

English edition

**CLOSE-UP** 

# Grapefruit











### An increasingly dangerous slope

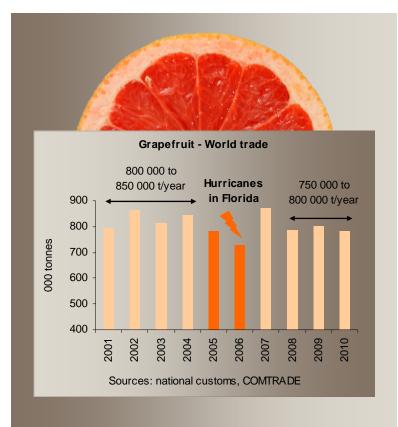


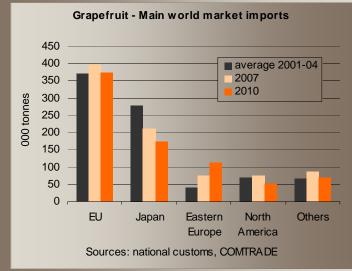
### Stable - but only just!

Has the world grapefruit market achieved a new balance? This is at least what the figures gathered by our market news service seem to show. After the depression in the mid-2000s linked with the collapse of production in Florida, international trade seems to have been stable at between 750 000 and 800 000 t since 2008. However, closer analysis shows that this good performance regained is only apparent and the conclusions reached are alarming. Although consumption is increasing in a small number of countries in Eastern Europe-that can be counted on the fingers of one hand-all the other markets in the world display a downward movement. In short, a small measure of joy in a sea of tears.

### Distinct slide in consumption on the major markets

The heart of the market, that is to say the rich countries that account for about 70% of world trade, beats a little more slowly each year. In Western Europe, the leading importing region in the world, volumes from overseas or from producer countries in the region have lost about 30 000 t since 2006-07, slipping below 300 000 t, less than the volumes handled in the mid-2000s when the Florida crisis was at its worst. The same feature can be observed in Japan, the second largest import market in the world, where consumption is now less than 180 000 t after falling by about 40 000 t during the same period. Canada is no different: at about 45 000 t in 2010, imports have decreased by 10 000 t since 2007.





## No new opportunity for growth on the horizon...

Another subject for major concern is that there is no upcoming market on the (very short) list of other countries that import significant quantities of grapefruit. Consumption in the Persian Gulf countries has stagnated at between 20 000 and 30 000 t per year for a decade. Nothing is moving at all in South America, the latest part of the world to display interest in the fruit and where imports are stable at 10 000 to 15 000 t per year.

#### Eden in the East...

The dynamism of the markets of Eastern Europe is the only good news in this very gloomy overview. Imports by countries outside the EU have nearly doubled in the last five years, exceeding 110 000 t in 2010. Russia, which imported about 80 000 t in the latter year, accounts for the greater part of the development of the zone since 2007. Volumes are tending to stabilise at about 30 000 t in the other countries of the region, among which Ukraine is by far the main market. The same smiling faces can be found among importers in the new EU member countries where volumes have gained about 30 000 t thanks in particular to the dynamic Polish and Romanian markets.

### Dwindling supply from Florida

Is shortage of supply responsible for their practically universal moroseness? It can be considered that it plays a role, as in the crisis of the mid-2000s. Production is still dwindling in Florida, losing nearly 300 000 t since 2006-07, the last season with no serious meteorological event with direct consequences for the harvest. In addition, the spread of citrus canker to practically all the counties in the state means that the volumes available for sale fresh have de-

Grapefruit — Main world market imports										
tonnes	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Japan	268 650	284 687	274 328	288 510	205 961	170 881	212 837	184 037	178 911	174 770
N. America	78 410	80 668	56 246	64 978	53 982	66 657	74 471	65 515	58 272	53 494
EU	370 074	391 150	366 803	364 098	378 521	357 941	398 540	377 102	386 530	373 288
Eastern Europe	26 848	40 600	41 821	57 346	58 411	72 317	99 772	100 593	104 174	114 320
Others	49 938	68 782	76 387	71 362	85 932	62 231	86 332	60 803	76 398	*70 000

<sup>\*</sup> Estimate / Sources: national customs, COMTRADE





creased strongly. At certain times of the year, this problem has become a limiting feature for importers in Europe where the measures to protect against the diseases are stricter than in Japan, a country reputed for its strictness with regard to the sanitary conditions of produce. Furthermore, the effects of increased production costs on FOB prices make importers very cautious with regard to this produce that changes hands on a firm purchase basis. A 2009 study estimate that greening alone had caused an increase in costs of some 50%, without considering other items. Thus imports decreased from 12.6 million export boxes in 2006-07 to about 9 million during the last season, representing a fall of about 70 000 t.

