lb.
		Otherwise prepared or preserved:			
152.26	00	Citron	Lb.	2.7¢ per lb.	6¢ per lb.
152.30	00	Orange	Lb.	3.4¢ per lb.	8¢ per lb.
152.34	00	Lemon	Lb.	4.5¢ per lb.	8¢ per lb.
152.38	00	Other	Lb.	8¢ per lb.	8¢ per lb.
152.39		If products of Cuba and grapefruit, or pomelo or shaddock, peel		6.4¢ per lb. (s)	
		Fruit pastes and fruit pulps:			
152.42	00	Apricot	Lb.	17.5% ad val.	35% ad val.
152.46	00	Cashew apple, mamey colorado, papaya, sapodilla, soursop, and sweetsop	Lb.	17.5% ad val.	35% ad val.
152.47		If product of Cuba		10% ad val. (s)	
152.50	00	Fig	Lb.	5¢ per lb.	5¢ per lb.
152.54	00	Guava	Lb.	11% ad val.	35% ad val.
152.55		If product of Cuba		10% ad val. (s)	
152.58	00	Mango	Lb.	11% ad val.	35% ad val.
152.59		If product of Cuba		10% ad val. (s)	
152.62	00	Orange	Lb.	17.5% ad val.	35% ad val.
152.63		If product of Cuba		14% ad val. (s)	
152.72	00	Banana and plantain	Lb.	12% ad val.	35% ad val.
152.74		Other		15% ad val.	35% ad val.
	20	*Strawberry*	*Lb.*		
	40	*Other*	*Lb.*		
152.75		If product of Cuba		14% ad val. (s)	
		All jellies, jams, marmalades, and fruit butters:			
153.00	00	Cashew apple, mango, mamey colorado, papaya, sapodilla, soursop, and sweetsop	Lb.	8% ad val.	35% ad val.
153.04	00	Currant and other berry	Lb.	5% ad val.	35% ad val.
153.08	00	Guava	Lb.	8% ad val.	35% ad val.
153.16	00	Orange marmalade	Lb.	8.5% ad val.	35% ad val.
153.24	00	Pineapple	Lb.	8% ad val.	35% ad val.
153.28	00	Quince	Lb.	14% ad val.	35% ad val.
153.32	00	Other	Lb.	11% ad val.	35% ad val.

(s) = Suspended. See general headnote 3(b).

TARIFF SCHEDULES OF THE UNITED STATES ANNOTATED (1969)

1 - 9 - D
154.05-154.90

SCHEDULE 1. - ANIMAL AND VEGETABLE PRODUCTS
Part 9. - Edible Nuts and Fruits

Item	Stat. Suffix	Articles	Units of Quantity	Rates of Duty 1	Rates of Duty 2
		Subpart D. - Glacé Nuts, Fruits, and Other Vegetable Substances			
		Candied, crystallized, or glacé nuts, fruits, fruit peel, and other vegetable substances:			
154.05	00	Cherries	Lb.	7¢ per lb. + 10% ad val.	9.5¢ per lb. + 40% ad val.
154.10	00	Chestnuts, including marrons	Lb.	4¢ per lb.	25¢ per lb.
154.15	00	Citrons	Lb.	2.7¢ per lb.	6¢ per lb.
		Fruit peel:			
154.20	00	Citron	Lb.	2.7¢ per lb.	6¢ per lb.
154.25	00	Lemon	Lb.	4.5¢ per lb.	8¢ per lb.
154.30	00	Orange	Lb.	3.4¢ per lb.	8¢ per lb.
154.35	00	Other	Lb.	6.4¢ per lb.	8¢ per lb.
154.40	00	Ginger root	Lb.	13.5% ad val.	20% ad val.
154.45	00	Pineapples	Lb.	14% ad val.	35% ad val.
		Other:			
154.50	00	Nuts	Lb.	11% ad val.	40% ad val.
154.51		If product of Cuba		10% ad val. (s)	
154.55	00	Fruit	Lb.	10% ad val.	40% ad val.
154.60	00	Other	Lb.	20% ad val.	20% ad val.
154.90	00	Mixtures of two or more kinds of candied, crystallized, or glacé nuts, fruit, or vegetable substances	Lb.	The highest rate applicable to any of the components	The highest rate applicable to any of the components

(s) = Suspended. See general headnote 3(b).

TARIFF SCHEDULES OF THE UNITED STATES ANNOTATED (1969)

STAGED RATES AND HISTORICAL NOTES

Notes p.1
Schedule 1,
Part 9

Staged Rates

Modifications of column 1 rates of duty by Pres. Proc. 3822 (Kennedy Round), Dec. 16, 1967, 32 F.R. 19002:

TSUS item	Prior rate	Rate of duty, effective with respect to articles entered on and after January 1 --				
		1968	1969	1970	1971	1972
145.02	5¢ per lb.	4.5¢ per lb.	4.4¢ per lb.	4¢ per lb.	3.8¢ per lb.	3.5¢ per lb.
145.04 1/	0.125¢ each	0.1¢ each	0.05¢ each	0.05¢ each	Free	Free
145.07	1.1¢ per lb.	0.8¢ per lb.	0.6¢ per lb.	0.4¢ per lb.	0.2¢ per lb.	Free
145.08	1.75¢ per lb.	1.5¢ per lb.	1.4¢ per lb.	1.3¢ per lb.	1.1¢ per lb.	1¢ per lb.
145.09	20% ad val.	18% ad val.	16% ad val.	14% ad val.	12% ad val.	10% ad val.
145.14	0.375¢ per lb.	Free	Free	Free	Free	Free
145.16	0.7¢ per lb.	Free	Free	Free	Free	Free
145.26	0.625¢ per lb.	0.45¢ per lb.	0.45¢ per lb.	0.45¢ per lb.	0.45¢ per lb.	0.45¢ per lb.
145.42	1.125¢ per lb.	Free	Free	Free	Free	Free
145.44	0.7¢ per lb.	Free	Free	Free	Free	Free
145.52	1.5¢ per lb.	1¢ per lb.	1¢ per lb.	1¢ per lb.	1¢ per lb.	1¢ per lb.
145.53	1.25¢ per lb.	1¢ per lb.	1¢ per lb.	1¢ per lb.	1¢ per lb.	1¢ per lb.
145.54	1.5¢ per lb.	7¢ per lb.	6.5¢ per lb.	6¢ per lb.	5.5¢ per lb.	5¢ per lb.
146.10	0.25¢ per lb.	0.2¢ per lb.	0.15¢ per lb.	0.1¢ per lb.	0.05¢ per lb.	Free
146.12	1¢ per lb.	0.9¢ per lb.	0.9¢ per lb.	0.75¢ per lb.	0.75¢ per lb.	0.75¢ per lb.
146.14	1.07¢ per lb.	0.95¢ per lb.	0.85¢ per lb.	0.74¢ per lb.	0.6¢ per lb.	0.5¢ per lb.
146.20	0.5¢ per lb.	0.4¢ per lb.	0.4¢ per lb.	0.3¢ per lb.	0.3¢ per lb.	0.2¢ per lb.
146.42	7.5% ad val.	6.5% ad val.	6% ad val.	5% ad val.	4% ad val.	3.5% ad val.
146.44 1/	15% ad val.	13% ad val.	12% ad val.	10% ad val.	9% ad val.	7.5% ad val.
146.50	0.7¢ per lb.	0.6¢ per lb.	0.5¢ per lb.	0.4¢ per lb.	0.4¢ per lb.	0.3¢ per lb.
146.52	0.375¢ per lb.	0.3¢ per lb.	0.2¢ per lb.	0.1¢ per lb.	Free	Free
146.54	0.5¢ per lb.	0.4¢ per lb.	0.3¢ per lb.	0.2¢ per lb.	Free	Free
146.56	0.75¢ per lb.	0.6¢ per lb.	0.6¢ per lb.	0.5¢ per lb.	0.4¢ per lb.	0.3¢ per lb.
146.58	0.5¢ per lb.	0.4¢ per lb.	0.4¢ per lb.	0.3¢ per lb.	0.2¢ per lb.	0.2¢ per lb.
146.62	0.75¢ per lb.	0.6¢ per lb.	0.4¢ per lb.	0.3¢ per lb.	0.1¢ per lb.	Free
146.66	2¢ per lb.	1.8¢ per lb.	1.6¢ per lb.	1.4¢ per lb.	1.2¢ per lb.	1¢ per lb.
146.68	6% ad val.	5% ad val.	4.5% ad val.	4% ad val.	3.5% ad val.	3% ad val.
146.70	7% ad val.	6% ad val.	5.5% ad val.	4.5% ad val.	4% ad val.	3.5% ad val.
146.73	14% ad val.	12.5% ad val.	11% ad val.	9.5% ad val.	8% ad val.	7% ad val.
146.80 1/	15% ad val.	13% ad val.	12% ad val.	10% ad val.	9% ad val.	7% ad val.
146.90	0.5¢ per lb.	0.4¢ per lb.	0.4¢ per lb.	0.3¢ per lb.	0.2¢ per lb.	0.2¢ per lb.
146.91	2¢ per lb.	1.8¢ per lb.	1.5¢ per lb.	1.4¢ per lb.	1.2¢ per lb.	1¢ per lb.
146.97	7¢ per lb. + 10% ad val.	6.3¢ per lb. + 9% ad val.	5.5¢ per lb. + 8% ad val.	4.9¢ per lb. + 7% ad val.	4.2¢ per lb. + 6% ad val.	3.5¢ per lb. + 5% ad val.
147.02	3.4¢ per lb.	3¢ per lb.	2.7¢ per lb.	2.3¢ per lb.	2¢ per lb.	1.7¢ per lb.
147.10	1.2¢ per lb.	1.15¢ per lb.	1.1¢ per lb.	1.08¢ per lb.	1.04¢ per lb.	1¢ per lb.
147.13	0.9¢ per lb.	0.85¢ per lb.	0.85¢ per lb.	0.84¢ per lb.	0.8¢ per lb.	0.8¢ per lb.
147.16	1.5¢ per lb.	1.4¢ per lb.	1.4¢ per lb.	1.35¢ per lb.	1.3¢ per lb.	1.3¢ per lb.
147.21	1.25¢ per lb.	1¢ per lb.	1¢ per lb.	0.8¢ per lb.	0.7¢ per lb.	0.6¢ per lb.
147.26	35% ad val.	31% ad val.	28% ad val.	24% ad val.	21% ad val.	17.5% ad val.
147.29	0.5¢ per lb.	0.4¢ per lb.	0.4¢ per lb.	0.3¢ per lb.	0.2¢ per lb.	0.2¢ per lb.
147.30	1¢ per lb.	0.9¢ per lb.	0.8¢ per lb.	0.7¢ per lb.	0.6¢ per lb.	0.5¢ per lb.
147.33	17.5% ad val.	15.5% ad val.	14% ad val.	12% ad val.	10% ad val.	8.5% ad val.
147.50	2¢ per lb.	1.9¢ per lb.	1.8¢ per lb.	1.7¢ per lb.	1.6¢ per lb.	1.5¢ per lb.
147.53	4.5¢ per lb.	4.3¢ per lb.	4.1¢ per lb.	3.9¢ per lb.	3.7¢ per lb.	3.5¢ per lb.
147.54	16% ad val.	15% ad val.	14% ad val.	13.5% ad val.	12.5% ad val.	12% ad val.
147.60	12.5¢ per cu. ft. of such bulk or the capacity of the package	11¢ per cu. ft. of such bulk or the capacity of the package	10¢ per cu. ft. of such bulk or the capacity of the package	8¢ per cu. ft. of such bulk or the capacity of the package	7¢ per cu. ft. of such bulk or the capacity of the package	6¢ per cu. ft. of such bulk or the capacity of the package
147.63	5.25¢ per cu. ft. of such bulk or the capacity of the package	4¢ per cu. ft. of such bulk or the capacity of the package	3¢ per cu. ft. of such bulk or the capacity of the package	2¢ per cu. ft. of such bulk or the capacity of the package	1¢ per cu. ft. of such bulk or the capacity of the package	Free

