May 2011 - No. 189

FRuiTROP

English edition

CLOSE-UP

Banana

European stone fruit season: 2011 harvest forecasts

Trends in citrus diseases: the situation in Italy

http://passionfruit.cirad.fr

SCB

QUALITY FRUITS WEAR A CROWN

COMPAGNIE FRUITIERE

www.compagniefruitiere.com

The statue of 'El Bananero', Machala, Ecuador

Down with fools...!

Certainty is a disease that is spreading. Thanks to universal access to so-called 'information'—I mean the web, chats, blogs, whispering of all kinds, collective striptease operations via so-called social networks—any dummy with a keyboard knows just about everything about everything, and then all the rest as well. I observed this universal lack of understanding, not to say idiocy, at a recent colloquy on Overseas Tastes and Flavours. Participants included all kinds of specialists (an anthropologist, an economist, a shopkeeper, a cook, a historian, etc.), with the aim being that of discussing with the public the gastronomy of French overseas areas and of the south in general. The basic question was that of knowing why these cuisines and their specific ingredients (tropical fruits in particular) have not succeeded in gaining a solid foothold in Europe like Italian and Japanese food, etc. Discussion soon drifted into nauseous areas like that of issues of minority communities and the rejection of things exotic, when they are not your own of course. But also on the master and slave relation between rich traders in the North and the miserable producer/exporters in the South, against a background of appalling environmental impacts. The certainty with which falsehoods and stupid remarks were launched was so absolute that a kind of collective autosuggestion seemed to submerge the discussion. For example, they are now all certain that it is better not to import litchis from Madagascar or mangoes from West Africa in order to allow producers to enjoy their work themselves. Everybody thinks that consumption should be made seasonal again. And the answer to the question 'But when do you eat seasonal French apples, Madame?' was 'Well, I don't know. In July isn't it?'. This rather rancid slice of life leaves me hesitating between two attitudes. One would be to say that there is an enormous need to spread knowledge (and not information), and the other would be to say that it is much too late because, as the British philosopher and mathematician Bertrand Russell said, 'What men want is knowledge, not certainty'.

Denis Loeillet

cirad
AGRICULTURAL RESEARCH FOR DEVELOPMENT

Publisher
Cirad
TA B-26/PS4
34398 Montpellier cedex 5, France
Tel: 33 (0) 4 67 61 71 41
Fax: 33 (0) 4 67 61 59 28
Email: odm@cirad.fr
http://passionfruit.cirad.fr

Publishing Director
Hubert de Bon

Editors-in-chief
Denis Loeillet and Eric Imbert

Editor
Catherine Sanchez

Computer graphics
Martine Duportal

Iconography
Régis Domergue

Website
Unité multimédia (Cirad)

Advertising Manager
Eric Imbert

Subscriptions
Christian Clouet

Translator
Simon Barnard

Printed by
Impact Imprimerie
n°483 ZAC des Vautes
34980 Saint Gély du Fesc, France

Separate French and English editions

ISSN
French: 1256-544X / English: 1256-5458

CPPAP
Fr.: 0711 E 88281 / Eng.: 0711 R 88282

Subscription rate
EUR 210 / 11 issues per year

FRuiTROP

Contents

Cover photograph: Régis Domergue

Granot Avocado

Mehadrin Tnuport Export (L.P.)

With " Granot Avocado" Mehadrin is the first Israeli avocado Exporter with 26 000 t

Mehadrin, established in 1952, is Israel's largest grower and exporter of citrus as well as Avocado and other fruits and vegetables. With over 8,500 hectares of agricultural holdings, Mehadrin's strength is in its deep integration in every stage from the seed to the shelf. Mehadrin's ability to offer the widest variety of fresh produce and its flexibility to offer specific marketing and packaging solutions for each individual client makes it one of the most trusted growers and exporters in the world.

Together, we will become Israel's largest exporter of avocado, with an approximate 50% holding of the Israeli avocado export. This cooperation will not only maintain our excellent reputation but also surpass it, providing best quality fruits our land can offer and marketing them by request to anywhere on the globe.

We are proud to announce the establishment of a joint venture for Avocado export between two of the biggest private growers in Israel - Avocado Granot and Mehadrin. Plantations spread throughout the country will produce 26,000 tons of top quality avocado fruit, packed by request in two advanced packing houses, and marketed by Mehadrin marketing teams.

