

U.S. Fruit and Vegetable Availability and Handling Charts



Foreign Agricultural Service
Horticultural and Tropical Products
Division

<http://www.fas.usda.gov/htp>

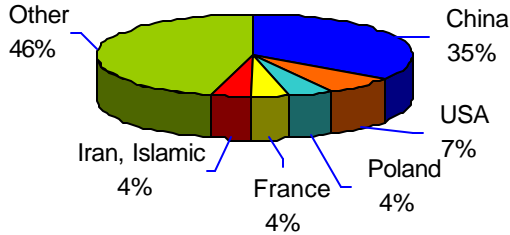
August 2005

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Apple Production

World Apple Production 2004



In Metric Tons	
China	20,503,000
USA	4,290,490
Poland	2,500,000
France	2,400,000
Iran	2,350,000
Other	26,923,452
Total World	58,966,942

Source: Food and Agriculture Association (FAO) of the United Nations

Apple Availability

United States

Varieties	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Braeburn												
Cameo												
Fuji												
Gala												
Golden Delicious												
Granny Smith												
Pink Lady												
Red Delicious												
Empire												
Gala												
Golden Delicious												
Granny Smith												
McIntosh												
Spartan												

Six states account for 85% of the U.S. apple crop: Washington, Michigan, New York, California, Virginia, and Pennsylvania.

Competitors

Countries	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Canada												
Chile												
New Zealand												

Apple Handling

Grades Available
U.S. Grades
U.S. Extra Fancy
U.S. Fancy
U.S. No. 1
U.S. Utility
Combination grades-
Combinations of :
U.S. Extra Fancy and U.S. Fancy
U.S. Fancy and U.S. No. 1
U.S. No 1 and U.S. Utility are permitted when at least 50% of the apples in any lot meet the requirements of the higher grade.

Handling and Storage
Temperature: 32-34° F, 0-1. 1°C
Relative Humidity: 90-95%
Mist: No
Typical Shelf Life: 90-240 days (with refrigeration)
Ethylene producer
Odor-sensitive
Odor producer
Moderately sensitive to freezing injury
Apples are incredibly sensitive. Therefore, do not dump apples into the display and handle carefully to avoid bruising.
Apples that are atmosphere controlled should be refrigerated at the proper temperature at all times to avoid becoming too mealy

Export Packaging
50-lb. field crates
40-45 lb. cartons/boxes, tray packed
40-lb/ bushel baskets/cartons, tray or cell-packed
40-lb. bushel baskets/cartons, loose pack
40-lb. 11/8-bushel cartons, loose pack
40-lb. cartons, 10 4-lb. film bags
40-lb. cartons, 16-8s tray-wrapped
40-lb. Cartons, 8 5-lb bags
38-42-lb. cartons/boxes, loose pack
37-43-lb. cartons, cell-packed
36 lb.-cartons, 12 3-lb. Bags
20 lb 1/2-bushel cartons, loose
3-,5-,6-,7-,8-, 101b-Polyethylene or cello bags
Tri-wall bins
600 lb. Tote bin, 300-lb. Half tote bin

Washington State Grades
Washington Extra Fancy: Washington Fancy-required to be higher in quality than U.S. Extra Fancy and U.S. Fancy.

Quality and Receiving
Avoid fruit with bruises, which result in decay spot. If picked before ripe, flavor will be lost. Over mature apples will be mushy and won't have the crunch of a firm apple. The best fruit is firm with full color and smooth, clean skin.

For more information, please contact FAS' industry partners:

Washington State Apple Commission

2900 Euclid Avenue
Wenatchee, WA 98807-0018
Phone: (509) 663-9600
Fax: (509) 662-5824
www.bestapples.com

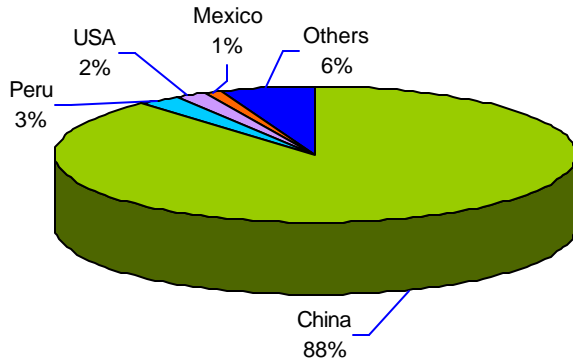
U.S. Apple Export Council

Kristine A. Marceca
Townsend Management, LLC
413 N. 23rd St
Arlington, VA 22207
Phone: (703) 312-0699
Fax: (703) 312-0699

Source: The Packer 2005 Produce Availability and Merchandising Guide & FAS Attaché Reporting

Asparagus Production

World Asparagus Production 2004



In Metric Tons	
China	5,806,200
Peru	186,000
USA	122,020
Mexico	67,247
Others	390,465
Total World	6,571,932

Source: Food and Agriculture Association (FAO) of the United Nations

Asparagus Availability

United States

Varieties	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Dark Green												
California		█	█	█	█	█	█	█	█	█		
Michigan				█	█	█						
Washington					█	█	█					

Competitors

Countries	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Mexico	█	█	█	█		█	█	█	█	█	█	
Chile										█	█	
Peru	█	█	█	█	█	█	█	█	█	█	█	█
Spain		█	█	█	█							

Asparagus Handling

Grades Available
U.S. Grades
No. 1
No. 2
Washington Grades
Washington XF (Extra Fancy)

Export Packaging
30 lb. Pyramid cartons/crates, bunched and loose
28 lb. cartons/crates, bunched
25 lb. lugs/cartons, loose
24-25 lb. cartons, 16 1/2-packages
21 lb. lugs/cartons, loose
20 lb. 1/2-pyramid carton
20 lb. cartons, bunched

Export Packaging
15-17 lb. 1/2 pyramid cartons/crates, loose or bunched
15-lb. cartons, loose or bunched
14-lb. cartons
12-lb. 1/2 cartons
12-13 1/2-lb. 1/3 cartons/crates, bunched
11-lb. cartons/crates

Handling and Storage	
Temperature:	In most cases, asparagus is usually stored for less than 10 days. In the event that the product is to be stored longer than that, store at 35 F to avoid low-temperature damage.
37-41° F, 2.85-5° C	
Relative Humidity: 95-100%	
Mist: Light	
Typical Shelf Life: 10-21 days	
Highly sensitive to freezing injury	

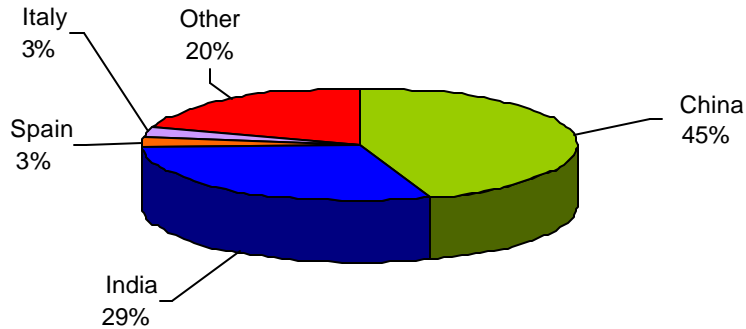
Quality and Receiving
Fresh asparagus will not maintain quality and texture unless low temperatures are preserved. At room temperature, flavor will be lost and the asparagus will soften. High quality asparagus should be firm and fresh, with closed, tight tips and a full green color. The green portion should be tender. To keep asparagus in the highest quality, the stems should be immersed in the water for display upon delivery.