Unused possibilities for compensation in spite of the increase in Mediterranean production!

However, the upstream part of the chain does not alone account for the fall in consumption. In the Mediterranean region, the second largest grapefruit production area after Florida, growers got ready to be able to take over from Florida as one man's misfortune is another man's opportunity. Planted areas have thus increased distinctly in Turkey and to a lesser degree in Spain and a fair number of Israeli growers have enhanced their export potential by replacing their not very profitable 'Marsh' by 'Star Ruby'. But the results are very mixed. Both Israel and Turkey gained practically no ground in Japan, even though this market is open to the two

sources on condition that a sanitary procedure to eliminate fruit flies is respected. The same has been observed in the United States and Canada. The volumes exported by the Mediterranean supplier countries have only increased in their natural market, that is to say the European Union. But a reserve should be made here too as the increase has resulted more from consumption in the markets in the eastern part of the EU than the replacement of volumes from Florida on Western European markets. The figures speak for themselves: in spite of a 50 000-t decrease in arrivals from Florida, the volumes of Mediterranean grapefruit have not increased on the Western European market, with the increasing Israeli and Spanish shipments just making up for the dips in Cyprus and Turkey, which has redeployed to cover the new member countries.

### Rigid market segmentation in Europe

Segmentation of the grapefruit market is clearly very rigid and fruits from the Mediterranean cannot substitute those from a more tropical climate. The particular physiology of this citrus fruit whose taste characteristics are strongly marked by soil and climate conditions is a major reason. High, stable temperatures make grapefruit sweeter than those grown in colder climates, giving the fruit a more characteristic flavour and making it less ordinary.

### Southern hemisphere sources not spared

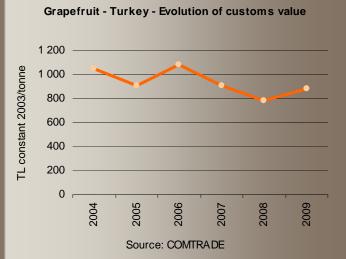
But it is not only Mediterranean grapefruit that is striving to find a new public. The performance of southern hemisphere sources is not much to write home about either, even though the taste of the fruits is 'tropical'. Here again, there seemed to be a fine opportunity for development, at least on paper. The early end of the northern hemisphere season should have given the southern hemisphere a broader sales window. But performance clearly did not match the theory. The summer grapefruit season in Japan shrank: after 70 000 to 75 000 t in a normal vear, the total fell to 45 000 to 60 000 t in 2009 and 2010. The same trend was seen in the EU, where average imports of 120 000 to 130 000 t lost 20 000 t in spite of the entry of 100 million more consumers following the enlargement of the community. Canada did not save the situation as its imports were marginal and stable at about 5 000 t. The only positive feature to report is the breach opened by South Africa in

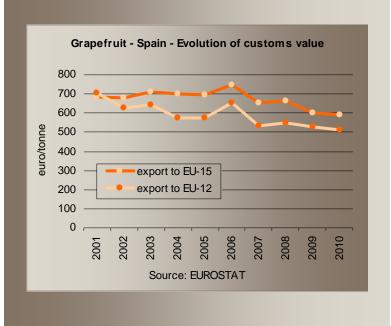
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2010 in the US market, now accessible for certain zones certified as free of black spot. But the Springboks' try remains to be converted as shipments totalled no more than 200 tonnes in this first season.

