

RESEARCH PAPER: 2006-9

ARGENTINA GRAPEFRUIT PRODUCTION, UTILIZATION AND TRADE

BY

Hyeyoung Kim

Graduate Research Assistant

FLORIDA DEPARTMENT OF CITRUS

Economic and Market Research Department

P.O. Box 110249

Gainesville, Florida 32611-2049 USA

Phone: 352-392-1874

Fax: 352-392-8634

Email: kim1978@ufl.edu

www.floridajuice.com

Argentina Grapefruit Production, Utilization and Trade^{*}

This report provides production, utilization and trade data with respect to Argentina's grapefruit industry.

Based on data from the Food and Agriculture Organization of the United Nation (FAO), even though harvested area of Argentina grapefruit has been increased from 10,390 hectares to 12,000 hectares between 1991 and 2005, production decreased from 203,900 metric tons (MT) to 170,000 MT (Table 1). Average production for 2001-2005 was 185,680 MT(metric tons) or 4.8 million 85-pound boxes.

Argentina's share of world grapefruit production has increased from 4.1% in 1990 to 4.6% in 2005, based on the FAO data (Table 2). In 2005, Argentina was the seventh largest grapefruit producer in the world, following the U.S., China, Mexico, Israel, Greece and South Africa.

Table 3a shows Argentina's grapefruit utilization in metric tons and percentages of its total supply. Table 3b shows Argentina's grapefruit utilization relative to world utilization, based on USDA data. Fresh grapefruit exports represent the 20% of Argentina's grapefruit supply. Processed grapefruit has increased for 31.8% to 46.7% from 1991-92 to 2005-06. Average share of Argentina's processed grapefruit was 49.1% of supply for the period from 2001-02 through 2005-06. Argentina's average share of the world's fresh grapefruit exports was 4.1% in for the period from 2001-02 to 2005-06 and average share of the world's processed grapefruit was 7.0% during the same period.

For comparison, U.S. grapefruit utilization relative to the world's utilization is shown in Table 4a and 4b. The Appendix provides additional grapefruit utilization for selected countries.

Based on FAO data, Argentina's fresh grapefruit exports has decreased from 45,881 MT in 1990 to 17,597 MT in 2000 and then increased to 30,345 MT in 2004. Argentina's grapefruit

* Prepared by Hyeyoung Kim, a research assistant of the Food and Resource Economics Department, University of Florida, FDOC-EMRD Staff Report # 2006-16, December 2006.

juice concentrated also has decreased from 1990 until 2000, then increased to 3,071 MT in 2004 (Table 5).

Table 6 shows fresh grapefruit imports into the European Union (E.U.) by country using the data provided by Global Trade Information Services, Inc. (World Trade Atlas). Argentina's share of the E.U. market ranged from 3.7% to 8.7% over the period from 1997-98 to 2004-05, while the U.S. share ranged from 24.8% to 33.7% from 1997-98 to 2003-04, before decreasing to 17.2% in the hurricane-impacted season of 2004-05. The country with the strongest growth over this period was Turkey with its share of the E.U. market increasing from 4.2% in 1997-98 to 10.4% in 2004-05.

Measured by volume, Argentina's fresh grapefruit exports to the E.U. have declined somewhat since 1997-98 and the volume of U.S. fresh grapefruit exports to the E.U. also declined from 1997-98 to 1999-00, before leveling off for the next several years and then declining again in 2004-05.

Argentina's share of Japan's fresh grapefruit market was low (Table 7). The U.S. share of the Japan market decreased from 89.0% in 1994-95 to 48.7% in 2004-05 and then increased to 56.2% in 2005-06.

Argentina's share of the Canadian fresh grapefruit market increased from nothing in 1995-96 to 1.4% in 2000-01 and then declined 0.6% in 2005-06, while the U.S. share decreased from 98.1% to 78.0% over the same period (Table 8).

With Argentina's grapefruit production and fresh grapefruit exports being counter-seasonal to production and exports in the U.S., competition between Argentina and U.S. grapefruit in the E.U. market occurs largely in May (Table 9). Most of Florida's offshore, as well as total, fresh grapefruit shipments occur from October through April (see, e.g., "Florida Fresh Citrus Shipments, 2004-05 Annual Report", and earlier-year reports, by the Florida Department of Citrus, Economic and Market Research Department (http://www.floridajuice.com/user_upload/files/fsann200_4325837d9b8bf.pdf)). Thus, Florida and Argentina grapefruit does not tend to directly compete with each other. Argentina exported grapefruit to the U.S. in 2002-03 and 2004-05 (Table 10).

Argentina's share of the E.U. GJ market measured in dollars has been increasing from 0.4% in 1997-98 to 2.8% in 2003-04 and then decreased in 2.1% in 2004-05, while the U.S. share ranged from 29.4% to 37.2% from 1999-00 to 2003-04, before decreasing to 21.7% in 2004-05 (Table 11). In the Japan GJ market, Argentina's share was 0.4% at first in 2004-05 while U.S. has decreased from 85% in 1994-95 to 36.1% in 2004-05 (Table 12). Argentina exports little GJ to Canada (Table 13).

The grapefruit tree population in Argentina is 3.1 million with 3.0 million bearing trees and 0.1 million non-bearing trees. In the last several years, the non-bearing trees have represented about 3.2% of the tree population, compared to 12.0 in 2000. The relatively low percentage of Argentina's tree population in the non-bearing category suggests decline in the future production.