For more information, please contact FAS' industry partners:	
California Asparagus Commission 311 E. Main St., Suite 204 Phone: (209) 474-7581 Fax: (209) 474-9105 www.calasparagus.com	For Additional Information: Attn: Jean Valentine Phone: (925) 838-5454 Fax: (925) 838-2311

Source: The Packer 2005 Produce Availability and Merchandising Guide & FAS Attaché Reporting

Broccoli Production

World Broccoli and Cauliflower Production 2004



In Metric Tons	
China	7,334,500
India	4,800,000
Spain	493,600
Italy	487,391
Other	3,258,634
Total World	16,374,125

Source: Food and Agriculture Association (FAO) of the United Nations

Broccoli Availability

United States

Locations	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Arizona												
California	P	P	P	P	P	P	P	P	P	P	P	P
Texas												

P = Peak

Competitors

Countries	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Canada												

Broccoli Handling

Grades Available
U.S. Fancy
U.S. No. 1
U.S. Combinations
U.S. No. 2

Handling and Storage
Temperature: 32° F, 0° C
Relative Humidity: 95-100%
Mist: Lightly
Typical Shelf Life: bunched 10-14 days, packaged 14-16 days
Ethylene sensitive
Moderately sensitive to freezing injury

Packaging
Bunched: 23-lb. cartons/crates, 14s and 18s
Crowns: 20-lb box, bulk
Consumer Packs: florets, bunch, coleslaw, spears, and stalk cuts.
Value-added Packs: forests – 9 to 18 lb cartons and 8-oz and 1-lb retail packs. Spears – 10, 15, 20 lb loose packed cartons. Florets available in 3-lb cello bags and loose. Coleslaw available in 8-oz and 1 and 5 lb bags. Iceless broccoli is available.

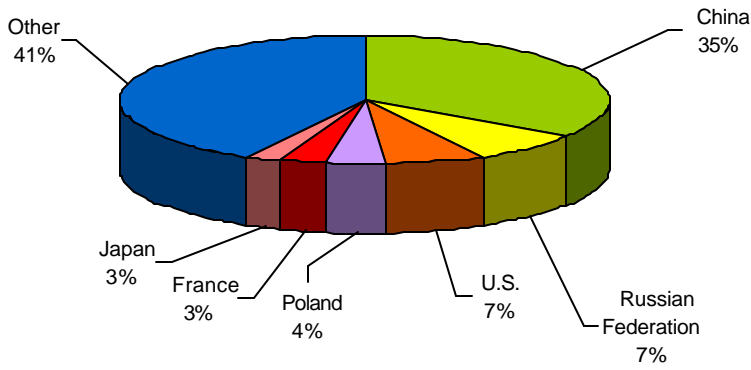
For more information, please contact FAS' industry partners:

Western Growers Association
 PO Box 2130
 Newport Beach, California 92658
 Phone: (949) 885-2267
 Fax: (949) 8639028
www.wga.com

Source: The Packer 2005 Produce Availability and Merchandising Guide & FAS Attaché Reporting

Carrot Production

World Carrot Production 2004



In Metric Tons	
China	8,292,500
Russian Fed.	1,762,040
U.S.A.	1,601,790
Poland	927,900
France	703,218
Japan	660,000
Other	10,024,093
Total World	23,971,541

Source: Food and Agriculture Association (FAO) of the United Nations

Carrot Availability

United States

Locations	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
California	P	P	P	P	P	P	P	P	P	P	P	P
Georgia												
Michigan							P			P	P	
Texas												

P = Peak

Competitors

Countries	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Canada												
Mexico												

Carrot Handling

Grades Available
U.S. extra No. 1
U.S. No. 1
U.S. No-1 jumbo
U.S. No. 2

Handling and Storage
Temperature: 33-36° F, 0.6-1.7° C
Relative Humidity: 98-100%
Mist: Lightly
Shelf Life: 28-180 days
Ethylene sensitive
Odor sensitive
Odor producer

Shipping
Master Cellos
50-lb. table cartons
48-lb. poly bags
25-lb. table poly bags
24 2-lb. poly bags
12 2-lb. poly bags
5 10-lb. poly bags
16 3-lb. poly bags
16 3-lb. poly bags
Bunched: 26-lb. cartons
Baby-peeled
24 1-lb. bags
20 1-lb. bags
12 2-lb. bags
10 2-lb. bags
8 5-lb. bags
4 5-lb. bags
20-2 lb. bags
40 1-lb. bags
72 3-oz bags
50 and 25 lb. ply jumbo
30 12-oz bags
Consumer Packs
1, 2, 3, 5, and 10 lb.-bags

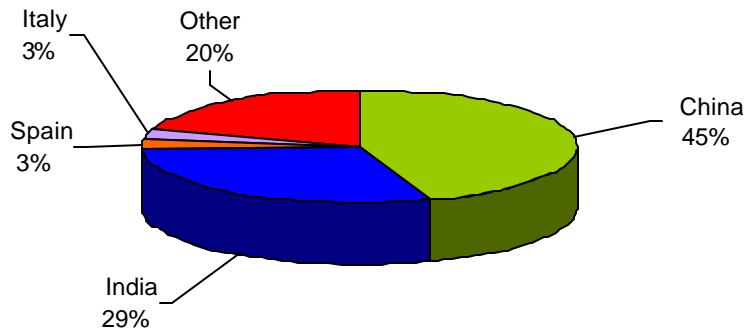
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Source: The Packer 2005 Produce Availability and Merchandising Guide & FAS Attaché Reporting

Cauliflower Production

World Broccoli and Cauliflower Producton 2004



In Metric Tons	
China	7,334,500
India	4,800,000
Spain	493,600
Italy	487,391
Other	3,258,634
Total World	16,374,125

Source: Food and Agriculture Association (FAO) of the United Nations

Cauliflower Availability

United States

Locations	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Arizona												
California	P	P	P	P	P	P	P	P	P	P	P	P
Green Cauliflower												
California	P	P	P	P	P	P	P	P	P	P	P	P

P = Peak

Competitors

Countries	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Canada												
Green Cauliflower												
Canada												