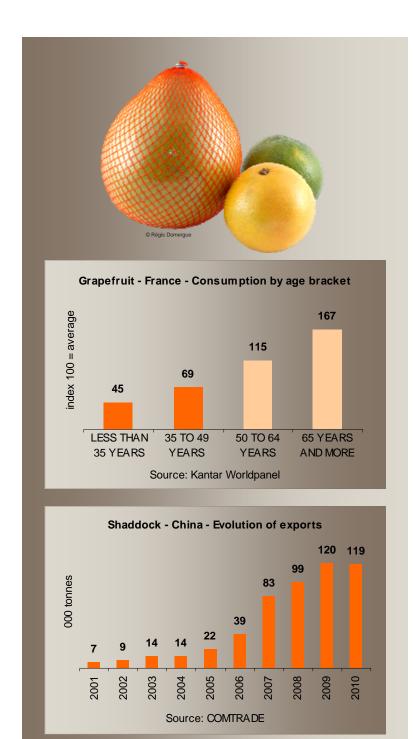
### A simultaneous decrease in value-added

But the less than sweet icing on the cake was that it was not only the volumes traded that decreased. The decrease in consumption also caused a decrease in value-added for fruits from certain sources. The increase in the volumes sold on certain Eastern European markets sometimes looked like dumping. Thus, analysis of customs values of the Turkish grapefruit that dominates these markets shows a decrease of slightly more than 15% in local currency from 2005-06 to 2008-09. It is even more concerning to note that some sources are confronted with a similar phenomenon of decrease in returns on the Western European markets in spite of the decrease in overall sales. The customs values of shipments of Spanish grapefruit to EU-15 display a fall of a little more than 15% between 2005-06 and 2009-10. Given the increase in the cost of all factors of production, it is reasonable to assume that returns for producers have decreased, even if the increase in productivity has probably softened the blow. Israeli exports have just managed to maintain stable customs values by increasing the volumes sold at the end and above all the beginning of the season when prices peak. In the last two seasons, Israeli exports sold 20 to 30% of their produce from mid-September to mid-November, in contrast with 10 to 15% in the mid-2000s.

#### Shaddock attacks

The simultaneous rise of Chinese shaddock is probably another factor. Even if shaddock and grapefruit are not interchangeable, if only for reasons of size, they compete on retail shelves. It can also be supposed that grapefruit is much appreciated by retail distributors as the returns are closer to those of exotics than to run-of-the-mill citrus fruits. Individual fruits are purchased for less than one euro (the average season price is some EUR 9.00 to 10.00 for a box of 10-11 fruits) resold at EUR 2.00 to 3.00! Great business, especially as the fruits are neither particularly perishable nor difficult to handle. It quickly went further than the French market and the ethnic/festive segment (Chinese New Year) to become an exemplary success of the 2000s. European imports were less than 10 000 t in the mid 2000s and reached some 80 000 t in 2009 and 2010. Sales of this fruit have also increased in Eastern Europe (more than





30 000 t imported to Russia in 2009) and it is also sold in Canada.

### A glaring lack of image

It is pitifully banal to say that the image of grapefruit is in need of rejuvenation. But it should be repeated as this is a serious, universal situation that is tending to worsen. An illustration using an emblematic market makes it possible to understand the seriousness of the situation: in France, consumption by persons younger than 35 is less than half of the average and has decreased by nearly 10% in the last five years. There are many factors in this loss of interest. A well-known component that also hits the consumption of fresh oranges is the tendency for consumers to favour more convenient items such as juice or easy peelers, or dairy products if we go beyond the universe of fruit and vegetables. The components related to the produce itself are also concerned, and these differ from one market to another. The polemic about the interactions between certain substances in grapefruit (bergamottin) and statin group drugs seems to have continued to slow consumption in the United States. In Europe, the acidity of the white grapefruit served in school canteens in the 1970s and 1980s seems to have put a whole generation off the fruit. Grapefruit is clearly in need of a new image.