1/ Subordinate Cuban provisions deleted, effective as follows:
Jan. 1, 1970 - Items 146.45 and 146.81
Jan. 1, 1971 - Item 145.05

TARIFF SCHEDULES OF THE UNITED STATES ANNOTATED (1969)

STAGED RATES AND HISTORICAL NOTES

Notes p. 2
Schedule 1,
Part 9

Staged Rates

Modifications of column 1 rates of duty by Pres. Proc. 3822 (Kennedy Round), Dec. 16, 1967, 32 F.R. 19002 1/ (con.):

TSUS item	Prior rate	Rate of duty, effective with respect to articles entered on and after January 1 --				
		1968	1969	1970	1971	1972
147.64	12.5¢ per cu. ft. of such bulk or the capacity of the package	11¢ per cu. ft. of such bulk or the capacity of the package	10¢ per cu. ft. of such bulk or the capacity of the package	8¢ per cu. ft. of such bulk or the capacity of the package	7¢ per cu. ft. of such bulk or the capacity of the package	6¢ per cu. ft. of such bulk or the capacity of the package
147.70	1.5¢ per lb.	1.4¢ per lb.	1.3¢ per lb.	1.2¢ per lb.	1.1¢ per lb.	1¢ per lb.
147.77	35% ad val.	31% ad val.	28% ad val.	24% ad val.	21% ad val.	17.5% ad val.
147.80 2/	15% ad val.	13% ad val.	12% ad val.	10% ad val.	9% ad val.	7% ad val.
147.85	8.75% ad val.	7.5% ad val.	7% ad val.	6% ad val.	5% ad val.	4% ad val.
148.25	17.5% ad val.	15.5% ad val.	14% ad val.	12% ad val.	10% ad val.	8.5% ad val.
148.60	17.5% ad val.	15.5% ad val.	14% ad val.	12% ad val.	10% ad val.	8.5% ad val.
148.65 2/	15% ad val.	13% ad val.	12% ad val.	10% ad val.	9% ad val.	7% ad val.
148.70	0.5¢ per lb.	0.2¢ per lb.	0.2¢ per lb.	0.2¢ per lb.	0.2¢ per lb.	0.2¢ per lb.
148.72	0.25¢ per lb.	0.2¢ per lb.	0.2¢ per lb.	0.15¢ per lb.	0.1¢ per lb.	0.1¢ per lb.
148.74	2¢ per lb.	1.8¢ per lb.	1.6¢ per lb.	1.4¢ per lb.	1.2¢ per lb.	1¢ per lb.
148.77	20% ad val.	18% ad val.	16% ad val.	14% ad val.	12% ad val.	10% ad val.
148.81	0.5¢ per lb.	0.45¢ per lb.	0.4¢ per lb.	0.35¢ per lb.	0.3¢ per lb.	0.25¢ per lb.
148.83	2¢ per lb.	1.9¢ per lb.	1.8¢ per lb.	1.5¢ per lb.	1.5¢ per lb.	1.5¢ per lb.
148.86	20% ad val.	19.5% ad val.	19% ad val.	18.5% ad val.	18% ad val.	18% ad val.
149.15 2/	15% ad val.	13% ad val.	12% ad val.	10% ad val.	9% ad val.	7.5% ad val.
149.19	0.5¢ per lb.	0.4¢ per lb.	0.3¢ per lb.	0.25¢ per lb.	0.15¢ per lb.	0.1¢ per lb.
149.20	0.25¢ per lb.	0.2¢ per lb.	0.2¢ per lb.	0.15¢ per lb.	0.1¢ per lb.	0.1¢ per lb.
149.24	0.25¢ per lb.	0.1¢ per lb.	0.1¢ per lb.	0.1¢ per lb.	0.1¢ per lb.	0.1¢ per lb.
149.28	35% ad val.	31% ad val.	28% ad val.	24% ad val.	21% ad val.	17.5% ad val.
149.48 1/	17.5% ad val.	0.6¢ per lb.	0.4¢ per lb.	0.3¢ per lb.	0.1¢ per lb.	Free
149.50	17.5% ad val.	15.5% ad val.	14% ad val.	12% ad val.	10% ad val.	8.5% ad val.
149.60	35% ad val.	31% ad val.	28% ad val.	24% ad val.	21% ad val.	17.5% ad val.
152.00 2/	14% ad val.	12.5% ad val.	11% ad val.	9.5% ad val.	8% ad val.	7% ad val.
152.05	20% ad val.	19% ad val.	18% ad val.	17% ad val.	16% ad val.	15% ad val.
152.14	0.8¢ per lb.	0.75¢ per lb.	0.7¢ per lb.	0.65¢ per lb.	0.64¢ per lb.	0.6¢ per lb.
152.18	1.2¢ per lb.	1.14¢ per lb.	1.05¢ per lb.	1¢ per lb.	0.95¢ per lb.	0.9¢ per lb.
152.22	2¢ per lb.	1.5¢ per lb.	1.5¢ per lb.	1.4¢ per lb.	1¢ per lb.	1¢ per lb.
152.26	3.4¢ per lb.	3¢ per lb.	2.7¢ per lb.	2.3¢ per lb.	2¢ per lb.	1.7¢ per lb.
152.34	6¢ per lb.	5.4¢ per lb.	4.5¢ per lb.	4¢ per lb.	3.5¢ per lb.	3¢ per lb.
152.54 2/	14% ad val.	12.5% ad val.	11% ad val.	9.5% ad val.	8% ad val.	7% ad val.
152.58 2/	14% ad val.	12.5% ad val.	11% ad val.	9.5% ad val.	8% ad val.	7% ad val.
152.72	15% ad val.	13% ad val.	12% ad val.	10% ad val.	9% ad val.	7.5% ad val.
153.00	10% ad val.	9% ad val.	8% ad val.	7% ad val.	6% ad val.	5% ad val.
153.04	6.5% ad val.	5.5% ad val.	5% ad val.	4.5% ad val.	3.5% ad val.	3% ad val.
153.08	10% ad val.	9% ad val.	8% ad val.	7% ad val.	6% ad val.	5% ad val.
153.16	11% ad val.	9.5% ad val.	8.5% ad val.	7.5% ad val.	6.5% ad val.	5.5% ad val.
153.24	10% ad val.	9% ad val.	8% ad val.	7% ad val.	6% ad val.	5% ad val.
153.28	17.5% ad val.	15.5% ad val.	14% ad val.	12% ad val.	10% ad val.	8.5% ad val.
153.32	14% ad val.	12.5% ad val.	11% ad val.	9.5% ad val.	8% ad val.	7% ad val.
154.10	5¢ per lb.	4¢ per lb.	4¢ per lb.	3¢ per lb.	3¢ per lb.	2.5¢ per lb.
154.15	3.4¢ per lb.	3¢ per lb.	2.7¢ per lb.	2.3¢ per lb.	2¢ per lb.	1.7¢ per lb.
154.20	3.4¢ per lb.	3¢ per lb.	2.7¢ per lb.	2.3¢ per lb.	2¢ per lb.	1.7¢ per lb.
154.25	6¢ per lb.	5.4¢ per lb.	4.5¢ per lb.	4¢ per lb.	3.5¢ per lb.	3¢ per lb.
154.35	8¢ per lb.	7.2¢ per lb.	6.4¢ per lb.	5.6¢ per lb.	4.8¢ per lb.	4¢ per lb.
154.45	17.5% ad val.	15.5% ad val.	14% ad val.	12% ad val.	10% ad val.	8.5% ad val.
154.50 2/	14% ad val.	12.5% ad val.	11% ad val.	9.5% ad val.	8% ad val.	7% ad val.