Table 1.Argentina Grapefruit and pomelo Area, Yields and Production.

year	Area harvested HA	Yield per hectare MT/HA	Production MT
1990	9,100	18.310	166,580
1991	10,390	19.620	203,900
1992	9,300	20.620	191,900
1993	10,030	19.590	196,540
1994	11,540	19.820	228,670
1995	9,530	20.550	195,920
1996	9,600	17.380	166,780
1997	9,440	24.660	232,770
1998	9,340	23.130	216,070
1999	10,750	19.100	205,270
2000	11,700	18.620	217,910
2001	12,000	16.620	199,490
2002	12,000	17.060	204,750
2003	12,000	15.350	184,160
2004	12,000	14.170	170,000
2005	12,000	14.167	170,000
Annual Growth Rate			
90-95	0.9%	2.3%	3.3%
95-00	4.2%	-2.0%	2.2%
00-05	0.5%	-5.3%	-4.8%

Source: FAOSTAT(<http://faostat.fao.org/site/567/default.aspx>)

Table 2. World Grapefruit Production

	Argentina	China	Cuba	Greece	Israel	Mexico	South Africa	Turkey	U. S.	Other	World
-----1,000 Metric Tons-----											
1990	167	130	331	5	404	107	101	33	1,794	987	4,060
1991	204	164	272	7	379	98	113	42	2,047	955	4,280
1992	192	153	326	8	336	107	102	40	2,018	984	4,266
1993	197	195	248	8	413	112	89	48	2,532	1,016	4,858
1994	229	190	235	7	338	137	120	54	2,414	981	4,703
1995	196	247	271	7	404	161	128	65	2,642	1,019	5,140
1996	167	246	365	6	379	246	158	75	2,466	1,000	5,108
1997	233	276	306	7	435	222	155	55	2,617	977	5,284
1998	216	254	338	7	377	168	196	100	2,352	951	4,960
1999	205	310	261	6	372	211	212	140	2,280	999	4,997
2000	218	268	444	7	246	263	268	130	2,506	984	5,334
2001	199	323	302	8	330	320	233	135	2,233	985	5,069
2002	205	357	137	8	252	269	268	125	2,199	1,005	4,825
2003	184	401	228	7	256	258	256	135	1,872	999	4,595
2004	170	433	225	7	236	260	233	135	1,964	1,014	4,677
2005	170	443	226	8	264	265	212	150	914	1,023	3,675
-----% of World-----											
1990	4.1%	3.2%	8.2%	0.1%	10.0%	2.6%	2.5%	0.8%	44.2%	24.3%	100.0%
1991	4.8%	3.8%	6.3%	0.2%	8.9%	2.3%	2.6%	1.0%	47.8%	22.3%	100.0%
1992	4.5%	3.6%	7.6%	0.2%	7.9%	2.5%	2.4%	0.9%	47.3%	23.1%	100.0%
1993	4.0%	4.0%	5.1%	0.2%	8.5%	2.3%	1.8%	1.0%	52.1%	20.9%	100.0%
1994	4.9%	4.0%	5.0%	0.1%	7.2%	2.9%	2.6%	1.1%	51.3%	20.9%	100.0%
1995	3.8%	4.8%	5.3%	0.1%	7.9%	3.1%	2.5%	1.3%	51.4%	19.8%	100.0%
1996	3.3%	4.8%	7.1%	0.1%	7.4%	4.8%	3.1%	1.5%	48.3%	19.6%	100.0%
1997	4.4%	5.2%	5.8%	0.1%	8.2%	4.2%	2.9%	1.0%	49.5%	18.5%	100.0%
1998	4.4%	5.1%	6.8%	0.1%	7.6%	3.4%	4.0%	2.0%	47.4%	19.2%	100.0%
1999	4.1%	6.2%	5.2%	0.1%	7.4%	4.2%	4.2%	2.8%	45.6%	20.0%	100.0%
2000	4.1%	5.0%	8.3%	0.1%	4.6%	4.9%	5.0%	2.4%	47.0%	18.5%	100.0%
2001	3.9%	6.4%	6.0%	0.1%	6.5%	6.3%	4.6%	2.7%	44.1%	19.4%	100.0%
2002	4.2%	7.4%	2.8%	0.2%	5.2%	5.6%	5.6%	2.6%	45.6%	20.8%	100.0%
2003	4.0%	8.7%	5.0%	0.2%	5.6%	5.6%	5.6%	2.9%	40.7%	21.7%	100.0%
2004	3.6%	9.3%	4.8%	0.1%	5.0%	5.6%	5.0%	2.9%	42.0%	21.7%	100.0%
2005	4.6%	12.1%	6.1%	0.2%	7.2%	7.2%	5.8%	4.1%	24.9%	27.8%	100.0%

Source: FAOSTAT(<http://faostat.fao.org/site/567/DesktopDefault.aspx?PageID=567>)

Table 3a. Argentina Grapefruit: Production, Supply and Distribution.

Year	Production	Imports	Total Supply	Exports	Fresh Domestic	Processed
-----1,000 Metric Tons-----						
1991/1992	170	3	173	46	72	55
1992/1993	177	5	182	35	72	75
1993/1994	195	6	201	26	111	64
1994/1995	208	3	211	37	135	39
1995/1996	216	8	224	34	157	33
1996/1997	229	6	235	30	167	38
1997/1998	229	6	235	30	167	38
1998/1999	178	6	184	21	119	44
1999/2000	189	8	197	18	99	80
2000/2001	177	6	183	24	88	71
2001/2002	170	3	173	25	75	73
2002/2003	185	1	186	30	50	106
2003/2004	160	0	160	30	55	75
2004/2005	170	0	170	37	43	90
2005/2006	150	0	150	40	40	70
-----% Total Supply-----						
1991/1992	98.3%	1.7%	100.0%	26.6%	41.6%	31.8%
1992/1993	97.3%	2.7%	100.0%	19.2%	39.6%	41.2%
1993/1994	97.0%	3.0%	100.0%	12.9%	55.2%	31.8%
1994/1995	98.6%	1.4%	100.0%	17.5%	64.0%	18.5%
1995/1996	96.4%	3.6%	100.0%	15.2%	70.1%	14.7%
1996/1997	97.4%	2.6%	100.0%	12.8%	71.1%	16.2%
1997/1998	97.4%	2.6%	100.0%	12.8%	71.1%	16.2%
1998/1999	96.7%	3.3%	100.0%	11.4%	64.7%	23.9%
1999/2000	95.9%	4.1%	100.0%	9.1%	50.3%	40.6%
2000/2001	96.7%	3.3%	100.0%	13.1%	48.1%	38.8%
2001/2002	98.3%	1.7%	100.0%	14.5%	43.4%	42.2%
2002/2003	99.5%	0.5%	100.0%	16.1%	26.9%	57.0%
2003/2004	100.0%	0.0%	100.0%	18.8%	34.4%	46.9%
2004/2005	100.0%	0.0%	100.0%	21.8%	25.3%	52.9%
2005/2006	100.0%	0.0%	100.0%	26.7%	26.7%	46.7%