Cauliflower Handling

Grades Available	Handling and Storage	Shipping
U.S. No. 1	Temperature: 32° F, 0° C Relative Humidity: 90-98 percent Mist: lightly Shelf life: 2 to 3 weeks No quality difference between large and small heads if equally mature. Slightly granular appearance is acceptable if heads are not spreading. Store butts down to prevent moisture accumulating on curds.	60-lb. Long Island wire bound crates. 50-lb. Catskill cartons 25 to 30 lb. cartons, 12 and 16 film wrapped trimmed heads

For more information, please contact FAS' industry partners:

Western Growers Association
 PO Box 2130
 Newport Beach, California 92658
 Phone: (949) 885-2267
 Fax: (949) 8639028
www.wga.com

Source: The Packer 2005 Produce Availability and Merchandising Guide & FAS Attaché Reporting

Celery Availability

United States

Locations	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
California	P	P	P	P	P	P	P	P	P	P	P	P
Florida												
Michigan												
Texas												

P = Peak A = Available

Celery Handling

Grades Available	Handling and Storage	Shipping
U.S. Extra No. 1	Temperature: 32 to 36° F, 0 to 1.7° C	50-60 lb. cartons
U.S. No 1	Relative Humidity: 90-95 percent	Hearts
U.S. No. 2	Mist: yes	28-lb. cartons
Not all celery is graded. Ungraded celery is called "unclassified."	Shelf life: 14 – 28 days from harvest. 3 to 5 days in store.	18-lb. cartons
	Odor sensitive	Foodservice packs
	Odor producer	Whole product is packed according to size, 18-48 count. Hearts come in 12, 18 and 24 count. Celery is available diced, sliced, and as sticks in various packs.
	Fresh-cut	
	Store at 34° F, 1.1° C and keep sealed until used.	

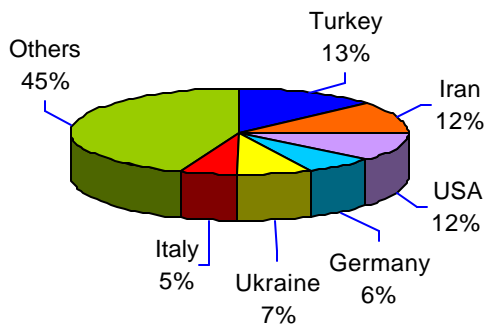
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 Fax: (949) 8639028
www.wga.com

Source: The Packer 2005 Produce Availability and Merchandising Guide & FAS Attaché Reporting

Cherry Production

World Cherry Production 2004



In Metric Tons	
Turkey	255,000
Iran	220,000
USA	220,000
Germany	120,000
Ukraine	140,000
Italy	100,000
Others	841,522
Total World	1,896,522

Source: Food and Agriculture Association (FAO) of the United Nations

Cherry Availability

United States

Varieties	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Bing				CA	CA	CA/NW	NW	NW				
Brooks				CA	CA							
Burlat					CA							
Chelan						NW						
Lambert					CA	CA	NW	NW				
Lapins							NW	NW				
Rainier					CA	CA/NW	NW	NW				
Skeena							NW	NW				
Sweetheart								NW				
Tieton						NW						
Tulare				CA	CA							

CA= California

NW= Idaho, Oregon, Utah, and Washington

Competitors¹

Countries	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Australia												
New Zealand												
Chile												
Europe²												
China/Japan³												

¹The availability months for competitors include all types of cherries produced.

²Europe includes the countries of France, Turkey, Greece, Spain, and Italy.

³China and Japan produce only limited amounts of cherries and do not export them.

Cherry Handling

Grades Available
U.S. No 1
U.S. Commercial

Handling and Storage
Temperature: 32° F, 0° C
Relative Humidity: 90-95%
Mist: No
Typical Shelf Life: 10-21 days
Odor -sensitive
Poly liners should be slit when product is received to eliminate gas buildup and off-flavors. Open the lids of cherry boxes stored in the cooler; good air circulation will slow spoilage.
Cherries should be handled carefully at all stages of production and through the retail level to avoid bruising.
Don't break cherry stems. Cherries with stems have a greater shelf life than those without.

Export Packaging
32-1b. crates, 16 1-quart baskets
20-1b. lugs/cartons (Northwest)
18-1b. lugs/cartons(Calif.)
12-1b. cartons (Northwest)

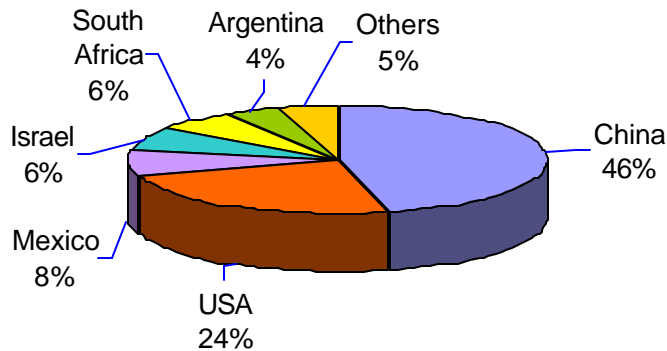
Quality and Receiving
Avoid fruit that is leaky, sticky and shows signs of decay. Immature fruit generally will be hard, smaller, more acidic and dry, with a lighter color than ripe cherries. Over mature fruit will be soft, dull and shriveled
Good quality cherries will be fresh, firm, juicy, well matured, and well colored for the variety. It is normal for Rainier cherries to have some skin discoloration, slight scuffing, or brown spotting and it often indicates high sugar content. Cherries that are mahogany or reddish brown are considered to be the most flavorful.

For more information, please contact FAS' industry partners:		
Northwest Cherry Growers 105 South 18th Street #205 Yakima, Washington 98901 Phone (509) 453-4837 www.nwcherries.com -	California Cherry Advisory Board 33 East Oak Street P.O. Box 877 Lodi, CA 95241 Phone: (209) 368-0685 Fax: (209) 368-4309 www.calcherry.com	

Source: The Packer 2005 Produce Availability and Merchandising Guide & FAS Attaché Reporting

Grapefruit Production

World Grapefruit Production 2004/05



In 1,000 Metric Tons

China	1,724
USA	894
Mexico	310
Israel	239
South Africa	230
Argentina	160
Others	175
Total World	3,732

Source: Food and Agriculture Association (FAO) of the United Nations

Grapefruit Availability

United States

Varieties	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
California & Arizona (Sunkist)	M	M	M	M	M	P	P	P	P	P	M	M
Marsh Ruby (red)												
Marsh Seedless (white)												
Pummelos												
Rio Red (red)												
Ruby (red)												
Star Ruby (red)												
Florida	P	P	P	P	P	M			L	M	P	P
Flame (red)												
Marsh Seedless (white)												
Ruby (red)												
Texas	P	P	M	L	L					L	M	P
Flame (red)												
Henderson (red)												
Ray (red)												
Rio Star (red)												
Ruby (red)												
Star Ruby (red)												

P=Peak M=Moderate L=Low

Competitors

Countries	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Cuba												
Israel												
Mexico												
Turkey												