1/ The staged rates for item 149.48 were not proclaimed by Pres. Proc. 3822. These rates were established by Pub. L. 90-564, effective date Nov. 11, 1968, which provides that they shall be treated as having been proclaimed by the President as being required or appropriate to carry out foreign trade agreements to which the United States is a party.

2/ Subordinate Cuban provisions deleted, effective as follows:
Jan. 1, 1970 - Items 147.81, 148.66, 149.16, 152.01, 152.55, 152.59, and 154.51.

TARIFF SCHEDULES OF THE UNITED STATES ANNOTATED (1969)

STAGED RATES AND HISTORICAL NOTES

Notes p. 3
Schedule 1,
Part 9

Other Amendments and Modifications

PROVISION

[illegible]

146.72--Item 146.72 (column 1 rate--14% ad val.; column 2 rate--35% ad val.) deleted and items 146.73 and 146.75 added in lieu thereof. Pres. Proc. 3822 (Kennedy Round), Dec. 16, 1967, 32 F.R. 19002, effective date Jan. 1, 1968.

146.97--Item 146.98 (column 1 rate--7¢ per lb. + 10% ad val.; column 2 rate--9.5¢ per lb. + 40% ad val.) deleted and items 146.97 and 146.99 added in lieu thereof. Pres. Proc. 3822 (Kennedy Round), Dec. 16, 1967, 32 F.R. 19002, effective date Jan. 1, 1968.

147.19--Item 147.20 (column 1 rate--1.25¢ per lb.; column 2 rate--2.5¢ per lb.) deleted and items 147.19 and 147.21 and heading immediately preceding item 147.19 added in lieu thereof. Pres. Proc. 3822 (Kennedy Round), Dec. 16, 1967, 32 F.R. 19002, effective date Jan. 1, 1968.

147.30--Items 147.31 (column 1 and 2 rate--1¢ per lb.) and 147.32 (Cuba--0.8¢ per lb.) deleted and new items 147.30, 147.31, and 147.32 added in lieu thereof. Pres. Proc. 3822 (Kennedy Round), Dec. 16, 1967, 32 F.R. 19002, effective date Jan. 1, 1968.

147.34--Item 147.34 (Cuba--14% ad val.) deleted. Pres. Proc. 3822 (Kennedy Round), Dec. 16, 1967, 32 F.R. 19002, effective date Jan. 1, 1969.

147.51--Item 147.52 (column 1 rate--4.5¢ per lb.; column 2 rate--5¢ per lb.) deleted and items 147.51 and 147.53 added in lieu thereof. Pres. Proc. 3822 (Kennedy Round), Dec. 16, 1967, 32 F.R. 19002, effective date Jan. 1, 1968.

147.61--Item 147.62 (column 1 rate--5.25¢ per cu. ft.; column 2 rate--25¢ per cu. ft.) deleted and items 147.61 and 147.63 added in lieu thereof. Pres. Proc. 3822 (Kennedy Round), Dec. 16, 1967, 32 F.R. 19002, effective date Jan. 1, 1968.

148.26--Item 148.26 (Cuba--14% ad val.) deleted. Pres. Proc. 3822 (Kennedy Round), Dec. 16, 1967, 32 F.R. 19002, effective date Jan. 1, 1969.

PROVISION

148.76--Item 148.76 (column 1 rate--20% ad val.; column 2 rate--35% ad val.) deleted and items 148.77 and 148.78 and heading immediately preceding item 148.77 added in lieu thereof. Pres. Proc. 3822 (Kennedy Round), Dec. 16, 1967, 32 F.R. 19002, effective date Jan. 1, 1968.

148.80--Item 148.80 (column 1 and 2 rate--0.5¢ per lb.) deleted and items 148.81 and 148.82 and heading immediately preceding item 148.81 added in lieu thereof. Pres. Proc. 3822 (Kennedy Round), Dec. 16, 1967, 32 F.R. 19002, effective date Jan. 1, 1968.

149.19--Items 149.20 (column 1 rate--0.25¢ per lb.; column 2 rate--0.5¢ per lb.) and 149.22 (column 1 and 2 rate--0.5¢ per lb.) deleted and new items 149.19, 149.20, and 149.21 added in lieu thereof. Pres. Proc. 3822 (Kennedy Round), Dec. 16, 1967, 32 F.R. 19002, effective date Jan. 1, 1968.

149.48--Item 149.48 added. Pub. L. 90-564, Secs. 1, 2(a), Oct. 12, 1968, 82 Stat. 1001, effective date Nov. 11, 1968.

149.50--Article description amended by deleting "Fresh" and inserting "Other fruits, fresh" in lieu thereof. Pub. L. 90-564, Secs. 1, 2(a), Oct. 12, 1968, 82 Stat. 1001, effective date Nov. 11, 1968.

149.51--Item 149.51 (Cuba--14% ad val.) deleted. Pres. Proc. 3822 (Kennedy Round), Dec. 16, 1967, 32 F.R. 19002, effective date Jan. 1, 1969.

152.06--Item 152.06 (Cuba--16% ad val.) deleted. Pres. Proc. 3822 (Kennedy Round), Dec. 16, 1967, 32 F.R. 19002, effective date Jan. 1, 1968.

152.70--Items 152.70 (column 1 rate--15% ad val.; column 2 rate--35% ad val.) and 152.71 (Cuba--14% ad val.) deleted and items 152.72, 152.74, and 152.75 added in lieu thereof. Pres. Proc. 3822 (Kennedy Round), Dec. 16, 1967, 32 F.R. 19002, effective date Jan. 1, 1968.

