

Review of the 2004/2005 grapefruit season

A very unusual season

Gales and downpours fashioned the very unusual profile of this winter grapefruit season. The substantial production losses suffered in Florida after three hurricanes in a row resulted in serious under-supply of the EU market and a redistribution of market shares between origins. It is true that the average season prices rose strongly, but the 2004/2005 season was not a joyful party.

The 2004/2005 season started with a drama in the form of the loss of 700 000 to 800 000 tonnes of fruits in Florida after a succession of

three hurricanes. A symbolic image of the catastrophe is the smashed sign belonging to the 'Citrus League', one of the main producers' associations in Florida.



Concentrate market peaking

Florida accounts for about three-quarters of world concentrate and single juice supplies. According to the FDOC, production was only about 24 million gallons this season in contrast with 115 to 120 million in the two preceding years.

It is easy to imagine the reaction of the market in the face of such a drastic reduction in production even though consumption has decreased strongly since the end of the 1990s (sales fell from 160 million gallons in 1998/1999 to less than 90 million in 2003/2004).

Prices peaked at US\$ 1 500 per t with difficulty in August 2004 and then reached US\$ 3 500 to 4 000 per t at the end of April 2005 according to *FoodNews*. The market could even become more stretched in the medium term. On

the one hand, stocks have dwindled in Florida and on the other Cuba, the second largest world producer of concentrate with slightly more than 10% of the market, lost the 250 000-t harvest of its main plantation to hurricane Dennis. In addition, Florida will not have bumper grapefruit harvests between now and the end of the decade. The production capacity of the Florida juice industry thus seems clearly too large. Cargill has already reacted by closing its Saint Lucie factory in the Indian River area.

A historic production deficit in Florida

After reaching an average of 40 million boxes of 85 lbs of fruits in recent years, production plummeted to less than 13 million boxes, that is to say a 70% decrease. This had never been experienced before in Florida citrus growing, even after the historic frosts in 1980. The juice industry was particularly hard-hit by the shortage of fruits, receiving only just over 5 million boxes against some 22 to 24 million in a normal year. This drastic decrease only made the deficit up to 55% on the fresh fruit market but sent concentrated juice prices sky-high !

A tremendous shortage

Accounting for nearly 50% of supplies, Florida is not just a minor origin shipping to the EU market. The shortage of some 55 000 to 60 000 t of Florida fruits (that is to say 3.3 to 3.5 million boxes for export) obviously left a serious vacuum, drawing most producer countries attracted by particularly interesting price prospects.

Production and outlets for Florida grapefruit							
Note: figures in millions of 85-lb orchard boxes (and not 42.5-lb export boxes)							
	98/99	99/00	00/01	01/02	02/03	03/04	04/05
Production	47.0	53.4	46.0	46.7	38.7	40.9	12.8
Fresh	18.7	17.0	15.9	15.9	14.1	15.0	6.7
USA	7.6	6.6	5.8	5.6	5.0	4.5	2.4
EU	4.1	3.2	3.3	3.3	3.1	3.5	1.4
Japan	5.0	5.5	5.4	5.6	5.1	6.1	2.4
Canada	1.3	1.1	1.1	1.1	0.8	0.9	0.4
Other	0.6	0.6	0.3	0.4	0.2	0.3	0.1
Fresh exports	11.1	10.4	10.1	10.3	9.1	10.5	4.3
Processed	26.5	34.5	27.6	28.1	22.2	23.8	5.2
Single juice	19.0	24.1	21.2	21.7	16.0	17.8	2.5
Concentrate	7.5	10.4	6.4	6.4	6.2	6.8	2.8
Not certified	1.2	1.3	1.6	1.5	1.5	1.5	0.7
Misc.	0.7	0.6	0.9	1.2	0.9	0.9	0.2