### Rejuvenation

What is the recipe for putting the freshness back into grapefruit? It is difficult to be very impressive on the 'ready-to-eat front, which nonetheless attracts the young public. A grapefruit will never be a clementine and 'fresh-cut' and simply peeled 'natural' production techniques that reconcile the quality of the finished product and a reasonable price have not yet been perfected. Peeling is still a problem. Solely mechanical techniques are not sufficient as they wound the fruits as the latter are unevenly

		_								
Shaddock — China — Exports										
tonnos	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
tonnes	2001	2002	2003	2004	2005	2000	2007	2006	2009	2010
Total, incl.	6 595	8 774	14 201	14 073	21 716	38 868	82 814	98 879	120 160	119 204
EU	14	50	396	1 431	5 485	16 890	47 148	66 712	82 917	78 000
Russia	-	-	79	787	5 040	9 191	22 014	19 171	22 818	31 789
China HK	3 521	5 272	9 702	8 666	5 166	5 705	5 321	1 870	3 134	3 134
Philippines	678	742	1 404	124	417	1 068	641	1 812	2 404	2 404
Canada	1 019	1 430	1 184	1 961	3 418	2 699	2 563	2 669	2 390	1 815
Ukraine	-	-	-	-	37	360	1 056	2 162	1 055	1 055

Note: estimates in italics / Source: COMTRADE



shaped. They have to be combined with a complementary enzyme treatment to digest the remains of the albedo, and this considerably shortens the lifetime of the finished product. In this context it is difficult to consider the powerful snack segment. In contrast, the diversification of forms of consumption is certainly a pathway, especially as the use of this fruit either as a starter or a dessert gives a broad spectrum. Promoting grapefruit as an ingredient for salads and other dishes would probably attract young consumers.

### Check the sugar content to avoid surprises at tasting!

Another image to be eliminated is that the fruit is too acid-a major brake on purchases, especially in Europe. For although some consumers seek a more characteristic taste, too much acidity seriously affects the reputation of the fruit. It would seem important to take several complementary

steps. Export stakeholders must take care to keep to a minimum sugar:acid ratio. This approach is a key ingredient in the success and fame of grapefruit grown in Florida. It has to be admitted that this is not the case today, especially for certain Mediterranean producers at the beginning of the winter season when prices encourage concentrating on sales rather than using a refractometer. This mission is all the more possible in the Mediterranean as the sectors are concentrated in certain major supplier countries. Fewer than 10 structures are active in Spain. In Israel, Mehadrin and Agrexco account for more than 80% of citrus exports. These two countries also have joint trade organisations (AILIMPO in Spain and the Citrus Marketing Board in Israel) that are capable of setting up a joint quality certification policy and profit from this through promotion downstream. AILIMPO has already done this for the lemon sector. In Turkey, the problem of acidity is acute in certain zones that are marginal for grapefruit in terms of climate but is more difficult to handle because of the dispersal of the sector. However, for a short time now there has been a citrus board that is capable of handling the problem.



### Publication of a study showing the absence of serious interactions between Lipitor and grapefruit juice

The interaction should between the taking of certain drugs and grapefruit juice are a serious hindrance to consumption, especially in the United States. In particular, this point weighs heavily on the large numbers of people treated with statins for cholesterol. A recent study published in the British Journal of Clinical Pharmacology shows that Lipitor, the main anticholesterol drug sold in the world, does not interact sufficiently with grapefruit juice to cause clinical symptoms. This is perhaps another good sign for re-launching advertising focused on the advantages of grapefruit for health, an area hitherto affected by the polemic. In addition to its nutritional qualities (especially vitamin C and fibres), grapefruit plays a positive role in the fight against obesity and cardiovascular diseases, in particular by boosting HDL cholesterol levels.

#### Where are the varietal innovations?

Market dynamics and innovation are linked in agriculture just as they are elsewhere. The success of 'Extra Sweet' pineapple and Chinese shaddock prove this point. Varietal research can also be an effective line of attack for the development of grapefruit cultivars with a sweeter flavour. However, although varietal research is very active in citrus, grapefruit is the poor relation in current breeding programmes that are focused on easy peelers that generate more value-added. Although new shaddock varieties have been bred recently ('Valentine', etc.), this is not the case for grapefruit. The last new cultivars that made a mark as regards dissemination were 'Flame' and 'Rio Red' in 1987 and 1988 respectively. Is anything new expected in the short or medium term? Some research centres are working on the subject but it seems that nothing is due for completion at last in the medium term.