Grapefruit Handling

Grades Available		Handling and Storage
Florida	Texas and other States	Temperature:
U.S. Fancy	U.S. Fancy	Calif. and Ariz: 50-55° F, 10-12.8° C
U.S. No. 1 Bright	Texas Fancy	Fla. & Texas: 50-60° F, 10-15.8°C
U.S. No. 1	U.S. No. 1 Bright	Relative Humidity: 85-90%
U.S. No. 1 Golden	U.S. No. 1	Mist: No
U.S. No. 1 Bronze	U.S. No. 1 Bronze	Typical Shelf Life: 28-42 days
U.S. No. 1 Russet	U.S. Combination	Moderately sensitive to freezing injury
U.S. No. 2 Bright	Texas Choice	Susceptible to chilling injury
U.S. No. 2	U.S. No. 2	Long storage can cause damage to fruit. Decay and rind breakdown may occur as well as stem-end rot, especially from crops grown in the Gulf States. Florida fruit that has been degreened with ethylene can be handled normally. Lower humidity levels can contribute to rind breakdown.
U.S. No. 2 Russet	U.S. No. 2 Russet	
U.S. No. 3	U.S. No. 3	
California and Arizona		
U.S. No. 2		
U.S. Combination		
U.S. No. 3		

U.S. No. 2
U.S. Combination
U.S. No. 3

Export Packaging
21-2- lb. plain pack cartons/bags/lugs (California)
19 lb. cartons/bags/ lugs (California)
18 lb. cartons/bags/lugs
16 lb. cartons/bags/lugs (California)

Quality and Receiving
Grapefruit should feel heavy. The heavier the grapefruit, the juicier it is. The grapefruit should be firm but should give a little when placing pressure. This ensures the fruit will be juicy and not dry. Select grapefruit with a shiny skin because rough skin indicates dry fruit.

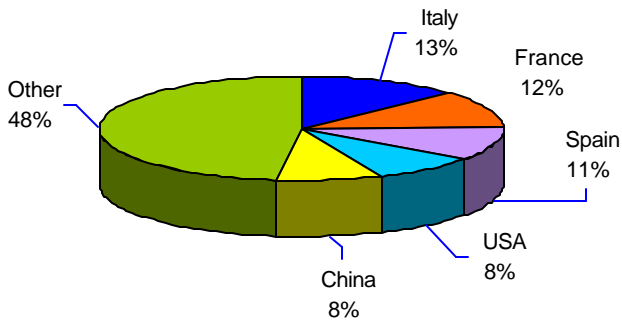
For more information, please contact FAS' industry partners:

<p>Florida Department Of Citrus 1115 E. Memorial Boulevard Lakeland, FL 33802-0148 Mailing Address: P.O. Box 148 Lakeland, FL 33802-0148 Phone: (863) 499-2500 Fax: (863) 499-2548 www.floridajuice.com</p>	<p>Sunkist Growers (Ca. & Az.) 14130 Riverside Drive Sherman Oaks, CA 91423-2392 Mailing Address: P.O. Box 7888 Van Nuys, CA 91409 Phone: (818) 379-7340 Fax: (818) 379-7511 www.sunkist.com</p>
<p>Texas Producer Export Assoc. 901 Business Park Drive, Suite 500 Mission, TX 78572 Phone: (956) 581-8632 Fax: (956) 584-3307 www.texasweet.com</p>	

Source: The Packer 2005 Produce Availability and Merchandising Guide & FAS Attaché Reporting

Grape Production

World Grape Production 2004



In Metric Tons	
Italy	8,400,000
France	7,800,000
Spain	6,901,900
USA	5,509,330
China	5,342,500
Other	31,532,505
Total World	65,486,235

Source: Food and Agriculture Association (FAO) of the United Nations

Grape Availability

United States

Varieties	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Green Grapes												
Calmeria	█								█	█	█	█
Perlette					█	█	█	█				
Sugraones						█	█	█				
Thompson Seedless	█					█	█	█	█	█	█	█
Red Grapes												
Christmas Rose	█							█	█	█	█	█
Crimson Seedless	█	█							█	█	█	█
Emperatriz									█	█	█	█
Emperor										█	█	█
Flame Seedless					█	█	█	█	█	█	█	█
Premium Red								█	█	█	█	█
Red Globe	█					█	█	█	█	█	█	█
Rouge	█								█	█	█	█
Ruby Seedless	█	█						█	█	█	█	█
Black/Blue Grapes												
Exotic						█	█	█	█	█		
Fantasy Seedless						█	█	█	█	█	█	
Niabell								█	█	█		
Ribier								█	█	█	█	█

California produces 97 percent of the fresh table grapes in the United States.

Competitors

Countries	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Chile												
India/China												
South Africa												
Turkey												

Grape Handling

Grades Available
U.S. Extra Fancy Table
U.S. Extra Fancy Export
U.S. Fancy Table
U.S. Fancy Export
U.S. No. 1 Table
U.S. No. 1 Institutional Pack

Quality and Receiving
<p>Grapes that are wrinkled, soft, wilted, shriveled, or leaking should be avoided. Choose grapes that are full in color, plump, and firmly attached to the stem.</p> <p>Green or white grapes are at their best if they have yellow cast or straw color with a bit of amber. Red grapes are at their peak if they are almost fully red in color. The darker varieties should not have any hint of green.</p>

Handling and Storage
Temperature: 30-32° F, (-1) - 0° C
Relative Humidity: 85%
Mist: No
Typical Shelf Life: 56-180 days
Odor Producer
Odor Sensitive
Moderately sensitive to freezing injury.
Minimize shatter by loosening the lid of the lug. Hold the lid on top while turning the lug upside down. Carefully remove the lug. The grapes will stay in place if the lug is lined. The grapes will fall freely after the liner is removed.

Export Packaging
21-2-lb. plain pack cartons/bags/lugs (California.)
19 lb. cartons /bags/lugs (California.)
18 lb. cartons/bags/lugs
16 lb. cartons/bags/lugs (California)

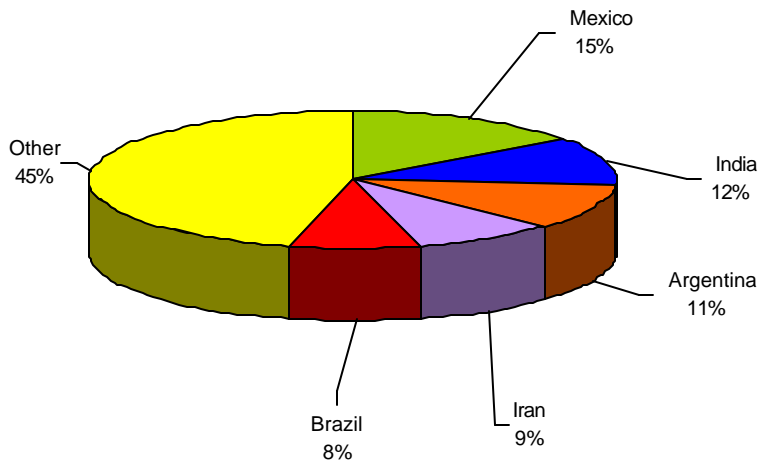
For more information, please contact FAS' industry partners:

<p>California Table Grape Commission 392 W. Fallbrook Ave. Suite 101 Fresno, California 93729-7320</p>	<p>Mailing Address: P.O. Box 27320 Fresno, CA 93729-7320 Phone: (559) 447-8350 Fax: (559) 447-9184 www.tablegrape.com</p>
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Source: The Packer 2005 Produce Availability and Merchandising Guide & FAS Attaché Reporting

Lemon Production

World Lemon and Lime Producton 2004



In Metric Tons	
Mexico	1,824,890
India	1,420,000
Argentina	1,300,000
Iran	1,100,000
Brazil	1,000,000
Other	5,674,605
Total World	12,319,495

Source: Food and Agriculture Association (FAO) of the United Nations

Lemon Availability

United States

Locations	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Arizona												
California	P	P	P	P	P	P	P	P	P	P	P	P

P = Peak

Competitors

Locations	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Chile												
Spain												

Lemon Handling

Grades Available	Handling and Storage	Shipping
U.S. No. 1	Temperature: 45-48° F, 7.2-8.9° C	42-lb. 4/5 bushel cartons
U.S. Export No. 1	Relative Humidity: 85-90 percent	38-lb. cartons (Arizona and California)
U.S. combination	Mist: lightly	36-lb. cartons/crates (Chile, Spain)
U.S. No. 2	Shelf life: several weeks if properly refrigerated	
	Odor producers	
	Highly sensitive to freezing injury	
	Susceptible to chilling injury	
	Lemons can store for 1-5 months	

Sunkist Growers (Calif. & Arizona)

14130 Riverside Drive
 Sherman Oaks, CA 91423-2392
 Mailing Address:
 P.O. Box 7888
 Van Nuys, CA 91409-7888
 Phone: (818) 379-7340
 Fax (818) 379-7492

www.sunkist.com

California Citrus Mutual

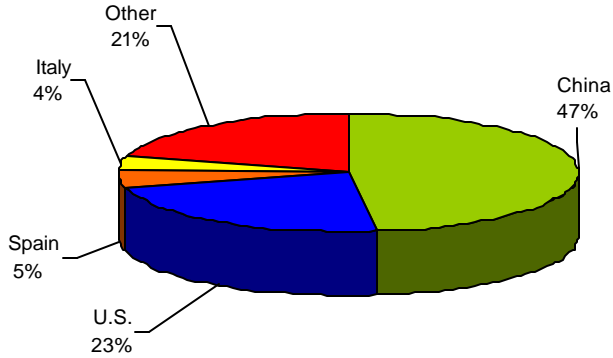
512 North Kaweah Avenue;
 Exeter, CA 93221
 Phone: (559) 592-3790
 Fax: (559) 592-3798

<http://www.cacitrusmutual.com>

Source: The Packer 2005 Produce Availability and Merchandising Guide & FAS Attaché Reporting

Lettuce Production

World Lettuce Production 2004



In Metric Tons	
China	10,505,000
U.S.A.	4,976,880
Spain	1,044,200
Italy	830,580
Other	4,528,737
Total World	21,885,397

Source: Food and Agriculture Association (FAO) of the United Nations

Lettuce Availability

United States

Location	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Arizona	P	P	P								P	P
California	P	P	P	P	P	P	P		P	P	P	P
Colorado												
Florida												
New Mexico												
Washington												
Boston/Bibb. Butterhead												
Arizona	P	P	P									
California	P	P	P	P	P	P	P	P	P	P	P	P
Florida												
Leaf												
Arizona	P	P	P									
California	P	P	P	P	P	P	P	P	P	P	P	P
Florida												
Washington												

P = Peak

Competitors

Locations	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Mexico												
Boston/Bibb/Butterhead												
Leaf												

Lettuce Handling

Grades Available
U.S. Fancy
U.S. No. 1
U.S. No. 2
Greenhouse leaf lettuce is subject to the grades U.S. fancy and U.S. no. 1

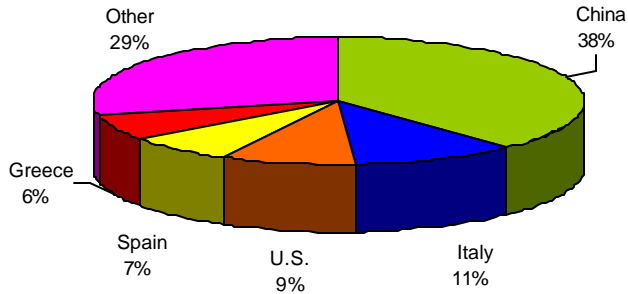
Handling and Storage
Temperature: 34-36° F, 1.1-2.2° C
Relative Humidity: 90-100 percent
Mist: lightly
Shelf life: 14 to 21 days; fresh cut, 14 days
Highly sensitive to freezing injury

Shipping
Iceberg
50-lb. cartons, 18, 24, 30 count
30-lb. cartons
20-lb. cartons, 15 and 16 count
Boston
22-lb. 1.5 bushel crates
20-lb. carton/crates, 24-count
10-lb. flat cartons/crates
5-lb. baskets/cartons, 12-quart
Bibb
10-lb. flat cartons/crates
5-lb. baskets/cartons, 12-quart
Loose Leaf
25-lb. carton/crates
20-lb. 4/5 bushel crates
14-lb. 1 1/9 bushel crates
10-lb. basket/cartons, 24-quart
3-lb. cartons
2-lb. cartons

Source: The Packer 2005 Produce Availability and Merchandising Guide & FAS Attaché Reporting

Nectarine Production

World Peach and Nectarine Production 2004



In Metric Tons	
China	5,832,000
Italy	1,672,609
U.S.A.	1,390,000
Spain	1,106,900
Greece	955,000
Other	4,418,044
Total World	15,374,553

Source: Food and Agriculture Association (FAO) of the United Nations

Nectarine Availability

United States

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
California							P	P	P	P		
Washington							P	P				

P = Peak

Competitors

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Chile	P	P										

Nectarine Handling

Grades Available
U.S. Fancy
U.S. Extra No1
U.S. No 1
U.S. No2

Handling and Storage
Temperature: 31-32° F, -0.6-0° C
Relative Humidity: 90-95 percent
Mist: No
Shelf life: 14 to 21 days
Holding nectarines at room temperature for two to three days is usually enough to complete the ripening process. Ripening at 65°F (18.3°C) is optimum, but a range of 51-77°F (10.6-25°C) is safe.
Susceptible to dehydration. Store and display away from drafts.
Russeting or staining of skin does not detract from internal quality.