Source: <http://www.fas.usda.gov/psdonline/psdquery.aspx>

Table 3b. Argentina Fresh Grapefruit: Share of World

Year	Production	Imports	Total Supply	Exports	Fresh Domestic	Processed
-----% of World-----						
1991/1992	5.2%	0.8%	4.7%	4.9%	5.4%	3.9%
1992/1993	4.5%	1.4%	4.3%	4.2%	5.1%	3.7%
1993/1994	5.4%	1.8%	5.1%	3.0%	8.2%	3.6%
1994/1995	5.2%	0.9%	4.9%	4.1%	9.4%	2.0%
1995/1996	5.4%	2.3%	5.2%	3.7%	10.3%	1.7%
1996/1997	5.7%	1.7%	5.4%	3.2%	10.5%	2.1%
1997/1998	6.2%	2.1%	5.9%	3.7%	12.0%	2.1%
1998/1999	5.0%	1.9%	4.7%	2.5%	8.6%	2.6%
1999/2000	4.8%	2.4%	4.6%	2.3%	7.1%	3.8%
2000/2001	4.6%	1.8%	4.4%	3.2%	6.2%	3.6%
2001/2002	4.7%	0.8%	4.3%	3.1%	5.5%	3.9%
2002/2003	3.9%	0.3%	3.6%	3.8%	1.8%	6.6%
2003/2004	3.3%	0.0%	3.0%	3.4%	1.8%	5.5%
2004/2005	4.3%	0.0%	4.0%	5.1%	1.5%	11.5%
2005/2006	3.5%	0.0%	3.3%	4.8%	1.5%	7.4%

Source: <http://www.fas.usda.gov/psdonline/psdquery.aspx>

Table 4a. U.S. Fresh Grapefruit: Production, Supply and Distribution.

Year	Production	Imports	Total Supply	Exports	Fresh Domestic	Processed
-----1,000 Metric Tons-----						
1991/1992	2,018	11	2,029	459	685	885
1992/1993	2,532	12	2,544	441	726	1,377
1993/1994	2,409	15	2,424	459	718	1,247
1994/1995	2,642	13	2,655	487	719	1,449
1995/1996	2,466	15	2,481	500	711	1,270
1996/1997	2,617	13	2,630	480	760	1,390
1997/1998	2,352	5	2,357	392	739	1,226
1998/1999	2,280	16	2,296	426	724	1,146
1999/2000	2,507	6	2,513	394	649	1,470
2000/2001	2,233	19	2,252	387	623	1,242
2001/2002	2,199	27	2,226	397	602	1,227
2002/2003	1,872	17	1,889	353	539	997
2003/2004	1,964	19	1,983	396	549	1,038
2004/2005	924	14	938	228	354	356
2005/2006	1118	19	1,137	260	306	571
-----% Total Supply-----						
1991/1992	99.5%	0.5%	100.0%	22.6%	33.8%	43.6%
1992/1993	99.5%	0.5%	100.0%	17.3%	28.5%	54.1%
1993/1994	99.4%	0.6%	100.0%	18.9%	29.6%	51.4%
1994/1995	99.5%	0.5%	100.0%	18.3%	27.1%	54.6%
1995/1996	99.4%	0.6%	100.0%	20.2%	28.7%	51.2%
1996/1997	99.5%	0.5%	100.0%	18.3%	28.9%	52.9%
1997/1998	99.8%	0.2%	100.0%	16.6%	31.4%	52.0%
1998/1999	99.3%	0.7%	100.0%	18.6%	31.5%	49.9%
1999/2000	99.8%	0.2%	100.0%	15.7%	25.8%	58.5%
2000/2001	99.2%	0.8%	100.0%	17.2%	27.7%	55.2%
2001/2002	98.8%	1.2%	100.0%	17.8%	27.0%	55.1%
2002/2003	99.1%	0.9%	100.0%	18.7%	28.5%	52.8%
2003/2004	99.0%	1.0%	100.0%	20.0%	27.7%	52.3%
2004/2005	98.5%	1.5%	100.0%	24.3%	37.7%	38.0%
2005/2006	98.3%	1.7%	100.0%	22.9%	26.9%	50.2%

Source: <http://www.fas.usda.gov/psdonline/psdquery.aspx>

Table 4b. U.S. Grapefruit: Share of World

Year	Production	Imports	Total Supply	Exports	Fresh Domestic	Processed
-----% of World-----						
1991/1992	61.3%	2.9%	55.2%	48.4%	51.5%	63.2%
1992/1993	65.0%	3.3%	59.7%	52.9%	51.2%	68.5%
1993/1994	66.1%	4.5%	60.9%	53.2%	53.0%	70.8%
1994/1995	66.4%	3.8%	61.5%	53.5%	50.3%	73.3%
1995/1996	61.6%	4.4%	57.1%	54.9%	46.7%	66.4%
1996/1997	65.2%	3.8%	60.3%	50.8%	47.9%	76.0%
1997/1998	63.7%	1.8%	59.3%	48.5%	53.1%	69.1%
1998/1999	63.7%	4.9%	58.8%	51.3%	52.6%	67.5%
1999/2000	63.6%	1.8%	58.8%	50.1%	46.6%	70.3%
2000/2001	58.7%	5.6%	54.3%	51.1%	43.8%	63.2%
2001/2002	60.2%	7.6%	55.5%	49.7%	44.5%	66.0%
2002/2003	39.3%	4.8%	36.9%	45.1%	19.7%	62.5%
2003/2004	40.3%	4.9%	37.8%	44.2%	18.4%	75.5%
2004/2005	23.2%	4.6%	21.9%	31.6%	12.7%	45.6%
2005/2006	26.4%	6.9%	25.2%	31.3%	11.2%	60.7%

Source: <http://www.fas.usda.gov/psdonline/psdquery.aspx>

Table 5. Argentina Grapefruit and GJ Exports.