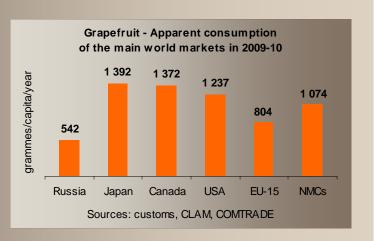
### Deliver the message of 'the pleasure of grapefruit' to consumers

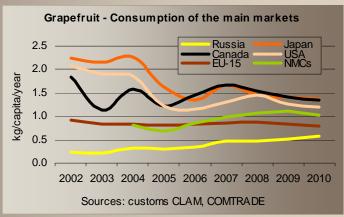
Advertising centred on the image of a fruit for pleasure remains. Is this optional? No! The extent of the decrease in consumption (see box), that can only get worse, given the disaffection of the younger age groups, should needle the trade into action. There is first the question of budgets—a complex problem in a context of stagnating sales and increased costs. The producers' associations found in all exporting countries must play a leading role in making their public aware of the need to fund this type of programme. The FDOC and, more recently, the CGA in South Africa imposed by decree a parafiscal tax for funding the promotion of grapefruit. There is also the guestion of means. Although operations to promote awareness are essential



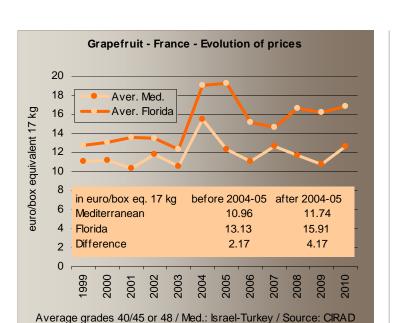
## Consumption a black decade

The series of disasters continues. After the collapse of Florida caused by hurricanes in the mid-2000s, when some markets such as Japan observed a fall of nearly a kilo per person per year, the decrease in consumption continued strongly. In the last three years, annual consumption per person has decreased by between 100 and 300 g per person in the rich countries. The stars of the world market were the hardest hit. The decrease was nearly 20% in Japan and Canada, which nonetheless remain in the lead with more than 1.3 kg per person per year. The United States lost about 7% at about 1.2 kg per person per year—hardly any more than the levels of 2005 and 2006 when direct losses caused by hurricanes sent production in Florida down to a historically low level. Western Europe also lost 100 g per person and 10% of total consumption which slid to 800 g per person per year. The movement varied considerably from one country to another in Western Europe. France, the main EU market for grapefruit, lost about 100 g but per capita consumption remained higher than 1.2 kg and continued to rival that of the world leaders. The fall was tremendous in the United Kingdom with a per capita loss of 250 g and a switch in status from that of overconsumer to one of under-consumer. Grapefruit is still not very attractive in the countries of south-west Europe and especially in Spain even though it is one of the leading European producers, along with Cyprus. The status quo in Italy, another large EU market, is fairly honourable. However, Germany has displayed the best performance with about 850 g, this being above the European average. In Scandinavia, with 170 g and an upward trend, the Swedes and above all the Danes are affirming their positions as large consumers, even if the total volumes imported are still moderate. The last countries in the world to display a certain dynamism are in Eastern Europe. Consumption in Russia has increased by more than 200 g and is now more than 500 g per person per year. The increase in volumes is some 150 g in the new member countries, where consumption is exceeding that of the Western European countries and is more than 1 kg per person per year. This performance is strongly linked to extremely strong dynamics in Bulgaria, the Baltic countries and Poland. Consumption is stable in Romania where annual per capita consumption at 1.4 kg makes it one of the largest consumers in the world.