Source: FDOC

Israeli exporters on the alert in both the EU and Japan

Traditional suppliers tried to increase their shipments. Israeli shipments to the EU approached 55 000 t after three seasons at approximately 40 000 t. Cumulated exported volumes exceeded 85 000 t (including Sweetie) after three years at less than 70 000 t. This fine performance should reassure Israeli farmers who have gradually regained confidence in citrus growing in several seasons after a long bad period. Although shipments to eastern Europe remained stable (about 10 000 t, consisting mainly of Star Ruby), exports to Japan increased strongly, again as a result of the shortage of fruits from Florida. Thus the increase in exports of Sweetie, a pomelo x grapefruit hybrid, to the Japanese market is only one of the components of this increase. Israeli professionals exported grapefruit to Japan for the first time for 10 years (mainly White March).

Turkey not in the best of form

Turkey is another pillar of EU supplies and was the only origin whose exports to the community decreased. The first reason was the downward phase of alternate bearing. The second is that Turkish citrus production is still growing strongly and operators are well aware of the strategic role of the Russian and Ukrainian markets and so they are still shipping 55% of production to these destinations.



Chinese grapefruit at Rungis wholesale market

Fine progress of Cypriot exports and strong Spanish presence

Grapefruit exports from Cyprus increased markedly, recovering to the level of the end of the 1990s. The trend is probably not only related to the supply situation but also a result of increased confidence of European importers and distributors in citrus fruits from the island.

Spain is another growing Mediterranean origin. It is true that grapefruit production is dwarfed by the mountains of oranges, lemons and easy peelers. Nevertheless, with 20 000 t shipped in the export season, Spain is strengthening its presence on the EU market (especially with the large retail chains) and its fruits form nearly 12% of total supplies.

The shortage, that was both potentially lucrative and unusual, obviously encouraged importers to find original solutions. For example, Texas, that exports little but produces more than 200 000 t, made

a noted entry to the EU market. Nearly 930 000 boxes of 40 lbs of fruits went to the international market this season (against 250 000 in 2003/2004), of which approximately 410 000 (that is to say nearly 7 500 t) went to the EU. Rio Star, the trade mark of 'Star Ruby' and 'Rio Red' from Texas may confirm the position gained in the coming seasons. 'Tropical' origins usually found in the European Union only in early autumn reappeared at the beginning of the winter (fruits shipped from Mexico and Cuba). A few batches from Chile and Syria were also available. The prize for originality goes to Carrefour which sold Chinese grapefruit for a short period!

Marked under-supply on the EU market

The overall supply of the market was nevertheless markedly short—by about 30% when only the five main origins are considered. Taking into account the volumes from the other suppliers (customs statistics are not yet available) will probably not change the result very much. Prices

Grapefruit — Average season price France — On quay (EUR per kg)

1998/1999	0.62
1999/2000	0.72
2000/2001	0.75
2001/2002	0.76
2002/2003	0.77
2003/2004	0.70
2004/2005	1.03
1998/2005 average	0.72

Source: CIRAD

Grapefruit — Estimated market releases in the EU by origin

		1997/98	1998/99	1999/00	2000/01	2001/02	2002/03	2003/04	2004/05
Florida	1 000 t	146.8	140.9	109.0	112.9	111.2	105.8	117.3	47.4
	Million boxes 17 kg	8.6	8.3	6.4	6.6	6.5	6.2	6.9	2.8
Turkey	1 000 t	18.1	24.8	44.6	44.3	48.5	36.0	43.8	39.9
	Million boxes 13 kg	1.4	1.9	3.4	3.4	3.7	2.8	3.4	3.1
Israel	1 000 t	90.2	86.5	77.2	55.0	37.9	40.1	41.5	53.7
White		28.3	26.1	22.1	11.5	7.4	7.1	9.3	9.9
Coloured		61.9	60.3	55.1	43.6	30.5	33.0	32.2	43.8
	Million boxes 16 kg	5.6	5.4	4.8	3.4	2.4	2.5	2.6	3.4
Sweetie		1.9	3.3	2.9	3.4	3.2	3.8	3.9	4.9
	Million boxes 16 kg	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3
Spain	1 000 t	18.0	16.6	17.6	16.2	19.5	23.6	21.2	22.0
	Million boxes 15 kg	1.2	1.1	1.1	1.1	1.3	1.6	1.4	1.5
Cyprus	1 000 t	25.0	24.0	16.4	20.8	18.1	18.2	18.4	23.0
	Million boxes 16 kg	1.6	1.5	1.0	1.3	1.1	1.1	1.2	1.4
Total	1 000 t	298.1	292.7	264.8	249.3	235.3	223.7	242.2	186.0