Year	Grapefruit and Pomelos		Grapefruit Juice Concentrate		Grapefruit Juice Single-Strength-Equivalent	
	Exports - Qty(MT)	Exports – val (1000\$)	Exports - Qty(MT)	Exports - val (1000\$)	Exports - Qty(MT)	Exports - val (1000\$)
1990	45,881	12,191	5,188	6,463		
1991	41,619	14,217	3,302	3,423		
1992	45,231	16,155	4,580	7,032		
1993	28,402	9,877	3,322	5,378		
1994	27,438	9,159	1,697	2,621	156	124
1995	36,322	15,806	2,704	4,011		
1996	34,339	16,031	1,136	1,526		
1997	29,543	13,376	651	546		
1998	27,136	12,590	485	381		
1999	21,391	9,659	1,393	1,712		
2000	17,597	7,854	784	1,108		
2001	23,993	9,780	1,926	2,188		
2002	22,891	6,349	3,046	2,521	2	1
2003	29,183	9,212	4,553	3,549	6	2
2004	30,345	10,882	3,071	2,713	5	2

Source: FAOSTAT(<http://faostat.fao.org/site/535/DesktopDefault.aspx?PageID=535>)

Table 6. E.U. Fresh Grapefruit Imports, By Country, August-July Season.

Country	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05
-----Million 85-pound Boxes-----								
World	11.135	10.873	10.359	9.371	11.407	8.415	8.908	7.915
South Africa	2.039	2.177	2.169	2.108	2.106	1.743	1.850	2.090
Israel	2.289	2.171	2.018	1.413	3.241	1.112	1.155	1.416
United States	3.751	3.463	2.876	2.809	2.829	2.623	2.957	1.361
Turkey	0.469	0.937	1.174	1.170	1.273	1.009	1.115	0.827
Argentina	0.712	0.512	0.387	0.473	0.460	0.735	0.467	0.673
Honduras	0.411	0.317	0.394	0.308	0.280	0.244	0.249	0.342
Cyprus	0.479	0.492	0.411	0.387	0.370	0.391	0.425	0.334
Mexico	0.037	0.061	0.071	0.042	0.150	0.107	0.153	0.197
Swaziland	0.382	0.301	0.341	0.268	0.220	0.182	0.141	0.186
Zimbabwe	0.073	0.066	0.095	0.113	0.082	0.067	0.036	0.129
Cuba	0.378	0.242	0.350	0.231	0.292	0.149	0.255	0.089
China	0.000	0.000	0.001	0.001	0.001	0.002	0.010	0.079
other	0.113	0.133	0.070	0.047	0.104	0.052	0.096	0.193
-----% of World-----								
World	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
South Africa	18.3%	20.0%	20.9%	22.5%	18.5%	20.7%	20.8%	26.4%
Israel	20.6%	20.0%	19.5%	15.1%	28.4%	13.2%	13.0%	17.9%
United States	33.7%	31.8%	27.8%	30.0%	24.8%	31.2%	33.2%	17.2%
Turkey	4.2%	8.6%	11.3%	12.5%	11.2%	12.0%	12.5%	10.4%
Argentina	6.4%	4.7%	3.7%	5.0%	4.0%	8.7%	5.2%	8.5%
Honduras	3.7%	2.9%	3.8%	3.3%	2.5%	2.9%	2.8%	4.3%
Cyprus	4.3%	4.5%	4.0%	4.1%	3.2%	4.6%	4.8%	4.2%
Mexico	0.3%	0.6%	0.7%	0.4%	1.3%	1.3%	1.7%	2.5%
Swaziland	3.4%	2.8%	3.3%	2.9%	1.9%	2.2%	1.6%	2.4%
Zimbabwe	0.7%	0.6%	0.9%	1.2%	0.7%	0.8%	0.4%	1.6%
Cuba	3.4%	2.2%	3.4%	2.5%	2.6%	1.8%	2.9%	1.1%
China	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	1.0%
other	1.0%	1.2%	0.7%	0.5%	0.9%	0.6%	1.1%	2.4%

Source: World Trade Atlas (Eurostat)

Table 7. Japanese Fresh Grapefruit Imports, By Country, August-July Season.

Country	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
-----Million 85-pound Boxes-----												
World	7.281	7.177	7.195	6.093	6.717	6.783	7.410	7.012	6.926	7.894	5.563	4.217
U.S.	6.480	6.150	5.839	4.932	5.562	5.383	5.450	5.400	5.086	5.705	2.708	2.369
S. Africa	0.078	0.204	0.547	0.358	0.579	0.756	1.370	1.208	1.538	1.792	2.331	1.531
Israel	0.472	0.596	0.539	0.613	0.400	0.477	0.414	0.257	0.200	0.217	0.324	0.231
Swaziland	0.251	0.225	0.270	0.190	0.164	0.156	0.174	0.143	0.098	0.157	0.113	0.082
Argentina	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002	0.001	0.001
Other	0.001	0.002	0.001	0.000	0.012	0.012	0.002	0.003	0.004	0.021	0.086	0.004
-----% of Total-----												
World	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
U.S.	89.0%	85.7%	81.2%	80.9%	82.8%	79.4%	73.5%	77.0%	73.4%	72.3%	48.7%	56.2%
S. Africa	1.1%	2.8%	7.6%	5.9%	8.6%	11.1%	18.5%	17.2%	22.2%	22.7%	41.9%	36.3%
Israel	6.5%	8.3%	7.5%	10.1%	6.0%	7.0%	5.6%	3.7%	2.9%	2.7%	5.8%	5.5%
Swaziland	3.4%	3.1%	3.8%	3.1%	2.4%	2.3%	2.3%	2.0%	1.4%	2.0%	2.0%	1.9%
Argentina	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%	0.0%	0.0%	0.1%	0.3%	1.5%	0.1%

Source: World Trade Atlas(Japan Customs)

Table 8. Canada Fresh Grapefruit Imports, By Country, August-July Season.