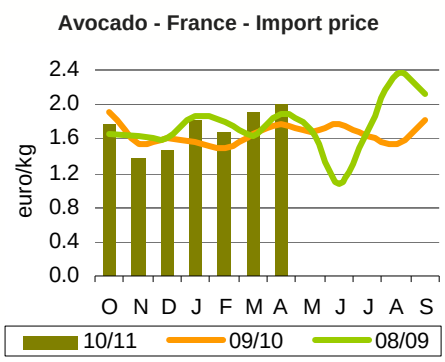
Avocado Granot, a Cooperative within the Granot Group, was established in the 1940's and is one of the largest cooperative groups in Israel and the world. Granot is owned by 40 Kibutz's (collective farming communities) located throughout coastal plain and central Israel. Granot owns approximately 20,000 dunam of agricultural land and packages about 30% of the entire Israeli avocado market, including 60% of the organic avocado market in Israel. In the next three years, Granot's avocado production is expected to exceed the 40,000 tons annually as its orchards reach full growing capacity. Granot opened this year its brand new 6,000 square meter packing house, which is one of the three largest packing houses in the world.

MEHADRIN TNUPORT EXPORT
Power Center 1 — Be'erot Yizhaq 60905, Israel
Tel.: 972-3-9371371 — Fax: 972-3-9371372
E-mail: export@mtex.co.il
http://www.mtex.co.il

Avocado

April 2011

Marked under-supply of 'Hass'. The large arrivals from Spain did not make up for another month of complete absence of Mexican fruits and the very gradual start of the Peruvian season in a context of limited shipments from Israel. Meanwhile demand increased for the traditional Easter promotion operations, although these were downsized as supply was small. Prices firmed and reached EUR 10 per box at the end of the month for fruits from some sources. The market for green varieties was less euphoric. The supply shortage was only slight, with moderate volumes from winter sources but fairly substantial quantities from Peru and Kenya. Prices held at a good level but a certain decrease was observed, especially for small fruits.



PRICE

Varieties	Average monthly price euro/box	Comparison with the last 2 years
Green	6.50-7.00	+ 17%
Hass	9.00-9.50	+ 9%

VOLUMES

Varieties	Comparison	
	previous month	last 2 years average
Green	↗	- 2%
Hass	↗	- 7%

■ Avocado is becoming increasingly strongly anchored in the Australian diet. Apparent annual consumption reached nearly 54 000 t in 2009-10, that is to say 2.45 kg per person. The fruits consist of 45 000 t grown in Australia and 10 600 t imported from New Zealand, from which exports of 1 700 t should be deducted. Volumes have doubled in ten years.

Source: HAL

■ USAID support for the development of the avocado sector in the Dominican Republic. The US agency for international development has earmarked a budget of some USD 300 000 to help growers in the Cambita region (west of Santo Domingo) to export avocado. The funds will be invested in technical support for both production and sales and in the setting up of a packing station. The objective is to be able to ship a little more than 70 containers of fruits per year.

Source: InfoHass.net

■ 2010-11 winter avocado season in the EU: overall supply probably suffered from a deficit. Professional sources make it possible to draw up a preliminary balance of community supply from major suppliers in the 2010-11 season. It confirms that overall supply was somewhat short. At some 11 million boxes, Israeli exports increased slightly in comparison with 2009-10 (10.5 million boxes), a fine performance in comparison with preceding seasons (7 to 8 million boxes in 2007-08 and 2008-09). In contrast, Mexican shipments fell dramatically. Arrivals should be less than a million boxes after 2 to 3 million since 2005-06 and more than 4 million before that! For reference (FruiTrop 185), the Chilean season was also small with 6.5 million boxes shipped to the EU, a figure almost as low as in 2007-08 and 2008-09 and far from that of 2009-10 when 13 million boxes were received. We are now waiting for customs figures for information about Spanish performance to be able to make a full review.