Source: CIRAD

therefore reached the historically high level of EUR1.03 per kg on the quay according to our watch statistics, that is to say 40% higher than average. But for all that the season was far from being a pleasant one.

Very high cost price of fruits from Florida

Sales of Florida fruits—especially the top of the range—were comparatively fluid for most of the season. However, the cost price of the goods paid firm was very high in spite of a more favourable euro:dollar exchange rate than in the preceding season (down by 7.5%). Importers were thus worried during the seasonal decrease in business from mid-November to the end of December (change of range with a switch to exotics) and also at the end of the season.

Difficult sales for most of the other origins

Grapefruit from Florida is a high-quality item with organoleptic differences with Mediterranean fruits. It is thus difficult to find a substitute for it. As a result, a fair proportion of distributors decided on a significant

reduction of the shelf space devoted to grapefruit, especially as prices were historically high for all origins. Sales were difficult for most of the other origins present (Mexico, Cuba and, to a lesser degree, Turkey).

Another disappointing end of season

The season started with surprises and finished in the same way. The whole sector agreed that the Florida export season would end very early on. Some operators—Israeli in particular—speculated on this scenario that did not seem to carry much risk at all. However, shipments from Florida were much more substantial than expected in March. Exporters in the Sunshine State were obliged to cut back their shipments to Japan where demand was slower than expected and the quality of some of the fruits at the end of the season was not up to the very high Japanese standards. This released unexpected quantities for the EU market. Prices were thus not up to operators' expectations in March, and especially in April. They even fell to close to cost for standard Florida produce.

Very unusual as a result of the situation in Florida and the resulting

Special physiological features

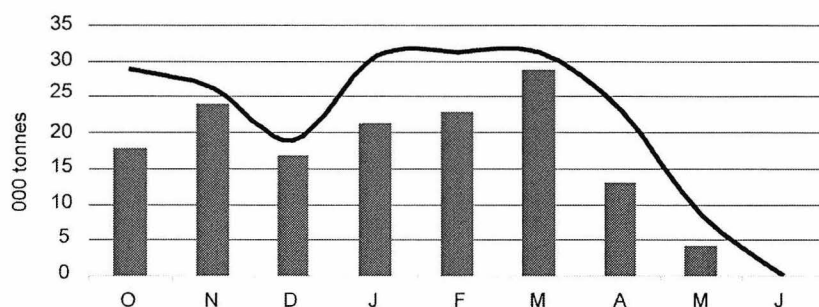
Grapefruit is a tropical fruit and so heat plays an important role in the development of its organoleptic qualities. With regard to taste, it develops the sugar content and lowers acidity and bitterness. It also has a considerable effect on fruit colour. The synthesis mechanism of lycopene, the pigment found in grapefruit, differs to that of the anthocyanins that give oranges their colour. The colour becomes more intense when the period of exposure to high temperatures is long (whereas cool periods are required for enhancing the synthesis of anthocyanins). It can thus be understood why the sweetest, least bitter and best-coloured fruits are from tropical and semi-tropical zones like Florida, Texas and South Africa.

shortage of fruits, this season gives few hints of what the market trends might be in the coming seasons. Nonetheless, it probably marks the beginning of a period that should last until the end of the decade with the cost price of Florida produce remaining fairly high, but without equalling last year's record levels (see box). It is true that grapefruit from tropical and sub-tropical zones have taste qualities justifying a difference in price with the other produce (see box). It is therefore in the interest of Florida producers to seek to make the gap as wide as possible by reinvesting in a policy of promoting consumer awareness, highlighting these strong points. The budget problem is not easy to solve of course, given the many problems faced by the sector, but the approach is a strategic one.