Country	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
-----Million 85-pound Boxes-----											
The World	1.920	1.948	1.516	1.493	1.474	1.364	1.494	1.378	1.304	1.263	1.163
United States	1.884	1.878	1.439	1.427	1.328	1.237	1.329	1.181	1.155	0.963	0.907
South Africa	0.026	0.041	0.058	0.038	0.121	0.086	0.092	0.134	0.081	0.122	0.140
Mexico	0.003	0.014	0.009	0.006	0.010	0.002	0.006	0.005	0.020	0.101	0.042
Argentina	0.000	0.000	0.001	0.013	0.006	0.020	0.014	0.008	0.005	0.004	0.007
other	0.007	0.015	0.009	0.010	0.010	0.020	0.053	0.050	0.043	0.072	0.066
-----% of Total-----											
The World	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
United States	98.1%	96.4%	94.9%	95.6%	90.1%	90.6%	88.9%	85.7%	88.6%	76.3%	78.0%
South Africa	1.4%	2.1%	3.8%	2.5%	8.2%	6.3%	6.2%	9.7%	6.2%	9.7%	12.1%
Mexico	0.2%	0.7%	0.6%	0.4%	0.7%	0.1%	0.4%	0.3%	1.6%	8.0%	3.6%
Argentina	0.0%	0.0%	0.1%	0.8%	0.4%	1.4%	0.9%	0.6%	0.4%	0.3%	0.6%
other	0.3%	0.8%	0.6%	0.7%	0.7%	1.4%	3.6%	3.6%	3.3%	5.7%	5.7%

Source: World Trade Atlas(Statistics Canada)

Table 9. Fresh Grapefruit Imports, By Market, By Month, 1997-2005 Average.

Market		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
-----Million 85-pound Boxes-----														
EU	World	0.856	0.964	1.010	1.018	0.767	1.060	0.855	0.530	0.456	0.710	0.944	0.678	9.848
	U.S.	0.459	0.517	0.522	0.376	0.166	0.022	0.001	0.000	0.004	0.118	0.340	0.334	2.860
	Argentina	0.000	0.000	0.000	0.003	0.095	0.203	0.145	0.077	0.033	0.006	0.000	0.000	0.563
	Other	0.398	0.447	0.488	0.638	0.505	0.835	0.709	0.453	0.420	0.586	0.603	0.344	6.425
Japan	World	0.452	0.672	1.115	1.143	0.634	0.527	0.692	0.478	0.142	0.102	0.424	0.450	6.831
	U.S.	0.402	0.665	1.110	1.140	0.633	0.201	0.128	0.090	0.017	0.092	0.248	0.323	5.049
	Argentina	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Other	0.050	0.007	0.005	0.003	0.000	0.326	0.564	0.388	0.126	0.010	0.176	0.128	1.782
Canada	World	0.173	0.147	0.162	0.139	0.119	0.098	0.071	0.056	0.064	0.139	0.145	0.125	1.437
	U.S.	0.167	0.142	0.158	0.137	0.112	0.062	0.039	0.033	0.051	0.129	0.135	0.118	1.283
	Argentina	0.000	0.000	0.000	0.000	0.000	0.002	0.002	0.002	0.002	0.000	0.000	0.000	0.008
	Other	0.006	0.004	0.004	0.002	0.007	0.034	0.030	0.021	0.012	0.010	0.010	0.007	0.146
-----% of World-----														
EU	World	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	U.S.	53.6%	53.6%	51.7%	37.0%	21.7%	2.1%	0.1%	0.1%	0.8%	16.7%	36.1%	49.3%	29.0%
	Argentina	0.0%	0.0%	0.0%	0.3%	12.4%	19.1%	17.0%	14.5%	7.3%	0.8%	0.0%	0.0%	5.7%
	Other	46.4%	46.4%	48.3%	62.7%	65.9%	78.7%	82.9%	85.5%	91.9%	82.5%	63.9%	50.7%	65.2%
Japan	World	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	U.S.	89.0%	99.0%	99.6%	99.8%	99.9%	38.1%	18.5%	18.8%	11.6%	90.4%	58.4%	71.7%	73.9%
	Argentina	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	Other	11.0%	1.0%	0.4%	0.2%	0.1%	61.9%	81.4%	81.1%	88.4%	9.6%	41.6%	28.3%	26.1%
Canada	World	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
	U.S.	96.7%	97.0%	97.8%	98.4%	94.0%	63.7%	55.0%	58.2%	79.5%	92.5%	93.2%	94.3%	89.3%
	Argentina	0.0%	0.0%	0.0%	0.0%	0.2%	2.0%	2.9%	4.3%	2.4%	0.2%	0.0%	0.0%	0.6%
	Other	3.3%	3.0%	2.2%	1.6%	5.7%	34.3%	42.1%	37.4%	18.1%	7.3%	6.8%	5.7%	10.1%

Source: World Trade Atlas(Eurostat, Japanese Customs, Statistics Canada)

Table 10. US GJ imports

	Oct 00-Sep 01	Oct 01-Sep 02	Oct 02-Sep 03	Oct 03-Sep 04	Oct 04-Sep 05
-----Million \$-----					
World	1.407	0.702	0.792	0.921	18.781
Mexico	0.201	0.027	0.093	0.279	13.906
Belize	0.587	0.000	0.000	0.000	3.289
S. Africa	0.002	0.000	0.032	0.055	0.033
Argentina	0.000	0.000	0.010	0.000	0.195
Other	0.617	0.675	0.657	0.587	1.358
-----% of World-----					
World	100.00	100.00	100.00	100.00	100.00
Mexico	14.31	3.92	11.80	30.33	74.04
Belize	41.70	0.00	0.00	0.00	17.51
S. Africa	0.14	0.00	4.02	5.95	0.18
Argentina	0.00	0.00	1.24	0.00	1.04
Other	43.85	96.08	82.94	63.72	7.23