Source: CIRAD


© Eric Imbert

VOLUMES

Source	Comparison		Observations	Cumulated total / cumulated average for last 2 years
	previous month	average for last 2 years		
Israel	↘	+ 51%	Season coming to an end with volumes higher than average but moderate and much smaller than those of the last season.	+ 18%
Peru	↗	- 8%	Arrivals increased but there was a serious shortage of 'Hass' (medium harvest, opening of the United States market very likely).	- 35%
Spain	↗	+ 39%	Marked peak in supply of 'Hass' especially during the Easter period. Very limited volumes of green varieties.	+ 3%
South Africa	↗	- 44%	Start of the season somewhat late for both 'Hass' and green varieties; volumes were moderate as a result of a strong production deficit.	- 44%
Kenya	↗	- 44%	Arrivals of 'Fuerte' were strong and growing. Some moderate volumes of 'Hass'.	+ 4%

Banana

April 2011

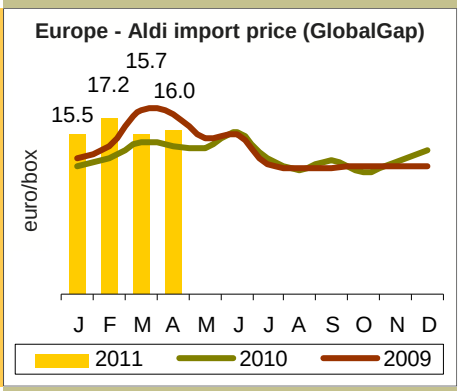
The first part of 2011 was definitely atypical. A recovery that was surprising for the season took place in April after a more difficult March than usual. European market supply was short in spite of the large volumes shipped from Surinam. Shipments from the French West Indies were stable and moderate while those from Africa were particularly small. The deficit in fruits from Cameroon and Ghana decreased but the political troubles in Côte d'Ivoire caused a serious dip in supply. Finally and above all, arrivals of dollar bananas were smaller than normal. Deliveries from Ecuador were still large. However, they did not make up for the weakness of the volumes from Costa Rica and above all from Colombia, the reason in both cases being small productivity because of unfavourable weather conditions in the preceding months.

In addition, the seasonal decrease in demand in the first fortnight was only small. The season's fruits, whose prices held fairly well, seem to have had a comparatively moderate effect on banana sales in France and Southern Europe. Release continued at a good rate in Germany and, as usual, Easter was good for banana sales on the Eastern European market. This resulted in a firming of prices until the end of the month, when market balance became delicate. Prices remained very high in Spain, where arrivals of Canary Island bananas were very small.

EUROPE — ALDI IMPORT PRICE

April 2011 euro/box	Comparison	
	previous month	average for last 2 years
16.00	+ 2%	0%

EUROPE



■ Canary Island bananas on the German market from September 2011. ASPROCAN has decided to target Germany in its necessary quest for market diversification. The objectives are modest at about one load by road every week (1 000 t per year), with the quality segment being aimed at. The first fruits should be available in September 2011. The initiative could be extended to Switzerland, Austria and certain Eastern European countries (Hungary, Poland, etc.).


© Charles de Wulf

Sources: Reefer Trends, ASPROCAN

■ The Ecuadorean government sees red! Nearly a million dollars! This is the total of the fines to be paid by nine Ecuadorean exporting companies that did not respect the 'new banana law' aimed at rebalancing the relation between production and trade. The law came into force at the beginning of this year and guarantees the respect of a minimum price (set at USD 5.50 per 41.5-lb box until the end of 2011) by means of the obligatory use of a sales contract and the routing of transactions via the Central Bank of Ecuador. The companies fined did not respect the latter clause. And the government promises even heavier sanctions for second offenders, with export licences withdrawn at the third offence!

Source: Reefer Trends

■ JFC to double its own banana production. The St Petersburg group has announced that it has obtained a loan of USD 180 million to be used to develop distribution infrastructure in Russian cities with populations of 500 000 and to increase its own banana production. The area of the group's plantations in Ecuador and Costa Rica should increase from 3 000 to 5 000 ha. The Russian market leader, in 2010 JFC controlled 36% of domestic trade in bananas and 15% of that of fruits, according to its own sources.