154.36--Item 154.36 (Cuba--6.4¢ per lb.) deleted. Pres. Proc. 3822 (Kennedy Round), Dec. 16, 1967, 32 F.R. 19002, effective date Jan. 1, 1968.

154.46--Item 154.46 (Cuba--14% ad val.) deleted. Pres. Proc. 3822 (Kennedy Round), Dec. 16, 1967, 32 F.R. 19002, effective date Jan. 1, 1969.

Statistical Notes

PROVISION	Effective date
[illegible]	
146.72--See Other Amendments and Modifications	
20--Disc.(transferred to 146.7520).....	*Jan. 1, 1968*
40--Disc.(transferred to 146.7300 & 146.7540).....	*do*
146.73--See Other Amendments and Modifications	
00--Estab.(transferred from 146.7240pt).....	*Jan. 1, 1968*
146.75--See Other Amendments and Modifications	
20--Estab.(transferred from 146.7220).....	*Jan. 1, 1968*
40--Estab.(transferred from 146.7240pt).....	*do*
146.97--See Other Amendments and Modifications	
00--Estab.(transferred from 146.9800pt).....	*Jan. 1, 1968*
146.98--See Other Amendments and Modifications	
00--Disc.(transferred to 146.9700 & 146.9900).....	*Jan. 1, 1968*

PROVISION	Effective date
146.99--See Other Amendments and Modifications	
00--Estab.(transferred from 146.9800pt).....	*Jan. 1, 1968*
147.00--	
00--Estab.(transferred from 147.0020, 40 & 60).....	*Jan. 1, 1966*
20--Disc.(transferred to 147.0000).....	*do*
40--Disc.	*do*
60--Disc.	*do*
147.19--See Other Amendments and Modifications	
00--Estab.(transferred from 147.2000pt).....	*Jan. 1, 1968*
147.20--See Other Amendments and Modifications	
00--Disc.(transferred to 147.1900 & 147.2100).....	*Jan. 1, 1968*
147.21--See Other Amendments and Modifications	
00--Estab.(transferred from 147.2000pt).....	*Jan. 1, 1968*
147.30--See Other Amendments and Modifications	
00--Estab.(transferred from 147.3100pt).....	*Jan. 1, 1968*

TARIFF SCHEDULES OF THE UNITED STATES ANNOTATED (1969)

STAGED RATES AND HISTORICAL NOTES

Notes p. 4
Schedule 1,
Part 9

Statistical Notes--(con.)

PROVISION	Effective date
147.31--See Other Amendments and Modifications	
00--Kumquats, packed in airtight containers, transferred to 147.3000	*Jan. 1, 1968*
147.51--See Other Amendments and Modifications	
00--Estab.(transferred from 147.5200pt)	*Jan. 1, 1968*
147.52--See Other Amendments and Modifications	
00--Disc.(transferred to 147.5100 & 147.5300)	*Jan. 1, 1968*
147.53--See Other Amendments and Modifications	
00--Estab.(transferred from 147.5200pt)	*Jan. 1, 1968*
147.61--See Other Amendments and Modifications	
00--Estab.(transferred from 147.6200pt)	*Jan. 1, 1968*
147.62--See Other Amendments and Modifications	
00--Disc.(transferred to 147.6100 & 147.6300)	*Jan. 1, 1968*
147.63--See Other Amendments and Modifications	
00--Estab.(transferred from 147.6200pt)	*Jan. 1, 1968*
148.44--	
00--Disc.(transferred to 148.4420 & 40)	*Jan. 1, 1967*
20--Estab.(transferred from 148.4400pt)	*do*
40--Estab. do	*do*
148.50--	
00--Disc.(transferred to 148.5020, 40, 60 & 80)	*Jan. 1, 1967*
20--Estab.(transferred from 148.5000pt)	*do*
40--Estab. do	*do*
60--Estab. do	*do*
80--Estab. do	*do*
148.76--See Other Amendments and Modifications	
00--Disc.(transferred to 148.7700 & 148.7800)	*Jan. 1, 1968*
148.77--See Other Amendments and Modifications	
00--Estab.(transferred from 148.7600pt)	*Jan. 1, 1968*
148.78--See Other Amendments and Modifications	
00--Estab.(transferred from 148.7600pt)	*Jan. 1, 1968*
148.80--See Other Amendments and Modifications	
00--Disc.(transferred to 148.8100 & 148.8200)	*Jan. 1, 1968*
148.81--See Other Amendments and Modifications	
00--Estab.(transferred from 148.8000pt)	*Jan. 1, 1968*
148.82--See Other Amendments and Modifications	
00--Estab.(transferred from 148.8000pt)	*Jan. 1, 1968*
149.15--	
00--Estab.(transferred from 149.1520 & 40)	*Jan. 1, 1966*
20--Disc.(transferred to 149.1500)	*do*
40--Disc. do	*do*
149.19--See Other Amendments and Modifications	
00--Estab.(transferred from 149.2200pt)	*Jan. 1, 1968*
149.21--See Other Amendments and Modifications	
00--Estab.(transferred from 149.2200pt)	*Jan. 1, 1968*
149.22--See Other Amendments and Modifications	
00--Disc.(transferred to 149.1900 & 149.2100)	*Jan. 1, 1968*
149.48--See Other Amendments and Modifications	
00--Estab.(transferred from 149.5000pt)	*Nov.11, 1968*
149.50--See Other Amendments and Modifications	
00--Chinese gooseberries transferred to 149.4800	*Nov.11, 1968*
152.38--	
00--Estab.(transferred from 152.3820 & 40)	*Jan. 1, 1966*
20--Disc.(transferred to 152.3800)	*do*
40--Disc. do	*do*
152.70--See Other Amendments and Modifications	
00--Disc.(transferred to 152.7020 & 40)	*Jan. 1, 1967*
20--Estab.(transferred from 152.7000pt)	*do*
Disc.(transferred to 152.7420)	*Jan. 1, 1968*
40--Estab.(transferred from 152.7000pt)	*Jan. 1, 1967*
Disc.(transferred to 152.7200 & 152.7440)	*Jan. 1, 1968*
152.72--See Other Amendments and Modifications	
00--Estab.(transferred from 152.7040pt)	*Jan. 1, 1968*
152.74--See Other Amendments and Modifications	
20--Estab.(transferred from 152.7020)	*Jan. 1, 1968*
40--Estab.(transferred from 152.7040pt)	*do*
154.35--	
00--Estab.(transferred from 154.3520 & 40)	*Jan. 1, 1966*
20--Disc.(transferred to 154.3500)	*do*
40--Disc. do	*do*

Item	Stat. Suf-fix	Articles	Units of Quantity	Rates of Duty 1	Rates of Duty 2	Effective Period
		PART 1. - TEMPORARY LEGISLATION				
		Subpart A. - Temporary Provisions for Additional Duties				
		Subpart A headnotes:				
		1. The duties provided for in this subpart are cumulative duties which apply in addition to the duties, if any, otherwise imposed on the articles involved. The duties provided for in this subpart apply only with respect to articles entered during the period specified in the last column.				
		2. Sections 336 and 350 of this Act (the so-called flexible tariff and trade-agreements provisions, respectively) shall not apply with respect to the duty provided for in item 901.00.				
		3. With respect to any articles upon which the duty imposed under item 901.00 has been paid and which, on the date of termination of the tax provided for in section 4501, I.R.C., are held by the importer and intended for sale or other disposition, there shall be refunded (without interest) to such importer an amount equal to the duty paid on such articles under item 901.00, if claim for such refund is filed with the Secretary or his delegate within 90 days after the date of termination of the tax.				
		Subpart A statistical headnote:				
		1. For statistical reporting purposes in this subpart (item 901.00) -- *(a) The 7-digit number found herein should follow the 7-digit reporting number found in schedules 1-7 for the imported article (see subpart A headnote 1).* *(b) The quantity required in this subpart is the total sugars content.* *(c) The value for the imported article should be reported only in connection with the 7-digit reporting number found in schedules 1-7.*				
901.00	1/	Sugars, sirups, and molasses provided for in items 155.20 to 155.31, inclusive, of part 10A of schedule 1, if not to be further refined or otherwise improved in quality, and articles of sugars, sirups, and molasses of the kinds described in such items, all the foregoing (except sugars, sirups, molasses, or articles to be used as livestock feed, or in the production of livestock feed, or for the distillation of alcohol).....	.....	The same as the tax imposed under sec. 4501, I.R.C.2/	The same as the tax imposed under sec. 4501, I.R.C.2/	For such time as the tax imposed under sec. 4501, I.R.C., is in effect 3/
	20	*Sugars, sirups, and molasses provided for in item 155.20*.....	*Lb.* 1/			
	40	*Sugars, sirups, and molasses provided for in item 155.30*.....	*Lb.* 1/			
	60	*Other*.....	*Lb.* 1/			

1/ *See Subpart A statistical headnote 1.*
2/ The tax rate is 0.53 cent per pound of total sugars.
3/ The tax terminates June 30, 1972.