Source: World Trade Atlas(U.S. Dept. of Commerce, Bureau of Census)

Table 11. E.U. GJ Imports

Country	Oct 97-	Oct 98-	Oct 99-	Oct 00-	Oct 01-	Oct 02-	Oct 03-	Oct 04-
-----Million \$-----								
World-	66.831	69.462	96.413	99.892	94.478	94.870	89.250	102.423
U. S.	22.001	22.647	28.364	32.572	29.180	35.558	33.191	22.231
South Africa	1.862	1.912	4.414	6.575	7.622	6.655	6.798	8.255
Israel	25.016	23.310	28.835	25.526	27.941	28.138	24.295	35.649
Cuba	9.819	12.976	24.975	24.636	18.365	12.251	14.881	25.023
Belize	4.529	4.319	2.677	5.646	4.281	6.646	3.806	2.393
Mexico	0.467	1.009	0.521	0.940	0.580	0.477	0.039	2.091
Argentina	0.281	0.306	1.384	0.974	2.442	2.534	2.523	2.140
other	2.856	2.984	5.242	3.023	4.067	2.610	3.717	4.641
-----% of World-----								
World	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
U.S.	32.9%	32.6%	29.4%	32.6%	30.9%	37.5%	37.2%	21.7%
South Africa	2.8%	2.8%	4.6%	6.6%	8.1%	7.0%	7.6%	8.1%
Israel	37.4%	33.6%	29.9%	25.6%	29.6%	29.7%	27.2%	34.8%
Cuba	14.7%	18.7%	25.9%	24.7%	19.4%	12.9%	16.7%	24.4%
Belize	6.8%	6.2%	2.8%	5.7%	4.5%	7.0%	4.3%	2.3%
Mexico	0.7%	1.5%	0.5%	0.9%	0.6%	0.5%	0.0%	2.0%
Argentina	0.4%	0.4%	1.4%	1.0%	2.6%	2.7%	2.8%	2.1%
other	4.3%	4.3%	5.4%	3.0%	4.3%	2.8%	4.2%	4.5%

Source: World Trade Atlas (Eurostat)

Table 12. Japan GJ Imports

Country	Oct 94- Sep 95	Oct 95- Sep 96	Oct 96- Sep 97	Oct 97- Sep 98	Oct 98- Sep 99	Oct 99- Sep 00	Oct 00- Sep 01	Oct 01- Sep 02	Oct 02- Sep 03	Oct 03- Sep 04	Oct 04- Sep 05
-----Million \$-----											
World	31.290	37.417	25.749	19.145	28.621	53.455	55.334	53.184	52.508	50.919	76.892
U.S.	26.596	29.530	21.386	16.058	20.325	40.230	41.344	33.169	30.222	30.897	27.725
S. Africa	0.000	0.000	0.021	0.000	0.000	0.113	0.033	0.055	0.117	0.141	4.070
Israel	4.195	6.833	3.737	2.310	7.044	10.034	8.269	13.064	15.758	12.022	29.657
Cuba	0.000	0.000	0.007	0.004	0.000	1.510	1.065	1.220	1.115	0.323	2.111
Belize	0.000	0.000	0.000	0.000	0.000	0.000	1.556	0.516	0.595	0.920	2.195
Mexico	0.000	0.234	0.030	0.000	0.000	0.040	0.000	0.144	0.000	0.000	3.250
Argentina	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.021	0.000	0.000	0.276
Other	0.499	0.821	0.568	0.772	1.252	1.527	3.067	4.995	4.699	6.617	7.607
% of World-----											
World	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
U.S.	85.0%	78.9%	83.1%	83.9%	71.0%	75.3%	74.7%	62.4%	57.6%	60.7%	36.1%
South	0.0%	0.0%	0.1%	0.0%	0.0%	0.2%	0.1%	0.1%	0.2%	0.3%	5.3%
Israel	13.4%	18.3%	14.5%	12.1%	24.6%	18.8%	14.9%	24.6%	30.0%	23.6%	38.6%
Cuba	0.0%	0.0%	0.0%	0.0%	0.0%	2.8%	1.9%	2.3%	2.1%	0.6%	2.7%
Belize	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.8%	1.0%	1.1%	1.8%	2.9%
Mexico	0.0%	0.6%	0.1%	0.0%	0.0%	0.1%	0.0%	0.3%	0.0%	0.0%	4.2%
Argentina	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%
other	1.6%	2.2%	2.2%	4.0%	4.4%	2.9%	5.5%	9.4%	8.9%	13.0%	9.9%

Source: World Trade Atlas(Japan Customs)

Table 13. Canada GJ Imports

Country	Oct 95-	Oct								
-----Million \$-----										
The World	11.680	11.843	11.120	11.470	14.560	13.306	12.540	13.473	12.374	11.159
U.S.	11.646	11.325	11.000	11.345	12.765	12.803	12.211	13.141	12.184	10.289
Argentina	0.000	0.001	0.000	0.000	0.000	0.000	0.129	0.010	0.000	0.025
South	0.000	0.000	0.000	0.000	0.000	0.000	0.029	0.007	0.010	0.062
Israel	0.017	0.012	0.001	0.006	0.001	0.008	0.009	0.001	0.008	0.070
Cuba	0.000	0.000	0.000	0.000	0.284	0.000	0.000	0.001	0.000	0.170
Belize	0.000	0.000	0.000	0.000	0.579	0.311	0.000	0.000	0.000	0.056
Mexico	0.011	0.446	0.118	0.097	0.489	0.153	0.067	0.024	0.058	0.353
other	0.007	0.059	0.002	0.021	0.442	0.031	0.095	0.292	0.113	0.134
-----% of World-----										
The World	100.0%	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
U.S.	99.7%	95.6%	98.9%	98.9%	87.7%	96.2%	97.4%	97.5%	98.5%	92.2%
Argentina	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%	0.1%	0.0%	0.2%
South	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.1%	0.6%
Israel	0.1%	0.1%	0.0%	0.1%	0.0%	0.1%	0.1%	0.0%	0.1%	0.6%
Cuba	0.0%	0.0%	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	1.5%
Belize	0.0%	0.0%	0.0%	0.0%	4.0%	2.3%	0.0%	0.0%	0.0%	0.5%
Mexico	0.1%	3.8%	1.1%	0.8%	3.4%	1.1%	0.5%	0.2%	0.5%	3.2%
other	0.1%	0.5%	0.0%	0.2%	3.0%	0.2%	0.8%	2.2%	0.9%	1.2%