© Denis Loeillet

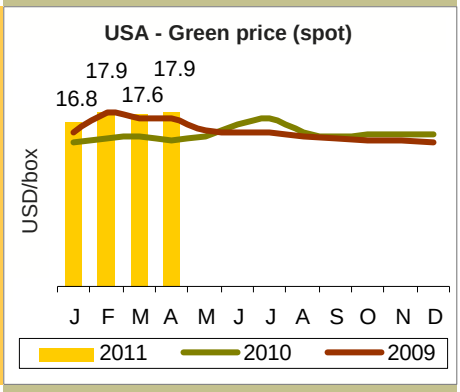
Source: Reefer Trends

EUROPE — RETAIL PRICE

Country	April 2011		Comparison	
	type	euro/kg	March 2011	average for last 2 years
France	normal	1.59	- 6%	0%
	special offer	1.32	- 10%	- 7%
Germany	normal	1.30	- 4%	- 6%
	discount	1.13	- 6%	- 7%
UK (£/kg)	packed	1.19	+ 1%	+ 2%
	loose	0.73	- 8%	- 16%
Spain	plátano	2.00	+ 3%	+ 8%
	banano	1.42	0%	- 4%

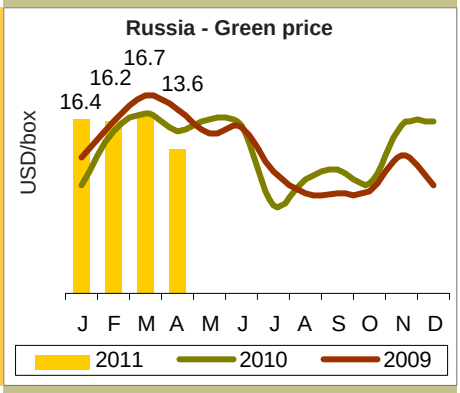
Banana

UNITED STATES



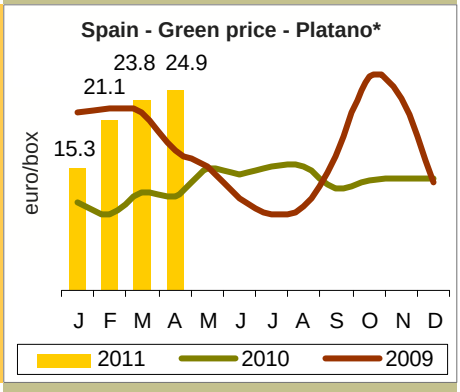
USA — IMPORT PRICE		
April 2011 USD/box	Comparison	
	previous month	average for last 2 years
17.90	+ 1%	+ 11%

RUSSIA



RUSSIA — IMPORT PRICE		
April 2011 USD/box	Comparison	
	previous month	average for last 2 years
13.60	+ 2%	0%

CANARIES



CANARIES — IMPORT PRICE*		
April 2011 euro/box	Comparison	
	previous month	average for last 2 years
24.90	+ 5%	+ 71%

* 18.5 kg box equivalent

■ Banana supply to the EU and the USA in January and February 2011: trend unchanged.

Banana supply to Europe is decreasing again. According to CIRAD estimates, the European market lost 3% in the first two months of the year. European production was down 10% in comparison with 2010 because of the still distinct effects of hurricane Tomas that hit Martinique (- 37%) and Guadeloupe (- 15%) at the end of 2010. Canary Island bananas displayed a nearly 2% increase.

Strongly affected, the ACP group also displayed a decrease. African ACPs shipped 13% less and the others 7% less. Cameroon (- 28%) accounts for the whole African ACP decrease. It will take another two or three months for Cameroonian recovery to be seen in customs figures, with the source returning to more traditional levels from early May onwards. Côte d'Ivoire confirmed the good trend of recent years (+ 2%) as the troubles only affected exports to a limited degree. Although the Dominican Republic (+ 22%) broke its record for exports to the EU yet another time, it did not make up either for the absence of St Lucia and St Vincent or for the very strong temporary dip in shipments from Surinam (- 40%).

Dollar sources remained stable in general but with strong decisions made about the allocation of shipments to the EU or US markets. Ecuador performed very well during the first two months of the year with 13% growth whereas shipments from Colombia (- 3%), Costa Rica (- 12%) and Panama (- 24%) decreased markedly. The opposite was true for the US market where these three sources, and Ecuador as well, displayed considerable increase on a strongly growing market with a 3% increase in net supply.

Brazil continues to suffer month after month and year after year, whereas Peru, like the Dominican Republic, is benefiting strongly from organic and fair trade bananas.

It has been mentioned that the US market continued to grow in the first two months of the year. Guatemala and Honduras are practically the only sources to have slowed shipments to this market for reasons of meteorological problems. Banana consumption in the USA reached nearly 600 000 t in January and February in comparison with 823 000 t in EU-27.