A P P E N D I X B

Value of U.S. imports for consumption, by TSUS items included in the individual summaries of this volume, total and from the 3 principal suppliers, 1967

Value of U.S. imports for consumption, by TSUS items included in the individual summaries of this volume, total and from the 3 principal suppliers, 1967

(In thousands of dollars. The dollar value of imports shown is defined generally as the market value in the foreign country and therefore excludes U.S. import duties, freight, and transportation insurance)

Summary title and page; TSUS item	All countries: Amount in 1967	All countries: Percent change from 1966	First supplier: Country	First supplier: Value	Second supplier: Country	Second supplier: Value	Third supplier: Country	Third supplier: Value
Apples (p. 5)								
146.10	6,419	137	Canada	5,891	New Zealand	252	Nicaragua	145
146.14	73	154	Canada	27	Japan	19	Belgium	14
Certain dried fruit (p. 15)								
146.12	577	49	Argentina	318	Italy	247	U.K.	1
146.22	255	113	Australia	123	Spain	54	Turkey	46
148.74	67	191	Australia	56	Rep. S. Af.	11	-	-
148.83	7	-70	Australia	6	Rep. S. Af.	1	-	-
150.00 (pt.) 1/	-	-	-	-	-	-	-	-
Apricots (p. 25)								
146.20	-	-	-	-	-	-	-	-
146.24	88	18	Spain	41	Syria	23	Israel	17
Avocados (p. 31)								
146.30 1/	49	-45	Dom. Rep.	49	Fr. W.Indies	2/	-	-
Bananas and Plantains (p. 35)								
146.40	173,889	-26	Honduras	44,803	Panama	44,715	Ecuador	43,497
146.42	256	27	Ecuador	203	Brazil	49	Phil. Rep.	3
146.44 1/	88	-21	Phil. Rep.	43	Honduras	32	India	13
149.10	2,895	2	Venezuela	1,618	Costa Rica	592	Guatemala	200
149.15 1/	4	-	Colombia	4	Dom. Rep.	1	-	-
152.70	4/ 620	4/ 5/	Honduras	4/ 580	Mexico	4/ 40	-	-
(pt.) 3/								
Blueberries (p. 43)								
146.50	996	-66	Canada	996	-	-	-	-
146.68	1,983	27	Canada	1,867	Poland	117	-	-
146.70	2	-93	Poland	1	West Germany	2/	Sweden	2/
Strawberries (p. 51)								
146.58	436	45	Canada	436	-	-	-	-
146.60	3,185	52	Mexico	3,180	New Zealand	3	Sweden	1
146.72	10,319	-35	Mexico	9,991	Poland	302	Netherlands	24
(pt.) 3/								
152.70	717	4/ -25	Mexico	713	Colombia	3	Argentina	1
(pt.) 1/3/								
Berries, except blueberries and strawberries (p. 59)								
146.52	38	6	Canada	29	Finland	7	Sweden	2
146.54	799	-25	Canada	799	-	-	-	-
146.56	2/	-55	U.K.	2/	-	-	-	-
146.62	6	-19	Dom. Rep.	5	Mexico	1	U.K.	2/
146.64	-	-	-	-	-	-	-	-
146.66	19	-6	Italy	10	Portugal	4	West Germany	2
146.72	261	-30	Sweden	140	Canada	62	West Germany	11
(pt.) 3/								

See footnotes at end of table

Value of U.S. imports for consumption, by TSUS items included in the individual summaries of this volume, total and from the 3 principal suppliers, 1967

(In thousands of dollars. The dollar value of imports shown is defined generally as the market value in the foreign country and therefore excludes U.S. import duties, freight, and transportation insurance)

Summary title and page; TSUS item	All countries: Amount in 1967	All countries: Percent change from 1966	First supplier: Country	First supplier: Value	Second supplier: Country	Second supplier: Value	Third supplier: Country	Third supplier: Value
Six tropical fruit (p. 71)								
146.80 1/	18	-50	Dom. Rep.	9	Argentina	6	Guatemala	3
148.60 1/	15	-7	Bahamas	7	Guatemala	4	Mexico	1
148.65 1/	83	107	Mexico	45	Australia	14	Taiwan	14
152.46 1/	69	25	Venezuela	25	Guatemala	19	Mexico	14
153.00	3	-	Jamaica	2	Canada	1	Phil. Rep.	2/
Cherries (p. 77)								
146.90	737	66	Canada	732	Chile	6	-	-
146.91	15	-55	Yugoslavia	8	Chile	8	-	-
146.93	3	110	Canada	3	-	-	-	-
146.95	229	42	Italy	229	-	-	-	-
146.96	532	75	Italy	375	Spain	150	Portugal	7
146.98 3/	161	42	France	89	Italy	58	Poland	7
154.05	2,692	18	France	2,631	Italy	60	Spain	1
Citron and fruit peel (p. 89)								
147.00	119	16	Israel	105	Taiwan	7	Greece	5
147.02	-	-	-	-	-	-	-	-
152.10	-	-	-	-	-	-	-	-
152.14	97	-6	Italy	62	Haiti	22	Spain	7
152.18	58	-37	Italy	54	Spain	3	-	-
152.22	3	-	Haiti	3	-	-	-	-
152.26	-	-	-	-	-	-	-	-
152.30	1	-89	Venezuela	1	Greece	2/	-	-
152.34	2/	-	Hong Kong	2/	-	-	-	-
152.38 1/	-	-	-	-	-	-	-	-
154.15	3	-	Italy	3	-	-	-	-
154.20	-	-	-	-	-	-	-	-
154.25	1	145	Canada	1	-	-	-	-
154.30	5	62	Australia	3	Rep. S. Af.	2	-	-
154.35	-	-	-	-	-	-	-	-
Grapefruit (p. 97)								
147.10 1/	6	155	Canada	6	-	-	-	-
147.13 1/	-	-100	-	-	-	-	-	-
147.16 1/	246	5/	Israel	243	Mexico	3	-	-
Lemons (p. 103)								
147.20 3/	33	-54	Japan	17	Hong Kong	14	Taiwan	2
Limes (p. 113)								
147.22 1/	195	-36	Mexico	195	Haiti	2/	-	-
147.26 1/	-	-	-	-	-	-	-	-
Oranges (p. 119)								
147.29	13,237	-5	Japan	11,818	Taiwan	1,399	Spain	17
147.31 1/3/	3,875	10	Mexico	3,550	Morocco	140	Israel	69

See footnotes at end of table.

Value of U.S. imports for consumption, by TSUS items included in the individual summaries of this volume, total and from the 3 principal suppliers, 1967

(In thousands of dollars. The dollar value of imports shown is defined generally as the market value in the foreign country and therefore excludes U.S. import duties, freight, and transportation insurance)