Source: World Trade Atlas(Statistics Canada)

Table 14. Argentina Grapefruit Trees.

Year	Non-Bearing	Bearing	Total
-----1,000 Trees-----			
2000	396	2,900	3,296
2001	150	2,950	3,100
2002	150	2,950	3,100
2003	100	3,000	3,100
2004	100	3,000	3,100
2005	100	3,000	3,100
-----% of Total-----			
2000	12.0%	88.0%	100.0%
2001	4.8%	95.2%	100.0%
2002	4.8%	95.2%	100.0%
2003	3.2%	96.8%	100.0%
2004	3.2%	96.8%	100.0%
2005	3.2%	96.8%	100.0%

Source: USDA, FAS(Gain Report-Argentina Citrus 2003-2006).

Appendix

Source: USDA, FAS, created Oct, 23, 2006 (<http://www.fas.usda.gov/psdonline/psdquery.aspx>).

Table A1. China Fresh Grapefruit: Production, Supply and Distribution.

Year	Production	Imports	Total Supply	Exports	Fresh Domestic Cons.	Processed
-----1,000 Metric Tons-----						
1991/1992	0	0	0	0	0	0
1992/1993	0	0	0	0	0	0
1993/1994	0	0	0	0	0	0
1994/1995	0	0	0	0	0	0
1995/1996	0	0	0	0	0	0
1996/1997	0	0	0	0	0	0
1997/1998	0	0	0	0	0	0
1998/1999	0	0	0	0	0	0
1999/2000	0	0	0	0	0	0
2000/2001	0	0	0	0	0	0
2001/2002	0	0	0	0	0	0
2002/2003	1,526	4	1,530	13	1,517	0
2003/2004	1,642	2	1,644	15	1,629	0
2004/2005	1,800	2	1,802	11	1,791	0
2005/2006	1,850	2	1,852	15	1,837	0

Table A2. Cuba Fresh Grapefruit: Production, Supply and Distribution.

Year	Production	Imports	Total Supply	Exports	Fresh Domestic Cons.	Processed
-----1,000 Metric Tons-----						
1991/1992	271	0	271	80	97	94
1992/1993	308	0	308	28	142	138
1993/1994	232	0	232	53	74	105
1994/1995	230	0	230	55	70	105
1995/1996	350	0	350	40	73	237
1996/1997	230	0	230	55	70	105
1997/1998	300	0	300	40	35	225
1998/1999	300	0	300	40	35	225
1999/2000	310	0	310	20	35	255
2000/2001	310	0	310	20	35	255
2001/2002	150	0	150	5	15	130
2002/2003	227	0	227	6	14	207
2003/2004	20	0	20	11	5	4
2004/2005	7	0	7	4	2	1
2005/2006	10	0	10	4	5	1

Table A3. Cyprus Fresh Grapefruit: Production, Supply and Distribution.

Year	Production	Imports	Total Supply	Exports	Fresh Domestic Cons.	Processed
-----1,000 Metric Tons-----						
1991/1992	113	0	113	78	2	33
1992/1993	110	0	110	70	5	35
1993/1994	112	0	112	72	5	35
1994/1995	95	0	95	60	5	30
1995/1996	78	0	78	50	4	24
1996/1997	93	0	93	48	31	14
1997/1998	51	0	51	32	4	15
1998/1999	52	0	52	33	3	16
1999/2000	36	0	36	23	3	10
2000/2001	38	0	38	27	3	8
2001/2002	38	0	38	25	3	10
2002/2003	30	0	30	23	3	4
2003/2004	30	0	30	26	3	1
2004/2005	30	0	30	26	3	1
2005/2006	30	0	30	26	3	1

Table A4. Gaza Strip Fresh Grapefruit: Production, Supply and Distribution.

Year	Production	Imports	Total Supply	Exports	Fresh Domestic Cons.	Processed
-----1,000 Metric Tons-----						
1991/1992	9	0	9	7	2	0
1992/1993	9	0	9	7	2	0
1993/1994	9	0	9	7	2	0
1994/1995	10	0	10	5	5	0
1995/1996	10	0	10	5	5	0
1996/1997	10	0	10	5	5	0
1998/1999	0	0	0	0	0	0
1999/2000	0	0	0	0	0	0
2000/2001	0	0	0	0	0	0
2001/2002	0	0	0	0	0	0
2002/2003	0	0	0	0	0	0
2003/2004	0	0	0	0	0	0
2004/2005	0	0	0	0	0	0
2005/2006	0	0	0	0	0	0

Table A5. Israel Fresh Grapefruit: Production, Supply and Distribution.

Year	Production	Imports	Total Supply	Exports	Fresh Domestic Cons.	Processed
-----1,000 Metric Tons-----						
1991/1992	345	5	350	120	20	210
1992/1993	383	7	390	111	20	259
1993/1994	335	5	340	100	25	215
1994/1995	415	5	420	116	30	274
1995/1996	395	5	400	117	25	258
1996/1997	357	5	362	137	19	206
1997/1998	349	0	349	134	13	202
1998/1999	328	0	328	123	21	184
1999/2000	324	5	329	121	23	185
2000/2001	286	0	286	63	21	202
2001/2002	251	0	251	68	20	163
2002/2003	255	0	255	64	20	171
2003/2004	237	0	237	70	23	144
2004/2005	263	0	263	86	20	157
2005/2006	256	0	256	82	20	154

Table A6. Italy Fresh Grapefruit: Production, Supply and Distribution.