Source: CIRAD

■ European imports of banana in January and February 2011.

Banana - EU-27 - January and February 2011 imports (provisional)						
tonnes	2008	2009	2010	2011	2008-2010 average	Variation 2011/2010
Extra-EU	**755 626**	**753 774**	**754 534**	**736 635**	**754 645**	**- 2%**
MFN	614 812	618 217	594 939	593 338	609 323	**0%**
ACP, of which	140 814	135 557	159 595	143 297	145 322	**- 10%**
ACP Africa	91 939	77 350	92 246	80 503	87 178	**- 13%**
ACP others	48 875	58 208	67 349	62 794	58 144	**- 7%**

Note: 2011 figures provisional, data lacking for certain member states and certain months.
Source: EUROSTAT customs code 8 030 019

EUROPE — IMPORTED VOLUMES — APRIL 2011			
Origin	Comparison		
	March 2011	April 2010	cumulated total 2011 compared to 2010
French West Indies	=	- 4%	- 19%
Cameroon/Ghana	↘	- 38%	- 22%
Surinam	↗↗	+ 36%	- 12%
Canaries	↘	- 25%	- 9%
Dollar:			
Ecuador	=↘	+ 17%	0%
Colombia*	↘	- 21%	0%
Costa Rica	↘	- 9%	- 4%

* total all destinations

Pineapple

April 2011

In April, operators greatly feared the arrival of large volumes of 'Sweet' from Costa Rica. This did not happen and in contrast supply was very small, leaving operators wondering how they could fulfil their undertakings for the promotion operations planned for Easter. Sales were very fluid in this context and the small volumes released on the market sold fast. Supply continued to be imbalanced with few medium-sized fruits and lots of large ones. An increase in prices might have been expected as supply was small but this did not happen. Prices were just a little firmer for the most sought-after sizes. As occurs whenever market conditions are difficult, major brand fruits sold best. The difference in price was as much as 2 euros for certain sizes. Demand decreased rapidly after Easter and this was seen in prices.

The crisis in Côte d'Ivoire was at its most intense in April. In practical terms, this resulted in the halting of exports from the country and an absence of batches of 'Smooth Cayenne' on the market until the end of the month.

Supply was small on the air pineapple market throughout the month, and operators were able to notch up their prices. Sales were good. A weakening of demand was felt after Easter and prices dipped a little. Sales of 'Sugarloaf' pineapples from Benin were brisk in April as there were few fruits and very strong demand for the few batches available. Prices of 'Sugarloaf' pineapples remained good at EUR 1.90 to 2.10 per kg throughout the month.

In April, supply of 'Victoria' from Mauritius was more ample. Unfortunately quality was uneven and the fruit did not truly profit from the weakness of competing supply and sell better.

EUROPE

PINEAPPLE — IMPORT PRICE

Weeks 14 to 17	Min	Max
By air (euro/kg)		
Smooth Cayenne	1.75	2.00
Victoria	3.00	4.50
By sea (euro/box)		
Smooth Cayenne	-	-
Sweet	6.50	9.00

Mango

April 2011

The fairly rapid decrease in deliveries from Peru caused a distinct change in market conditions in April. It resulted in a large and sudden increase in prices as the decrease in supply coincided with preparations for Easter, a period during which demand usually increases. Peak selling prices were reached in the second and third weeks of the month. Prices weakened while demand fell in the last week in spite of the steady decrease in shipments from Peru. At the same time as the increase in the prices of Peruvian mangoes, sales at lower prices (from EUR 3.00 per box) were observed in the first half of the month because of the more uneven quality of Peruvian fruits from storage or on arrival. Making up for the deficit from Peru, Brazil returned to the market with larger volumes. Other sources such as Guatemala, Nicaragua, Costa Rica and Puerto Rico also benefited from the increase in prices to place complementary volumes. Supply became more chaotic at the end of the month, with numerous sources, varieties and fruits.