Summary title and page; TSUS item	All countries: Amount in 1967	All countries: Percent change from 1966	First supplier: Country	First supplier: Value	Second supplier: Country	Second supplier: Value	Third supplier: Country	Third supplier: Value
Citrus fruit not elsewhere enumerated (p. 133)								
147.33	96	129	Jamaica	96	-	-	-	-
147.36 1/	2	5/	Phil. Rep.	2	-	-	-	-
Dates (p. 135)								
147.40	4	-	Iran	4	-	-	-	-
147.42	332	-56	Iraq	268	Iran	64	-	-
147.44	2/	-	Iraq	2/	-	-	-	-
147.46	2,318	154	Iraq	1,444	Iran	869	Portugal	5
147.48	94	112	Iran	69	Iraq	25	-	-
Figs (p. 143)								
147.50	10	-6	Greece	7	Portugal	3	U.K.	2/
147.52 3/	497	-7	Greece	379	Turkey	85	Italy	23
147.54	46	124	Italy	45	Greece	1	-	-
152.50	997	-37	Portugal	388	Turkey	332	Spain	259
Grapes (p. 155)								
147.60	2/	-58	Belgium	2/	-	-	-	-
147.62 3/	2,304	-10	Chile	1,234	Rep. S. Af.	901	Mexico	129
147.64	1,146	93	Canada	1,134	Chile	12	-	-
147.77 1/	16	-17	Spain	13	Japan	2	Italy	1
Raisins (p. 163)								
147.66	13	188	Italy	12	Spain	1	-	-
147.68	138	5/	Turkey	137	Greece	1	-	-
147.70	-	-	-	-	-	-	-	-
147.72	5	-14	Turkey	3	Australia	2	-	-
147.75	2	-21	Italy	2	-	-	-	-
Guavas (p. 173)								
147.80 1/	-	-	-	-	-	-	-	-
147.85	96	27	Rep. S. Af.	77	Venezuela	8	Costa Rica	6
152.54 1/	120	48	Haiti	34	Costa Rica	31	Venezuela	26
Mangoes (p. 177)								
147.90 1/	589	40	Mexico	354	Haiti	121	Taiwan	63
152.58 1/	21	189	Guatemala	15	Venezuela	5	India	1
Cantaloupes (p. 183)								
148.10 1/	-	-	-	-	-	-	-	-
148.15 1/	6,362	7	Mexico	6,133	Dom. Rep.	217	Salvador	7
Watermelons (p. 189)								
148.20 1/	1,338	-1	Mexico	1,276	Venezuela	32	Dom. Rep.	31
Other melons (p. 193)								
148.25 1/	1,052	-19	Chile	578	Spain	254	Mexico	180
148.30 1/	315	67	Spain	308	Mexico	6	Portugal	1

See footnotes at end of table.

Value of U.S. imports for consumption, by TSUS items included in the individual summaries of this volume, total and from the 3 principal suppliers, 1967

(In thousands of dollars. The dollar value of imports shown is defined generally as the market value in the foreign country and therefore excludes U.S. import duties, freight, and transportation insurance)

Summary title and page; TSUS item	All countries: Amount in 1967	All countries: Percent change from 1966	First supplier: Country	First supplier: Value	Second supplier: Country	Second supplier: Value	Third supplier: Country	Third supplier: Value
Miscellaneous fruit (p. 199)								
148.35 1/	-	-	-	-	-	-	-	-
149.40	13	5	India	4	Leeward & Windward Is.	3	Haiti	2
149.50 6/	117	36	Canada	52	New Zealand	40	Chile	12
149.60 1/	67	8	Taiwan	28	Japan	20	Phil. Rep.	9
Olives (p. 207)								
148.40	-	-	-	-	-	-	-	-
148.42	982	33	Greece	908	Chile	40	Italy	16
148.44 20	345	7	Spain	314	Greece	21	Portugal	5
148.44 40	3,596		Spain	3,146	Greece	330	Morocco	48
148.46	103	-3	Greece	95	Chile	6	Portugal	1
148.48	242	-51	Spain	209	Portugal	30	Greece	2
148.50 20	134		Spain	133	Italy	2/	Portugal	2/
40	922	9	Spain	884	Japan	16	Portugal	14
60	2,624		Spain	2,545	Portugal	62	Canada	6
80	22,215		Spain	21,543	Portugal	488	Greece	100
148.52	-	-	-	-	-	-	-	-
148.54	198	-	Morocco	195	Mauritania	1	Greece	1
148.56	56	115	Spain	39	Greece	6	Morocco	6
Peaches (p. 221)								
148.70	9	-69	Canada	8	Mexico	1	Chile	1
148.72	303	-	Chile	298	Brazil	4	Argentina	1
148.76 3/	83	-33	Japan	78	Spain	2	Italy	1
Pears (p. 229)								
148.80 3/	1,576	78	Canada	626	Argentina	598	Rep. S. Af.	224
148.86	1,413	5/	Italy	859	Japan	214	Australia	207
Pineapples (p. 235)								
148.90 1/	318	-35	Mexico	284	Phil. Rep.	34	West Germany	3/
148.93 1/	-	-100	-	-	-	-	-	-
148.96 1/	6	-85	Dom. Rep.	2	Costa Rica	2	Dom. Rep.	2
148.98 1/								
20	20,962	10	Taiwan	8,449	Phil. Rep.	5,094	Mexico	3,361
40	737	16	Mexico	397	Venezuela	210	Malaysia	102
Plums (p. 243)								
149.20	118	-30	Chile	117	Argentina	1	-	-
149.22 3/	71	-17	Chile	62	Argentina	6	Brazil	2
149.24	45	-37	Japan	45	-	-	-	-
149.28	644	-2	Hong Kong	538	Japan	76	Taiwan	25
Dried prunes (p. 249)								
149.26	235	5/	Rumania	103	Taiwan	63	Bulgaria	42
Certain fruit mixtures (p. 255)								
150.00 (pt.) 1/	1,169	99	Phil. Rep.	660	Japan	369	Australia	88

See footnotes at end of table.

Value of U.S. imports for consumption, by TSUS items included in the individual summaries of this volume, total and from the 3 principal suppliers, 1967

(In thousands of dollars. The dollar value of imports shown is defined generally as the market value in the foreign country and therefore excludes U.S. import duties, freight, and transportation insurance)

Summary title and page; TSUS item	All countries: Amount in 1967	All countries: Percent change from 1966	First supplier: Country	First supplier: Value	Second supplier: Country	Second supplier: Value	Third supplier: Country	Third supplier: Value
Alcohol with preserved fruit (261)								
150.50	7/ 756	5/	Italy	7/ 745	France	7/ 11	-	-
Fruit flours and certain fruit pastes and pulps (p. 263)								
152.00 1/	-	-	-	-	-	-	-	-
152.05	3	5/	France	3	-	-	-	-
152.42	-	-	-	-	-	-	-	-
152.62 1/	2	-	Jamaica	2	-	-	-	-
152.70 (pt.) 1/3/	4/ 155	4/ -23	Argentina	4/ 68	Spain	4/ 40	Canada	4/ 24
Jellies, jams, marmalades, and fruit butters (p. 267)								
153.04	1,554	8	Canada	1,154	U.K.	217	West Germany	71
153.08	3	-58	U.K.	1	Jamaica	1	Colombia	2/
153.16	672	-14	U.K.	362	Canada	243	Ireland	41
153.24	3	97	U.K.	3	-	-	-	-
153.28	12	34	Portugal	5	Switzerland	3	Spain	1
153.32	479	1	U.K.	182	Canada	153	Switzerland	46
Candied fruit (except cherries) (p. 275)								
154.10	35	9	France	29	Italy	5	Switzerland	1
154.40	112	-5	Taiwan	70	Hong Kong	16	Australia	13
154.45 1/	7	5/	Rep. S. Af.	4	Japan	2	Australia	1
154.50 1/	9	-27	France	5	Spain	2	Italy	2
154.55	406	5/	Australia	207	France	171	Switzerland	15
154.60	34	34	Hong Kong	17	France	8	Japan	4
154.90	13	-16	France	5	Italy	3	Spain	3

1/ An item number for products of Cuba of this description is not shown. There have been no imports from Cuba since 1962.
2/ Less than $500.
3/ This item deleted, effective Jan. 1, 1968. See appendix C for current item numbers.
4/ Imports estimated.
5/ Increase of more than 200 percent.
6/ Item 149.48 added and the product description for item 149.50 changed, effective Nov. 11, 1968, by Public Law 90-564.
7/ Quantity in proof gallons. Value is not reported.