Year	Production	Imports	Total Supply	Exports	Fresh Domestic Cons.	Processed
-----1,000 Metric Tons-----						
1991/1992	6	43	49	1	48	0
1992/1993	6	39	45	2	43	0
1993/1994	7	37	44	5	39	0
1994/1995	5	46	51	7	44	0
1995/1996	4	38	42	5	37	0
1996/1997	3	36	39	3	36	0
1997/1998	3	36	39	3	36	0
1998/1999	6	34	40	3	35	2
1999/2000	12	28	40	3	35	2
2000/2001	20	30	50	5	40	5
2001/2002	30	29	59	5	49	5
2002/2003	7	34	41	4	34	3
2003/2004	7	38	45	5	39	1
2004/2005	7	38	45	5	39	1
2005/2006	8	37	45	6	39	0

Table A7. Japan Fresh Grapefruit: Production, Supply and Distribution.

Year	Production	Imports	Total Supply	Exports	Fresh Domestic Cons.	Processed
-----1,000 Metric Tons-----						
1991/1992	0	257	257	0	257	0
1992/1993	0	239	239	0	239	0
1993/1994	0	273	273	0	273	0
1994/1995	0	272	272	0	272	0
1995/1996	0	275	275	0	275	0
1996/1997	0	281	281	0	281	0
1997/1998	0	230	230	0	230	0
1998/1999	0	266	266	0	266	0
1999/2000	0	270	270	0	270	0
2000/2001	0	274	274	0	274	0
2001/2002	0	277	277	0	277	0
2002/2003	0	272	272	0	272	0
2003/2004	0	304	304	0	304	0
2004/2005	0	219	219	0	219	0
2005/2006	0	195	195	0	195	0

Table A8. Mexico Fresh Grapefruit: Production, Supply and Distribution.

Year	Production	Imports	Total Supply	Exports	Fresh Domestic Cons.	Processed
-----1,000 Metric Tons-----						
1991/1992	110	0	110	1	79	30
1992/1993	118	0	118	1	84	33
1993/1994	112	0	112	1	77	34
1994/1995	160	1	161	1	125	35
1995/1996	245	1	246	3	203	40
1996/1997	222	1	223	2	187	34
1997/1998	168	1	169	3	141	25
1998/1999	165	1	166	4	138	24
1999/2000	240	9	249	2	215	32
2000/2001	320	9	329	7	282	40
2001/2002	297	8	305	5	265	35
2002/2003	281	12	293	7	247	39
2003/2004	409	9	418	10	339	69
2004/2005	360	9	369	11	246	112
2005/2006	330	9	339	8	219	112

Table A9. Turkey Fresh Grapefruit: Production, Supply and Distribution.

Year	Production	Imports	Total Supply	Exports	Fresh Domestic Cons.	Processed
-----1,000 Metric Tons-----						
1991/1992	42	0	42	34	4	4
1992/1993	40	1	41	25	12	4
1993/1994	48	0	48	36	8	4
1994/1995	60	0	60	45	9	6
1995/1996	65	1	66	42	17	7
1996/1997	75	1	76	51	18	7
1997/1998	55	1	56	34	17	5
1998/1999	100	0	100	66	24	10
1999/2000	140	0	140	72	54	14
2000/2001	135	0	135	88	36	11
2001/2002	135	10	145	100	35	10
2002/2003	125	12	137	96	39	2
2003/2004	135	10	145	115	30	0
2004/2005	135	20	155	90	65	0
2005/2006	150	10	160	100	60	0

Table A10. Argentina Fresh Grapefruit: Production, Supply and Distribution.

Year	Production	Imports	Total Supply	Exports	Fresh Domestic Cons.	Processed
-----1,000 Metric Tons-----						
1991/1992	170	3	173	46	72	55
1992/1993	177	5	182	35	72	75
1993/1994	195	6	201	26	111	64
1994/1995	208	3	211	37	135	39
1995/1996	216	8	224	34	157	33
1996/1997	229	6	235	30	167	38
1997/1998	229	6	235	30	167	38
1998/1999	178	6	184	21	119	44
1999/2000	189	8	197	18	99	80
2000/2001	177	6	183	24	88	71
2001/2002	170	3	173	25	75	73
2002/2003	185	1	186	30	50	106
2003/2004	160	0	160	30	55	75
2004/2005	170	0	170	37	43	90
2005/2006	150	0	150	40	40	70

Table A11. World Fresh Grapefruit: Production, Supply and Distribution.

Year	Production	Imports	Total Supply	Exports	Fresh Domestic Cons.	Processed
-----1,000 Metric Tons-----						
1991/1992	3,294	384	3,678	948	1,329	1,401
1992/1993	3,895	369	4,264	834	1,419	2,011
1993/1994	3,642	336	3,978	862	1,355	1,761
1994/1995	3,979	340	4,319	911	1,430	1,978
1995/1996	4,001	343	4,344	911	1,521	1,912
1996/1997	4,013	345	4,358	944	1,585	1,829
1997/1998	3,693	280	3,973	808	1,391	1,774
1998/1999	3,580	324	3,904	831	1,376	1,697
1999/2000	3,944	327	4,271	787	1,392	2,092
2000/2001	3,807	339	4,146	758	1,422	1,966
2001/2002	3,654	356	4,010	799	1,353	1,858
2002/2003	4,764	355	5,119	782	2,742	1,595
2003/2004	4,868	384	5,252	895	2,983	1,374
2004/2005	3,986	304	4,290	721	2,789	780
2005/2006	4,232	274	4,506	831	2,734	941