The increase in arrivals of shipments by air from Peru at the beginning of the month weighed on sales conditions for the fruits concerned. Furthermore, many batches consisted of very ripe fruits that had to be sold rapidly. In this context, the price of air mangoes decreased or held at a medium level without a systematic relation with the cost price. Supply arriving by air was also completed by deliveries from West African countries and consisted of a great range of varieties, colour and ripeness that poorly matched demand that preferred fruits ready to eat. Costa Rica consolidated the sales niche inaugurated in 2010, shipping 'Cavallini', 'Mora' and 'Irwin', generally of good quality. The first Kent from 'Côte d'Ivoire' arrived in the second half of the month. Their arrival on the market coincided with the last shipments from Peru and their selling conditions were satisfactory in spite of competition from the other West African sources.

EUROPE

MANGO — ARRIVALS (ESTIMATES) Tonnes

Weeks 2011	14	15	16	17
By air				
Peru	120	100	15	15
Mali	20	30	50	50
Burkina Faso	20	30	25	15
Costa Rica	10	10	10	-
Côte d'Ivoire	-	-	80	130
By sea				
Brazil	2 200	660	660	2 860
Peru	2 050	1 470	1 450	1 210

MANGO — IMPORT PRICE ON THE FRENCH MARKET — Euro

Weeks 2011		14	15	16	17	April 2011 average	April 2010 average
By air (kg)							
Peru	Kent	3.50-4.00	3.00-4.00	3.00-3.80	3.00-3.80	3.10-3.90	3.80-4.40
Mali	Amélie	2.50-2.80	2.40-2.50	2.20	2.50	2.40-2.50	2.35-2.50
Mali	Valencia	2.80-4.00	2.50-3.00	2.00-2.50	2.50-3.00	2.45-3.10	2.70-3.25
Mali	Kent	-	-	-	3.00-3.50	3.00-3.50	3.50-3.65
Burkina Faso	Amélie	2.00-2.20	2.00	2.00-2.20	2.00-2.20	2.00-2.15	2.25-2.30
Burkina Faso	Kent	-	3.00	2.50-2.80	2.50-3.50	2.65-3.10	na
Costa Rica	Cavallini	3.00-4.00	3.00-4.00	4.00-4.20	4.00	3.50-4.05	na
Côte d'Ivoire	Kent	-	-	3.50-4.50	3.50-4.00	3.50-4.25	3.75-4.20
By sea (box)							
Brazil	T. Atkins	5.00	5.00-5.50	-	5.50-6.00	5.15-5.50	2.60-3.60
Peru	Kent	4.20-5.50	5.00-7.00	5.50-7.00	5.00-6.00	4.90-6.35	5.00-6.15

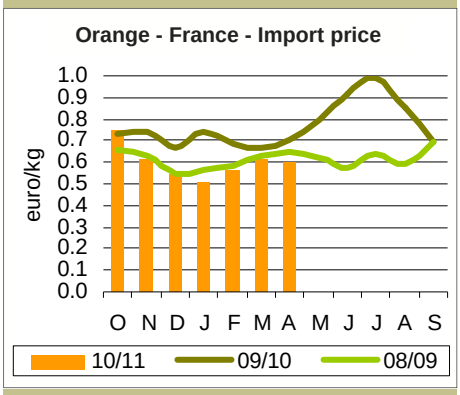
PINEAPPLE — IMPORT PRICE IN FRANCE — MAIN ORIGINS

Weeks 2011		14	15	16	17
By air (euro/kg)					
Smooth Cayenne	Benin	1.80-1.90	1.80-1.90	1.85-1.90	1.80-1.90
	Cameroon	1.85-2.00	1.85-1.90	1.85-1.90	1.80-1.90
	Ghana	1.85-1.90	1.80-1.90	1.80-1.90	1.75-1.90
	Côte d'Ivoire	-	-	-	-
Victoria	Réunion	4.00-4.50	4.00-4.50	3.50-4.50	3.50-4.00
	Mauritius	3.00-4.00	3.00-3.50	3.00-3.50	3.00-3.50
	South Africa	3.40-3.70	3.40-3.70	3.40-3.70	3.40-3.70
By sea (euro/box)					
Smooth Cayenne	Côte d'Ivoire	-	-	-	-
Sweet	Côte d'Ivoire	-	-	-	-
	Cameroon	6.50-9.00	6.50-9.00	6.50-9.00	6.50-9.00
	Ghana	6.50-9.00	6.50-9.00	6.50-9.00	6.50-9.00
	Costa Rica	6.50-8.00	7.00-8.50	7.00-8.50	6.50-8.00

Orange

April 2011

The market remained difficult for lack of demand. Supply tended to be moderate. In the dessert orange category, the season for 'Navelate' from Spain tailed off early in the last part of the month. The situation was the same for juice oranges with 'Valencia Late' from Spain continuing to develop very slowly even though the 'Salustiana' season had ended. However, unusually hot weather accentuated the seasonal decrease in sales. Furthermore, quality continued to be merely average after the frost that had hit Spain at the beginning of the year. As a result, prices remained at a medium level for 'Valencia' and were rock bottom for 'Navelate'. 'Maroc Late' was practically absent from the community market. Only the last batches of 'Maltese' from Tunisia sold under fairly good conditions on a niche market.