A P P E N D I X C

Value of U.S. imports for consumption, by TSUS items included in the individual summaries of this volume, total and from the 3 principal suppliers, 1968

Value of U.S. imports for consumption, by TSUS items included in the individual summaries of this volume, total and from the 3 principal suppliers, 1968

(In thousands of dollars. The dollar value of imports shown is defined generally as the market value in the foreign country and therefore excludes U.S. import duties, freight, and transportation insurance)

Summary title and page; TSUS item	All countries: Amount in 1968	All countries: Percent change from 1967	First supplier: Country	First supplier: Value	Second supplier: Country	Second supplier: Value	Third supplier: Country	Third supplier: Value
Apples (p. 5)								
146.10	10,968	71	Canada	10,102	Rep SAf	376	N Zeal	341
146.14	327	1/	Canada	131	Italy	69	Japan	69
Certain dried fruit (p. 15)								
146.12	738	28	Italy	412	Argentina	319	Bulgaria	7
146.22	689	170	Turkey	263	Spain	227	Iran	159
148.74	351	1/	Rep SAf	184	Australia	104	U King	63
148.83	86	1/	Rep SAf	69	Australia	18	-	-
150.00 (pt.) 2/	-	-	-	-	-	-	-	-
Apricots (p. 25)								
146.20	4	-	Canada	4	Australia	1	-	-
146.24	208	135	Spain	110	Israel	59	Syria	32
Avocados (p. 31)								
146.30 2/	20	-59	Dom Rep	18	Haiti	1	F W Ind	1
Bananas and plantains (p. 35)								
146.40	182,091	5	Panama	44,914	Costa Rica	43,883	Honduras	43,601
146.42	279	9	Ecuador	226	Brazil	44	Phil R	6
146.44 2/	164	86	Honduras	110	Phil R	49	Tanzania	4
149.10	3,556	23	Venezuela	1,239	Costa Rica	847	Guatemala	482
149.15 2/	14	1/	Guatemala	10	Dom Rep	2	Salvadr	2
152.72 3/	1,128	4/ 81	Honduras	1,059	Mexico	35	Br Hond	16
Blueberries (p. 43)								
146.50	510	-49	Canada	503	Mexico	7	-	-
146.68	2,844	43	Canada	2,365	Poland	429	W Germ	50
146.70	6	197	Canada	5	W Germ	1	-	-
Strawberries (p. 51)								
146.58	476	9	Canada	469	Netherlands	6	-	-
146.60	4,626	45	Mexico	4,425	Ecuador	115	Venezuela	55
146.7520 3/	12,539	4/ 22	Mexico	11,377	Poland	981	Denmark	158
152.7420 2/ 3/	740	4/ 3	Mexico	736	Japan	2	Canada	2
Berries, except blueberries and strawberries (p. 59)								
146.52	31	-19	Canada	31	Sweden	5/	-	-
146.54	847	6	Canada	847	-	-	-	-
146.56	10	1/	Sweden	7	Canada	3	-	-
146.62	169	1/	Canada	160	New Zealand	9	Dom Rep	5/
146.64	-	-	-	-	-	-	-	-
146.66	8	-56	Portugal	6	Yugoslv	1	Turkey	5/
146.73 3/	154	4/ 124	Sweden	122	Canada	13	Finland	8
146.7540 3/	430		Austria	78	Yugoslv	70	W Germ	59

See footnotes at end of table.

March 1969
1:8

Value of U.S. imports for consumption, by TSUS items included in the individual summaries of this volume, total and from the 3 principal suppliers, 1968

(In thousands of dollars. The dollar value of imports shown is defined generally as the market value in the foreign country and therefore excludes U.S. import duties, freight, and transportation insurance)

Summary title and page; TSUS item	All countries		First supplier		Second supplier		Third supplier	
	Amount in 1968	Percent change from 1967	Country	Value	Country	Value	Country	Value
Six tropical fruit (p. 71)								
146.80 2/	24	33	Guatemala	15	Dom Rep	7	Mexico	1
146.60 2/	10	-34	Bahamas	5	Mexico	2	Venezuela	1
146.65 2/	91	9	Mexico	47	Guatemala	21	Taiwan	15
152.46 2/	109	57	Mexico	40	Guatemala	35	Venezuela	20
153.00	2	-30	Colombia	1	Jamaica	1	-	-
Cherries (p. 77)								
146.90	978	33	Canada	966	Argentina	7	Chile	3
146.91	43	1/	Yugoslv	45	Italy	3	-	-
146.93	-	-43	Canada	4	-	-	-	-
146.95	345	50	Italy	307	Spain	24	Yugoslv	7
146.96	1,113	10	Spain	608	Italy	465	France	40
146.97 3/	-	4/ -94	-	-	-	-	-	-
146.99 3/	123	4/ -82	Italy	53	France	47	Greece	12
154.05	2,552	-5	France	2,479	Italy	67	Belgium	3
Citron and fruit peel (p. 89)								
147.00	77	-35	Israel	77	Cyprus	1	-	-
147.02	-	-	-	-	-	-	-	-
152.10	5	-	Italy	5	-	-	-	-
152.14	98	1	Italy	73	Haiti	11	Spain	10
152.18	89	55	Italy	69	Spain	16	Haiti	5
152.22	1	-63	Italy	1	-	-	-	-
152.26	-	-	-	-	-	-	-	-
152.30	9	1/	Greece	3	Rep SAf	3	Italy	2
152.34	1	1/	Hong Kong	1	-	-	-	-
152.38 2/	-	-	-	-	-	-	-	-
154.15	-	-100	-	-	-	-	-	-
154.20	5/	-	W Germ	5/	-	-	-	-
154.25	5/	-56	Hong Kong	5/	-	-	-	-
154.30	12	169	Israel	5	Australia	4	Rep SAf	3
154.35	-	-	-	-	-	-	-	-
Grapefruit (p. 97)								
147.10 2/	5/	-95	Dom Rep	5/	-	-	-	-
147.13 2/	29	-	Mexico	29	-	-	-	-
147.16 2/	453	84	Israel	443	Mexico	8	Canada	2
Lemons (p. 103)								
147.19 3/	-	4/ -24	-	-	-	-	-	-
147.21 3/	25		Taiwan	13	Hong Kong	12	Greece	1
Limes (p. 113)								
147.22 2/	207	6	Mexico	203	Haiti	2	Canada	1
147.26 2/	5/	-	Taiwan	5/	-	-	-	-
Oranges (p. 119)								
147.29	14,231	8	Japan	12,835	Taiwan	1,376	Panama	7
147.30 3/	36	4/ 158	Taiwan	13	Israel	10	Japan	7
147.31	9,978		Mexico	7,774	Israel	1,850	Japan	299
2/ 3/								

See footnotes at end of table.

Value of U.S. imports for consumption, by TSUS items included in the individual summaries of this volume, total and from the 3 principal suppliers, 1968

(In thousands of dollars. The dollar value of imports shown is defined generally as the market value in the foreign country and therefore excludes U.S. import duties, freight, and transportation insurance)

Summary title and page; TSUS item	All countries: Amount in 1968	All countries: Percent change from 1967	First supplier: Country	First supplier: Value	Second supplier: Country	Second supplier: Value	Third supplier: Country	Third supplier: Value
Citrus fruit not elsewhere enumerated (p. 133)								
147.33	157	63	Jamaica	155	Israel	2	-	-
147.36 2/	1	-54	Phil R	1	-	-	-	-
Dates (p. 135)								
147.40	-	-100	-	-	-	-	-	-
147.42	1,123	1/	Iraq	1,123	-	-	-	-
147.44	-	-100	-	-	-	-	-	-
147.46	1,447	-38	Iraq	1,046	Iran	401	-	-
147.48	60	-36	Iran	30	Iraq	28	U King	1
Figs (p. 143)								
147.50	1	-85	Greece	1	Italy	5/	-	-
147.51 3/	194	4/ 77	Greece	120	Turkey	65	Italy	8
147.53 3/	688	4/ 77	Greece	573	Turkey	90	Italy	21
147.54	66	42	Italy	53	Morocco	8	Greece	2
152.50	1,295	30	Portugal	565	Turkey	422	Spain	307
Grapes (p. 155)								
147.60	5	1/	Mexico	4	Belgium	1	-	-
147.61 3/	715	4/ 86	Chile	356	Rep SAf	292	Argentina	65
147.63 3/	2,467	4/ 29	Chile	1,493	Rep SAf	792	Mexico	116
147.64	466	-59	Canada	427	Chile	37	Mexico	2
147.77 2/	19	20	Spain	13	Japan	5	Greece	1
Raisins (p. 163)								
147.66	-	-100	-	-	-	-	-	-
147.68	241	75	Turkey	190	Iran	23	Greece	19
147.70	2	-	Israel	2	-	-	-	-
147.72	4	-31	Turkey	3	Israel	5/	Lebanon	5/
147.75	-	-100	-	-	-	-	-	-
Guavas (p. 173)								
147.80 2/	-	-	-	-	-	-	-	-
147.85	89	-6	Rep SAf	77	Venezuela	8	Mexico	4
152.54 2/	239	100	Costa Rica	85	Dom Rep	36	Venezuela	36
Mangoes (p. 177)								
147.90 2/	733	24	Haiti	356	Mexico	256	Taiwan	57
152.58 2/	10	-51	Venezuela	5	Dom Rep	2	India	2
Cantaloupes (p. 183)								
148.10 2/	-	-	-	-	-	-	-	-
148.15 2/	4,513	-29	Mexico	4,483	Ecuador	13	Salvadr	7
Watermelons (p. 189)								
148.20 2/	1,783	33	Mexico	1,658	Venezuela	86	Dom Rep	32
Other melons (p. 193)								
148.25 2/	1,396	33	Chile	812	Spain	343	Mexico	209
148.30 2/	488	55	Spain	463	Mexico	18	Ecuador	5

See footnotes at end of table.