Nevertheless, producers should also take care to remain competitive, with regard to both the consumer and to increasing fierce and increasingly well-armed competition ■

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**EU - Winter grapefruit supply
Main origins**

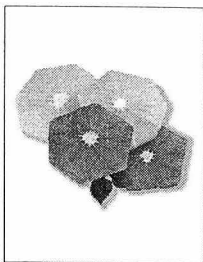


Source: Cirad

Grapefruit — Comparison between 2004/05 arrivals and 2001/04 average arrivals

(%)	O	N	D	J	F	M	A	M
Florida	- 95	- 59	- 50	- 56	- 54	- 36	- 71	- 93
Turkey	- 16	+ 23	+ 33	+ 1	+ 36	- 7	- 71	- 91
Israel	- 13	+ 115	+ 175	+ 5	+ 36	+ 68	+ 32	+ 30
Total	- 38	- 8	- 12	- 30	- 27	- 8	- 42	- 52

Source: CIRAD, CLAM



Florida grapefruit

A sector still in difficulty even though no hurricane damage has been reported

2005/2006 harvest forecast

The official 2005/2006 harvest forecast will not be published by USDA until mid-October. However, the first information collected leads to considering that although the volumes are clearly up on last year the harvest will be fairly small. The vice-president of Seald Sweet considered in mid-August that production should range between 22 and 24 million boxes. This would still be 40% down on a normal season even with 10 million boxes more than last year. Florida citrus growing is thus still having a rocky ride, even if no major hurricane hit the Sunshine State in summer 2005. **Fruitrop** reviews the various problems experienced by the sector at the moment. Although the damage caused by tristeza to Florida citrus growing is well known, citrus canker seems to be taking over as enemy No. 1, unless recently detected greening snatches the sinister first place.

Tristeza

Tristeza is a virus disease widely present around the world and became the scourge of Florida citrus growers in the mid-1990s with the appearance of a very effective vector, the aphid *Toxoptera citricida*, that enhanced the spread of the disease. It causes the withering and then the death of the tree. Sour orange, used as rootstock for more than 40% of the trees in Florida (according to a 1999/2000 census), is particularly susceptible to the disease. There is no curative treatment. As a result, the 5 million infected or potentially infected trees have been or will have to be grubbed up.

Citrus canker

This bacterial disease caused by *Xanthomonas axonopodis* was found in

Florida precisely ten years ago this autumn. Citrus canker causes a weakening of the tree with losses of yield and increased production costs (copper-based bactericidal spray to limit symptoms, windbreaks to prevent contamination, etc.). Spread of the disease on a large scale can go as far as the loss of markets (with the forbidding of the export of fruits from infected zones to certain destinations). No cure exists and the only way to eradicate the disease is to grub up the trees. Florida professionals have used a control approach since the mid-1990s that has already cost about \$US 650 million. More than 140 inspectors travel

and too expensive (compensation for professionals is limited and slow).

Some professionals consider that the disease is the greatest threat to Florida citrus growing. The 2004 hurricanes caused a very strong increase in infection. Wind carried the bacterium to hitherto uninfected zones and to zones where it had already been eradicated (such as Manatee County which was infected again after being declared canker-free less than a year ago). It is reported to be present in 22 counties. Eradication could cost Florida 3 to 4 million trees more in commercial orchards alone.