Shipping
5-lb. cartons, loose
25-lb. cartons or ½-bushel cartons, loose
22-lb. cartons/lugs, 2-layer tray pack
18-lb. cartons/lugs, 2-layer tray-pack (Chile)
9-lb. cartons, 1 layer
Consumer Packs
Small-sized nectarines packed in bags, commonly 2 lbs in weight.

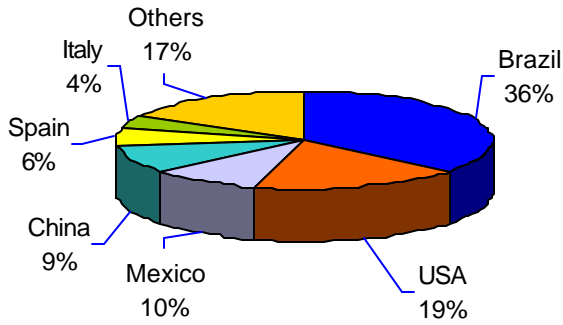
For more information, please contact FAS' industry partners:

California Tree Fruit Agreement
 PO Box 968
 975 "I" Street
 Reedley, CA 93654-0968
 Phone: 800-636-8260
 Fax: 559-638-8842

Source: The Packer 2005 Produce Availability and Merchandising Guide & FAS Attaché Reporting

Orange Production

World Orange Production 2004/05



In 1,000 Metric Tons	
Calendar Year	2004
Brazil	16,402
USA	8,535
Mexico	4,400
China	4,200
Spain	2,700
Italy	1,900
Other	7,753
Total World	45,890

Source: Food and Agriculture Association (FAO) of the United Nations

Orange Availability

United States

Varieties	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
California & Arizona (Sunkist)												
Moro												
Navel	P	P	P									
Red Navel												
Valencia					P	P	P					
Florida												
Hamlin												
Navel												
Red Navel												
Pineapple												
Valencia												
Texas												
Hamlin												
Navel	P											
Pineapple												
Valencia												

P=Peak

Other Producers

Countries	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Australia												
Mexico												

Orange Handling

Grades Available
U.S. Fancy
U.S. No. 1
U.S. No. 1 Bright
U.S. No. 1 Golden
U.S. No. 1 Bronze
U.S. No. 1 Russet
U.S. Combination
U.S. No. 2
U.S. No. 2 Bright
U.S. No. 2 Russet
U.S. No. 3
Texas Choice
Quality and Receiving
Good quality product should be firm, heavy for its size, well colored, and reasonably fine-textured for the variety. Florida and Texas oranges frequently are subject to russetting. However, quality is not affected. Avoid oranges that are light, puffy, or spongy because they lack juice. Soft surface areas that are water-soaked in appearance and may break under slight pressure indicate decay. Also, age or injury may cause fruit to be wilted, shriveled, or flabby. The seedier the orange, the less edible pulp and juice it has.

Handling and Storage
Temperature:
Florida: 32-34° F, 0-1.1° C
California : 45-48° F, 7.2-8.9° C
Arizona & Texas: 32-48° F, 0-8.9° C
Relative Humidity: 85-90%
Mist: No
Typical Shelf Life:
Arizona & California: 21-56 days
Florida, Texas: 56-84 days (with proper refrigeration)
Odor producer
Moderately sensitive to freezing injury
Susceptible to chilling injury
Early Florida oranges are not stored except as relates to shipping. Valencias can be stored to some extent; navels are kept only as needed to allow orderly marketing

Export Packaging
50-lb. cartons, 5 10-lb. film bags
48-lb. cartons, 6 8-lb. film bags
43-lb. 4/5-bushel cartons/crates
40-lb. 7/10-bushel cartons (Texas)
40-lb. cartons, 8 5-lb. Film bags
38-lb. cartons (Ariz, Calif)
4 10-lb. bags
58-lb. bags
10 4-lb. bags

For more information, please contact FAS' industry partners:

Sunkist Growers (Calif. & Arizona)

14130 Riverside Drive
 Sherman Oaks, CA 91423-2392
 Mailing Address:
 P.O. Box 7888
 Van Nuys, CA 91409-7888
 Phone: (818) 379-7340
 Fax (818) 379-7492

www.sunkist.com

Texas Produce Export Association

901 Business Park Dr., Suite 500
 Mission, TX 78572
 Phone: (956) 581-8632
 Fax: (956) 584-3307

www.texasweet.com

Florida Department of Citrus

1115 E. Memorial
 Boulevard
 Lakeland, FL 33802-0148
 Mailing Address:
 P.O. Box 148
 Lakeland, FL 33802-0148
 Phone: (863) 499-2500
 Fax: (863) 499-2548

www.floridajuice.com

California Citrus Mutual

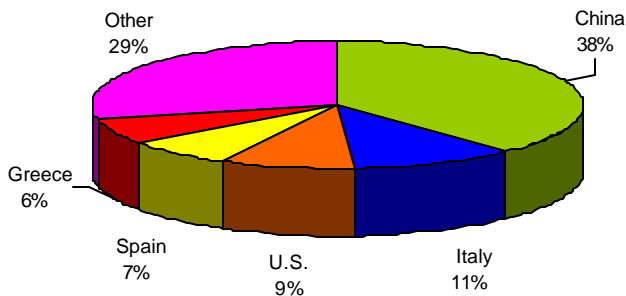
512 North Kaweah Avenue;
 Exeter, CA 93221
 Phone: (559) 592-3790
 Fax: (559) 592-3798

<http://www.cacitrusmutual.com>

Source: The Packer 2005 Produce Availability and Merchandising Guide & FAS Attaché Reporting

Peach Production

World Peach and Nectarine Production 2004



In Metric Tons	
China	5,832,000
Italy	1,672,609
U.S.	1,390,000
Spain	1,106,900
Greece	955,000
Other	4,418,044
Total World	15,374,553

Peach Availability

United States

Location	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
California				A	A	P	P	P	P	A	A	
Georgia				A	A	P	P	A	A			
Idaho								A	A			
Michigan							A	P	A			
New Jersey							A	P	A			
South Carolina					A	P	P	A	A			
Washington							A	A	P	A		

P = Peak A = Available

Peach Handling

Grades Available
U.S. Fancy
U.S. extra No. 1
U.S. No. 1
U.S. No. 2

Handling and Storage
Temperature: shipping; 32-34° F, 0-1.1° C; receiving point 51-77°F, 10.6-25°C
Relative Humidity: 90-95 percent
Mist: No
Shelf life: 14–21 days
Ethylene producer
Highly sensitive to freezing