Grapefruit — EU — Consumption								
	Consumption 2009-10 (kg/cap./year)	Evolution 2009-10/2006-07 (kg/cap./year)	Apparent volumes (tonnes)	Population (millions)				
France	1.218	- 0.091	78 787	64.7				
Denmark	1.006	+ 0.174	5 533	5.5				
Belgium	0.844	- 0.187	9 114	10.8				
Germany	0.826	+ 0.149	67 549	81.8				
Sweden	0.810	+ 0.032	7 536	9.3				
Aver. EU-15	0.804	- 0.040	306 338	381.1				
Greece	0.669	- 0.095	7 557	11.3				
Ireland	0.650	- 0.175	2 926	4.5				
Luxembourg	0.610	- 0.155	305	0.5				
Italy	0.572	+ 0.010	34 498	60.3				
UK	0.557	- 0.252	34 549	62				
Austria	0.425	- 0.001	3 572	8.4				
Finland	0.390	+ 0.033	2 109	5.4				
Spain	0.380	+ 0.084	17 478	46				
Portugal	0.099	+ 0.036	1 051	10.6				
Baltic states	1.49	+ 0.416	10 282	6.9				
Romania	1.36	- 0.010	29 257	21.5				
Bulgaria	1.35	+ 0.571	10 224	7.6				
Aver. NMCs	1.07	+ 0.153	107 457	100.1				
Czech Rep.	1.05	+ 0.087	11 046	10.5				
Poland	1.04	+ 0.221	39 667	38.2				
Slovakia	0.92	- 0.014	4 988	5.4				
Hungary	0.39	+ 0.003	3 914	10				
Sources: EUROSTAT, CLAM								



(tastings in shops, press advertising), shoppers should be helped to identify the fruit readily in shops at the moment of purchase. A simple sticker highlighting the taste qualities of the fruit and that respects the regulations on nutritional claims, would probably suffice if the message is repeated in point-of-sale advertising and in the campaigns mentioned above.

### Florida obliged to run advertising?

More active advertising is probably more essential for Florida than for any other production source as in addition to fighting falling consumption, this supplier must justify its increasingly elitist position with regard to its competitors in Europe for reasons of the rocketing of cost prices. The difference in guay price between grapefruit from Florida and fruits from the Mediterranean has doubled since the hurricanes of 2004 2005, increasing from a little more than EUR 2.00 per kg to more than EUR 4.00 for a 17 kg equivalent box (see graph). This is hard to handle when promotion budgets are shrinking rapidly as FDOC funds are logically redirected towards the control of greening, a lethal disease. Would it not be wise in this context to concentrate marketing efforts on the most receptive markets and those with the best potential? France is an ideal target as it takes about half of the volumes from Florida that arrive in the EU and the taste merits of fruits from this source have already been strongly highlighted. Flexibility of demand is another strong point of the French market. At a time when the quantities available at production are decreasing steadily, the ability of being able to ship red or pink fruits and several size references makes the work easier and large-scale promotion operations can be set up. The British market does not have this advantage and many operators are abandoning it because of its rigidity and because of the weak currency.

#### Tone down diet claims?

Is a return to the idea of a fruit for pleasure incompatible with that of grapefruit being an ally in diets to lose weight that are often at the core of current advertising campaigns? The question is a twin one. The image of diet foodstuffs still has a very negative connotation as regards taste. The budgets used by major brands of the sector to try to demonstrate that their hyperprotein cream or fatless biscuits are merely edible are proof of this. Another problem is that it is difficult to both guarantee a sugar content—the sworn enemy of those who want to become slim—and push the 'diet' aspect of the fruit.

#### Work on added-value

Although increasing the volumes sold is important, working on added value is also a priority. Marketing studies carried out recently in the UK for CGA in South Africa have shown that size can be a major element in segmentation and justify greater value-added. Should a cheap range of small fruits in nets be developed, as is already done for a fair number of fruits? Another line of approach could be the development of a brand policy centred on a guaranteed sugar content, as some producers have done for melons.

### Reasons for optimism

Reasons for concern are numerous: practically generalised decrease in consumption, ageing of the public that is faithful to grapefruit and absence of innovation. Paradoxically, this fruit has enormous development potential just through its poor market penetration. For example, only 20% of the British and less than 50% of the French, who are nonetheless the European leaders in terms of consumption, bought grapefruit in 2010. In addition, the fruit still has considerable seduction potential. Even if it is not as immediately ready to eat as a clementine or a banana, a grapefruit is easy to prepare and has

many uses: fresh as a dessert or a starter (whole or as a salad), juice. But it is necessary to go back to basics, that is to say supplying consumers with grapefruit that are certain to give pleasure and making this known

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