Greening

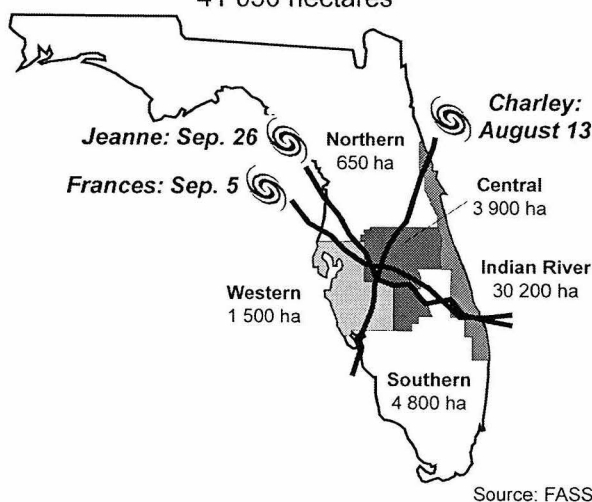
This disease caused by the bacterium *Liberibacter asiaticum* is a new threat to orchards in Florida. Nearly 25 outbreaks of this disease that is well-known to Asian citrus growers have been detected since August in south-east Florida (in particular in Miami/Dade and Broward Counties). Evaluation of the impact on the orchards is still difficult. However, the greatest vigilance is needed as the losses caused by greening in Brazilian orchards were greater than those resulting from canker.

Urban spread

This necrosis of agricultural tissue, whose vector is estate agents, is also causing damage. The determination shown by a significant proportion of American seniors to spend a happy retirement in the Florida sun continues to make building land prices climb fast and steadily. Given the problems described above, a number of growers are often tempted by the lucrative alternative for generating cash.

With this disturbing inventory in mind, professionals are not very optimistic about a rapid return of production to the level of 1995-2000, that is to say about 40 million boxes. The annual revision of *Florida Citrus Production Trends* published in February mentioned production of 28 to 30 million boxes until the end of the decade. The subsequent pattern will depend on current replanting rates. The study takes the impact of tristeza into account but underestimates the losses resulting

Grapefruit - Florida - Production areas and 2005 hurricanes
41 050 hectares



all over the state identifying outbreaks and applying '1 900-foot rule'. This strict measure stipulated that the infected tree should be grubbed up together with all those within a radius of 1 900 feet (a little more than 1 000 sq. m). No less than 6 million orange and grapefruit trees are reported to have been destroyed since the beginning of the programme. Growers must allow two years to elapse between eradication and replanting. The measure is strongly contested by certain growers who find it too extreme

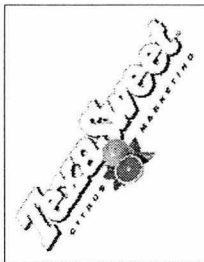
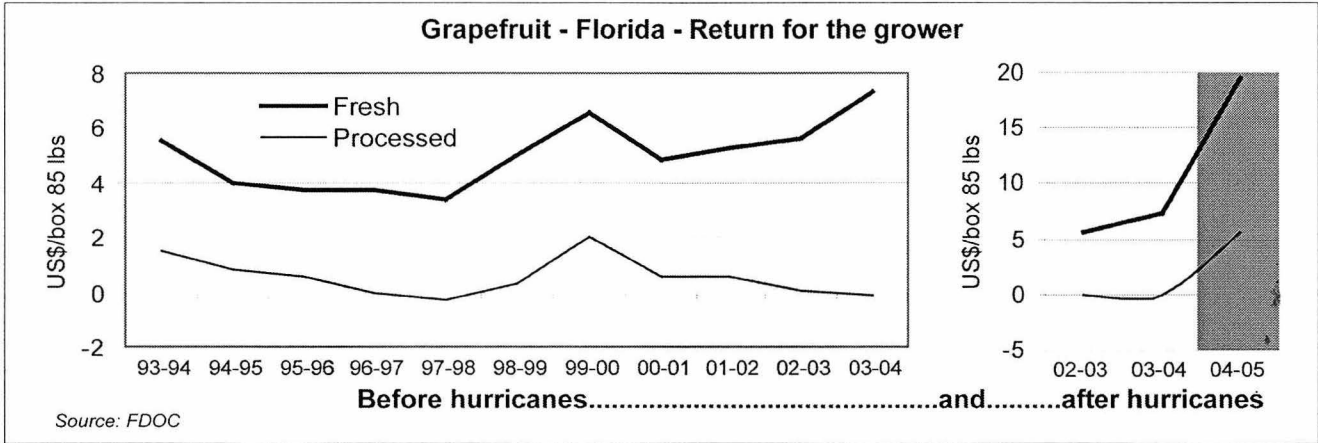
from citrus canker (spread by the 2004 hurricanes is not taken into account) and does not include the appearance of greening.