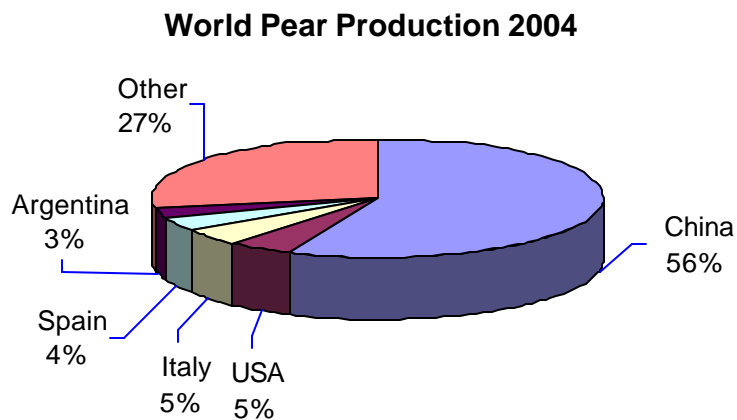
Shipping
38-lb. ¾ bushel cartons/ crates
35-lb. cartons
26-lb. cartons, loose
25-lb. ½ bushel cartons/ crates
22-lb. cartons, 2-layer tray pack
18-lb. cartons/lugs, 2-layer (Chile)
11-lb. crates/flats, 1-layer tray pack
10-lb. cartons
9-lb. cartons, 1-layer

For more information, please contact FAS' industry partners:

California Tree Fruit Agreement
 PO Box 968
 975 "I" Street
 Reedley, CA 93654-0968
 Phone: 800-636-8260
 Fax: 559-638-8842

Source: The Packer 2005 Produce Availability and Merchandising Guide & FAS Attaché Reporting

Pear Production



In Metric Tons	
China	10,120,000
USA	823,760
Italy	820,000
Spain	656,500
Argentina	509,749
Other	4,979,487
World Total	17,909,496

Source: Food and Agriculture Association (FAO) of the United Nations

Pear Availability

United States

Varieties	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
California Varieties												
Bartlett ¹												
Northwest ²												
Green Anjou												
Red Anjou												
Red Bartlett												
Yellow Bartlett												
Bosc												
Comice												
Forelle												
Seckel ¹												

¹ Bartlett pears are known as Williams pears outside the United States.

² The Northwest includes the states of Oregon and Washington.

Competitors

Countries	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Argentina												
Chile												
South Africa												

Pear Handling

Grades Available

U.S. Grades
Summer, fall, and winter pears:
U.S. No. 1
U.S. Combination
U.S. No. 2
Northwest Grades
Extra Fancy
U.S. No. 1
U.S. No. 2

Quality and Receiving

Scars and other minor blemishes on the skin are normal and will not affect quality. Bartletts will turn yellow and give off an aroma when ripe. Winter pears do not change color and pressure should be applied with the thumb to verify ripeness. Retailers can cover pallets of green pears with canvas, holding in heat and gas without causing the fruit to deteriorate.

Handling and Storage

Temperatures:
Ripe: 32° F, 0° C
To ripen: 60-70° F, 15.6-21.1° C
Relative Humidity: 90-95%
Mist: No
Typical Shelf Life: 60-90 days
Ethylene producer
Odor-sensitive
Odor producer
Moderately sensitive to freezing injury.
The best flavor and texture develop when pears are ripened off the tree. They are picked unripe, but mature. Fruit allowed to ripen on the tree develops a coarse, woody, or gritty texture.
When ripened, avoid excessive heat. Temperatures above 80 F (26.7 C) can cause damage to flavor and appearance

Export Packaging

48-lb. bushel baskets/cartons/crates
46-lb. 4/5 -bushel boxes/cartons (Calif.)
44-lb. 4/5 -bushel boxes/cartons (Northwest).
40-lb. boxes/cartons
36-lb. cartons
28-lb. cartons
23-lb. 1/2 cartons/lugs (Calif./Northwest)
14-lb. cartons

For more information, please contact FAS' industry partners:

California Pear Advisory Board

1521 I Street
 Sacramento, CA 95814
 Phone: (916) 441-0432
 Fax: (916) 446-1063

www.calpear.com

Pear Bureau Northwest

4382 SE International Way
 Suite A
 Milwaukie, OR 97269-2026

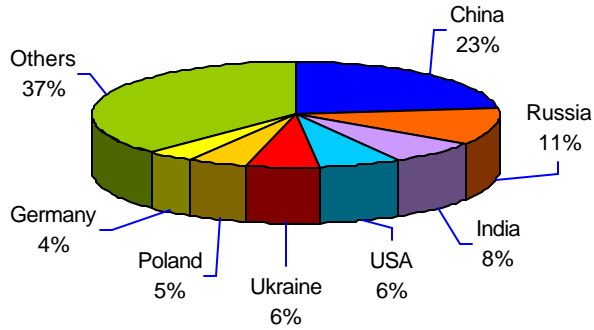
Phone: (503) 652-9720
 Fax: (503) 652-9721

<http://usapears.com>

Source: The Packer 2005 Produce Availability and Merchandising Guide & FAS Attaché Reporting

Potato Production

World Potato Production 2004



In Metric Tons	
China	75,048,000
Russia	37,000,000
India	25,000,000
USA	20,419,280
Ukraine	19,450,000
Poland	15,000,000
Germany	12,991,076
Other	123,092,580
Total World	328,865,936

Source: Food and Agriculture Association (FAO) of the United Nations

Potato Availability

United States

Varieties	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Russets												
Yellows												
Reds												
Whites												

Competitors

Countries	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Australia												
Canada												
Netherlands												
New Zealand												

Potato Handling

Grades Available

U.S. Extra No. 1
U.S. No. 1
U.S. Commercial
U.S. No. 2

Quality and Receiving

Avoid potatoes with wrinkled or wilted skins, cut surfaces, soft dark areas, and those with a green appearance. Potatoes should not be sprouting. The potatoes with good color and few holes will be best in quality. For Russet Burbanks, seek out potatoes with net-textured skin, oval shape, and a russet brown color. Select potatoes that are firm, smooth, and fairly clean. Those with more irregular shapes will produce more waste when peeled

Handling and Storage

45-50° F, 7.2-10° C (temperature). Avoid repeated changes in storage temperatures.
Relative Humidity: 90%
Mist: None
Typical Shelf Life: 30 days
Highly sensitive to freezing injury.
Susceptible to chilling injury.
Will transfer and absorb flavors. Do not display near pears, onions or fresh garlic.
Avoid exposure to light. 75% of the fall crop is usually stored in farm or commercial warehouses. Early and summer harvested potatoes are not usually stored long term.
When using a sprout inhibitor, a temperature of 45° F (7.2° C) is required. Storing at below 40° F (4.4° C) for prolonged time can cause the potatoes to develop a sweet flavor and blacken when cooked, giving the consumer a bad experience not knowing if it is okay to eat this blackened part.
Warmer temperatures induce sprouting and shriveling. Sprouted potatoes can still be used as long as the sprouts are removed and the potatoes are peeled.

Export Packaging

(including table, shipper, and seed)
100-lb. sacks
50-lb. carton/sacks
50-lb. baled, 5 10-1b, or 10-5-1b.
Most common retail sizes are 60-, 70-, 80-, 90-, and 100-count cartons.