Value of U.S. imports for consumption, by TSUS items included in the individual summaries of this volume, total and from the 3 principal suppliers, 1968

(In thousands of dollars. The dollar value of imports shown is defined generally as the market value in the foreign country and therefore excludes U.S. import duties, freight, and transportation insurance)

Summary title and page; TSUS item	All countries		First supplier		Second supplier		Third supplier	
	Amount in 1968	Percent change from 1967	Country	Value	Country	Value	Country	Value
Miscellaneous fruit (p. 199)								
148.35 2/	8	-	France	8	-	-	-	-
149.40	22	69	Barbado	14	Mexico	3	India	2
149.48 6/	4/ 62	4/ 55	N Zeal	4/ 62	-	-	-	-
149.50	4/ 103	4/ 34	Canada	64	Australia	26	Haiti	5
2/ 6/								
149.60 2/	56	-15	Tawain	25	Japan	14	Phil R	7
Olives (p. 207)								
148.40	-	-	-	-	-	-	-	-
148.42	1,307	33	Greece	1,141	Italy	99	Chile	58
148.4420	501	45	Spain	450	Greece	44	Portugal	4
40	4,678	30	Spain	4,146	Greece	460	Italy	43
148.46	40	-61	Greece	39	Spain	1	-	-
148.48	167	-31	Spain	108	Greece	30	Portugal	27
148.5020	226	68	Spain	194	Portugal	28	Japan	3
40	1,630	77	Spain	1,592	Portugal	28	Greece	9
60	6,070	131	Spain	5,985	Portugal	58	Japan	20
80	25,726	16	Spain	25,200	Portugal	483	Yugoslv	12
148.52	1	-	Greece	1	-	-	-	-
148.54	261	32	Morocco	251	Italy	9	Canada	1
148.56	32	-43	Greece	26	France	5	Portugal	5/
Peaches (p. 221)								
148.70	52	1/	Chile	47	Canada	5	-	-
148.72	368	22	Chile	329	Rep SAf	23	Mexico	12
148.77 3/	56	19	Japan	56	Korea	1	-	-
148.78 3/	43		Rep SAf	40	Japan	2	Taiwan	1
Pears (p. 229)								
148.81 3/	1,353	4/ 54	Argentina	925	Rep SAf	252	Chile	118
148.82 3/	735	4/ 5	Canada	239	Chile	217	Argentina	145
148.86	1,832	30	Australia	1,104	Italy	236	Japan	231
Pineapples (p. 235)								
148.90 2/	309	-3	Mexico	300	Thailand	7	Dom Rep	2
148.93 2/	-	-	-	-	-	-	-	-
148.96 2/	151	1/	Costa Rica	84	Honduras	64	Colombia	2
148.9820	27,246	30	Phil R	8,818	Taiwan	8,430	Mexico	4,168
2/								
148.9840	819	11	Mexico	558	Venezuela	147	Malaysia	77
2/								
Plums (p. 243)								
149.19 3/	125	4/ 76	Chile	119	Argentina	6	-	-
149.20	293	148	Chile	211	Argentina	50	Rep SAf	18
149.21 3/	-	4/	-	-	-	-	-	-
149.24	44	-1	Japan	43	Taiwan	1	-	-
149.28	687	7	Hong Kong	554	Japan	88	Taiwan	44
Dried prunes (p. 249)								
149.26	165	-30	Taiwan	62	Rumania	57	Chile	22

See footnotes at end of table.

March 1969
1:8

Value of U.S. imports for consumption, by TSUS items included in the individual summaries of this volume, total and from the 3 principal suppliers, 1968

(In thousands of dollars. The dollar value of imports shown is defined generally as the market value in the foreign country and therefore excludes U.S. import duties, freight, and transportation insurance)

Summary title and page; TSUS item	All countries: Amount in 1968	All countries: Percent change from 1967	First supplier: Country	First supplier: Value	Second supplier: Country	Second supplier: Value	Third supplier: Country	Third supplier: Value
Certain fruit mixtures (p. 255)								
150.00 (pt.) 2/	1,381	18	Phil R	709	Japan	425	Australia	198
Alcohol with preserved fruit (p. 261)								
150.50	7/ 1,320	75	Italy	7/ 1,309	W Germ	7/ 11	-	-
Fruit flours and certain fruit pastes and pulps (p. 263)								
152.00 2/	6	-	Ecuador	6	Phil R	5/	-	-
152.05	1	-62	Israel	1	Italy	5/	-	-
152.42	124	-	Spain	91	Turkey	21	Argentina	10
152.62 2/	2	-1	Israel	2	Dom Rep	5/	-	-
152.7440 2/ 3/	643	1/ 4/	Argentina	366	Netherlands	192	Colombia	20
Jellies, jams, marmalades and fruit butters (p. 267)								
153.04	1,342	-14	Canada	907	U King	257	W Germ	54
153.08	8	120	Jamaica	5	Colombia	2	-	-
153.16	774	15	U King	478	Canada	232	Ireland	27
153.24	4	45	U King	3	Belgium	1	-	-
153.28	17	45	Portugal	5	Switzld	4	U King	3
153.32	603	26	Canada	220	U King	215	Switzld	73
Candied fruit (except cherries) (p. 275)								
154.10	35	-1	France	24	Italy	10	Switzld	5/
154.40	115	3	Taiwan	69	Australia	25	Hong Kong	12
154.45 2/	13	78	Taiwan	6	Rep SAf	5	Australia	1
154.50 2/	16	83	France	5	Italy	5	Portugal	4
154.55	562	38	Australia	255	France	254	Switzld	23
154.60	27	-21	France	11	Hong Kong	11	Japan	2
154.90	13	3	France	7	Spain	3	Hong Kong	2

1/ Increase of more than 200 percent.
2/ An item number for products of Cuba of this description is not shown. There have been no imports from Cuba since 1962.
3/ A new item number effective Jan. 1, 1968 as a result of concessions granted in the sixth round of trade negotiations under the GATT concluded in 1967.
4/ Imports estimated.
5/ Less than $500.
6/ Item 149.48 added and the product description for item 149.50 changed effective Nov. 11, 1968, by Public Law 90-564.
7/ Quantity in proof gallons. Value is not reported.

Note.--A dash means no imports in either 1967 or 1968.

OTHER AVAILABLE VOLUMES OF THE SUMMARIES SERIES

Schedule	*Volume*	*Title*
1	1	Animals and Meats
1	2	Fish: Fresh, Chilled, Frozen, or Cured
1	3	Fish Products, Shellfish, and Shellfish Products
1	4	Dairy Products and Birds' Eggs
1	5	Live Plants and Seeds
1	6	Cereal Grains, Malts, Starches, and Animal Feeds
1	7	Vegetables and Edible Nuts
1	9	Sugar, Cocoa, Confectionery, Coffee, Tea and Spices
1	11	Tobacco and Tobacco Products
1	12	Animal and Vegetable Fats and Oils
1	13	Hides, Skins, Leather, Feathers, and Miscellaneous Articles of Animal Origin
2	1	Wood and Related Products I
2	2	Wood and Related Products II
2	3	Paper and Related Products I
3	4	Felts, Batting, Nonwoven Fabrics, Fish Nets, Machinery Belts and Clothing, Hose, Coated Fabrics, and Other Fabrics for Special Purposes
3	5	Textile Furnishings and Apparel
3	6	Cordage, Braids, Elastic Yarns and Fabrics, Trimmings, Packing, Polishing Cloths, Sacks, Labels, Lacings, Rags, and Other Miscellaneous Textile Products
4	2	Inorganic Chemicals I
4	3	Inorganic Chemicals II
4	4	Inorganic Chemicals III
4	6	Organic Chemicals II
4	9	Glue, Gelatin, Aromatic Substances, Toilet Preparations, Surface-Active Agents, Soaps, Dyes, and Tannins
4	10	Pigments, Inks, Paints, and Related Products
4	12	Fatty Substances, Waxes, and Miscellaneous Chemical Products