Nevertheless, Florida's leading position—with regard to both quantity and quality—on the world fresh grapefruit market does not seem to be called into question in the medium term. On the one hand, growers in Florida have proved their capacity for

recovery, in particular after the frosts of the 1980s. In addition, they have federal government support, shown in very real terms at the end of September by the awarding of a specific \$40 million subsidy for the control of citrus canker. On the other hand, growers should continue to favour the fresh market more clearly at the expense of processing, as was the case in 2004/2005. Whereas returns for producers of fruits for the fresh market

have increased steadily for four years, those from fruits sold for processing continue to be near to nothing.

The profitability of the crop was very hypothetical between the mid and the end of the 1990s but is now much clearer. This could encourage growers to replant at a faster rate than that envisaged by the FDOC in the document mentioned above ■



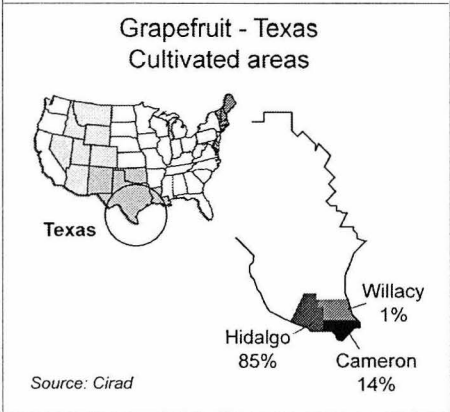
Texan grapefruit

A rising star on the European grapefruit market?

Grapefruit from Texas was practically unknown to international operators until the last season. However, Texas is among the world's leading producers with about 240 000 t, far behind Florida and China but on a par with South Africa, Israel and Cuba. It is true that exports are not the usual outlet for Texan growers. The fruits generally go first to the domestic market that takes about 60% of production. The rest goes to the only factory in the state for making single and concentrated juice, Texas Citrus Exchange. As a result of the special situation, exports formed a significant outlet in 2004/2005 with 930 000 boxes (40 lbs) going to the international market (against 250 000 boxes in 2003/2004), of which 410 000 boxes were shipped to the European Union (nearly 7 500 t).

While Florida is going through a difficult period today, Texan operators have also had their bad times. The history of

the sector, that got under way at the end of the nineteenth century, is punctuated with devastating frosts. It is true that the climate is fairly similar to that of Florida, but production is much more concentrated and all in the extreme south of the state in the lower Rio Grande valley. Hidalgo County alone has 85% of the area under grapefruit, the rest being in Cameron



County (14%) and Willacy County (1%). Frosts thus have a serious impact. The last two in 1983 and 1989 reduced the area under grapefruit from about 28 000 ha to less than 5 000 ha. There has since been a recovery and the area is stable at 7 500 ha.

Frost risk is not the only weak point of the sector. Production costs are slightly higher than in Florida as a result of smaller yields and much greater need for irrigation.

Texan operators have shown imagination to find a position on the domestic market without being overshadowed by big brother Florida. Grouped under the Texas Valley Citrus Committee, growers have set themselves stricter quality standards than US requirements (especially as regards the tolerance for discolouration of the epidermis). The range is segmented, with two quality categories: Texas Fancy (top of the range) and Texas Choice. Growers also have a promotion tool for the domestic market, TexaSweet, and have registered trade marks for their produce. The varieties with red pulp (consisting mainly of 'Rio Red' and completed by 'Star Ruby') are sold under the Rio Star® label and the pink varieties (mainly 'Ray Ruby' and 'Henderson') go by the name of Ruby Sweet® ■