For more information, please contact FAS' industry partners:

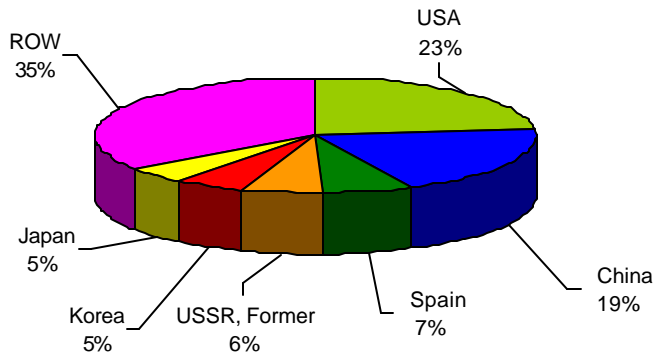
National Potato Promotion Board

7555 East Hampden Avenue
 Building #1, Suite 412
 Denver, CO 80231
 Phone: (303) 369-7783
 Fax: (303) 369-7718
www.uspotatoes.com

Source: The Packer 2005 Produce Availability and Merchandising Guide & US Potato Board

Strawberry Production

World Strawberry Production 2004



In Metric Tons	
USA	1,004,110
China	840,000
Spain	286,300
USSR, Former	273,000
Korea	210,000
Japan	205,000
ROW	1,500,814

Source: Food and Agriculture Association (FAO) of the United Nations & FAS Attaché Reporting

Strawberry Availability

United States

Locations	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
California			P	P	P	P	P	P	P			
Florida		P	P									
North Carolina												

P= Peak

Competitors

Countries	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Canada												
Chile												
Italy												
Japan												
Mexico												
Poland												
Spain												

Strawberry Handling

Grades Available
U.S. No. 1
U.S. Combination
U.S. No. 2

Handling and Storage
Temperature: 32-34° F, 0° C
Relative Humidity: 90-95%
Mist: No
Typical shelf life: 5-7 days
Highly sensitive to freezing injury
Brief storage is absolutely necessary for maintaining quality product. After a few day in storage, strawberries will begin to lose coloring and flavor and may shrivel.
Strawberries are perishable and require careful handling. They must be kept cold at all times. Do not wash strawberries for display, moisture causes them to break down.

Export Packaging
12 lb. flats, 12 1-pint containers
12 lb. flats, 6 quarts
12 10-oz clamshells
12 8-oz clamshells
12 8.8-oz clamshells
8.8-oz. long stem clamshells
4 16-oz. long stem clamshells
9 lb. crates, 8 16-oz. clamshells
5 lb. 1/2 trays
4 2-lb. clamshells

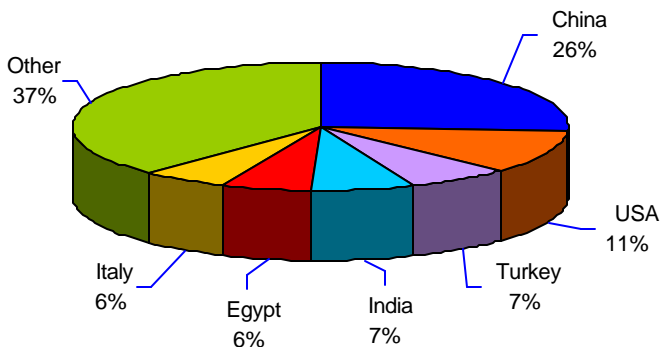
Quality and Receiving
Quality characteristics are indicated by fresh and clean berries. Look for berries with bright and solid red coloring with very little green or white. Select berries with caps in place and no mold, moisture or damage on the berries.

For more information, please contact FAS' industry partners:	
California Strawberry Commission 41 Hangar Way Watsonville, CA 95077 Phone (831) 724-1301 Fax: (831) 724-5973 -	For Additional information: JEVCO Jean Valentine Phone: (925) 838-5454 Fax: (925) 838-2311 Email: jevco@aol.com

Source: The Packer 2005 Produce Availability and Merchandising Guide & FAS Attaché Reporting

Tomato Production

World Tomato Production 2004



In Metric Tons	
China	30,142,040
USA	12,400,000
Turkey	8,000,000
India	7,600,000
Egypt	6,780,000
Italy	6,500,000
Others	44,528,811
Total World	115,950,851

Source: Food and Agriculture Association (FAO) of the United Nations

Tomato Availability

United States

States	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
California						P	P	P	P	P		
Florida							P			P		
Michigan												
North Carolina												
South Carolina						P						
Virginia												

P= Peak

Tomatoes are available in the following types: round/globe, vine-ripe/cluster, Roma, cherry, grape, greenhouse, and hydroponic.

Most states grow tomatoes, but California and Florida provide about 90% of the nation's supplies.

Competitors

Countries	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
Canada												
Mexico	P	P	P	P	P	P						
Europe												

Source: The Packer 2005 Produce Availability and Merchandising Guide & FAS Attaché Reporting

Tomato Handling

Grades Available
Fresh Tomatoes
U.S. No. 1
U.S.
Combination
U.S. No. 2
U.S. No. 3
Greenhouse
U.S. No. 1
U.S. No. 2

Handling and Storage
Temperature:
Mature-green or pink; 62-68° F, 16.7- 20. 16° C
Relative Humidity: 85-95%
Mist: No
Typical Shelf Life:
Mature-green : 21-28 days
Pink: 7-14 days
Do not refrigerate
Highly sensitive to freezing injury
Susceptible to chilling injury
Tomatoes should be handled extremely delicately to maintain good tomato quality. Bruising will cause the tomato to damage more quickly. Do not stack more than two levels high and keep the product stem end up to protect tomato shoulders.

Export Packaging
25-lb. cartons (loose)
22-lb. flats/cartons
3-layer lugs
2-layer lugs
Cherry and Grape
12 1-pint baskets
Green
10-, 20-, and 25- lb. cartons (loose)
Plum or Roma
25-lb. cartons (loose)
Greenhouse
15-lb. flats (1-layer)
7-kilo flats (1-layer)

Quality and Receiving
The best tomatoes should be firm, smooth, and full in color. The tomato should also weigh heavy for its size. Choose tomatoes that are mature but not overripe and have a good shape. Scars near to the blossom end will not deteriorate flavor. Avoid puffy or watery tomatoes.

For more information, please contact FAS' industry partners:	
California Tomato Commission 1625 E. Shaw Ave., Suite 106 Fresno, CA 93710 Phone: (559) 230-0116 Fax: (559) 230-0635 www.tomato.org	Florida Tomato Committee 4401 East Colonial Drive Orlando, FL 32814 Mailing Address: P.O. Box 140635 Orlando, FL 32814 Phone: (407) 894-3071 Fax : (407) 898-4296 www.floridatomatoes.org

Source: The Packer 2005 Produce Availability and Merchandising Guide & FAS Attaché Reporting