PRICE

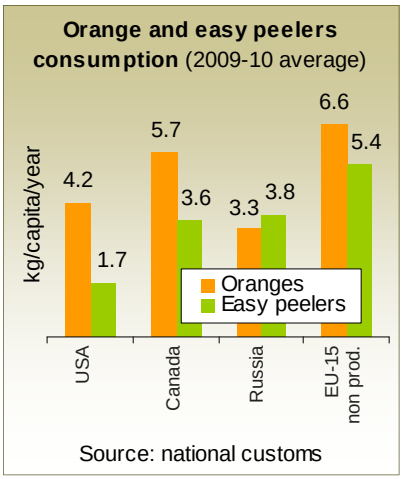
Type	Average monthly price euro/box 15 kg	Comparison with average for last 2 years
Dessert oranges	9.00-9.50	- 12%
Juice oranges	8.50-9.00	- 4%

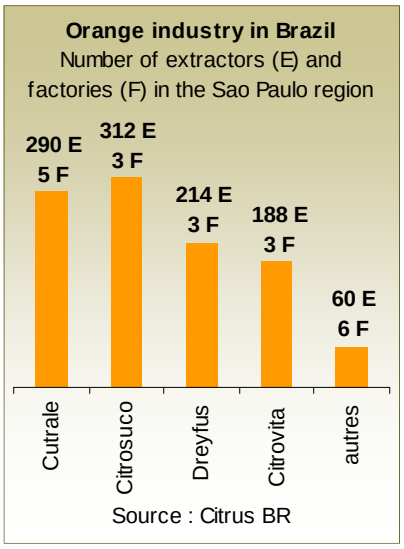
VOLUMES

Type	Comparison	
	previous month	average for last 2 years
Dessert oranges	↘	- 12%
Juice oranges	↗	- 30%

■ Diversification of outlets for Spanish citrus. Spain, the giant world leader of the citrus export trade, is too dependent on the EU market. The figures speak for themselves: 80% of annual exports in excess of 3 million tonnes is shipped to Western Europe. The export balance for this season should show that a strategy for the diversification of the customer portfolio has begun to take shape. Shipments to destinations outside Western Europe up to mid-April exceeded 170 000 t, an increase of nearly 70 000 t in comparison with the previous season. Professionals have concentrated their efforts on markets in North America (+ 16 000 t to the United States and + 5 000 t to Canada), Eastern Europe (+ 30 000 t to Russia, + 4 000 t to Belarus and + 3 000 t to Ukraine) and the Persian Gulf (+ 3 000 t to Saudi Arabia and the emirates). There is immense potential as North American and Eastern Europe display strong underconsumption, especially as regards easy peelers and oranges. This potential is very attractive and other sources such as Morocco are also concentrating on these markets.

Sources: customs, CIRAD, FoodNews





■ Orange juice: just one more step to be taken before the wedding of the century. The EU Antitrust Commission has approved the plan for the merger between Citrosuco (Votorantim group) and Citrovita (Fisher group), two of the four giants that control the greater part of the world orange juice trade, along with Cutrale and Louis Dreyfus. All that remains to be obtained before the wedding celebrations is the green light from the Brazilian antitrust commission. Will small Brazilian growers have to foot the bill?

Source: Bloomberg

■ Brazilian oranges: orchard recovery coming? One year! That is how long it takes on average to obtain orange seedlings from Brazilian nurseries, according to EPTV, the Brazilian press agency. Processers increased the price paid per box of oranges from USD 2-5 at the end of 2008 to USD 8-9 since April 2010 according to Escola Superior de Agricultura Luiz De Queiroz (ESALQ), and this seems to have encouraged growers.

Sources: EPTV, ESALQ

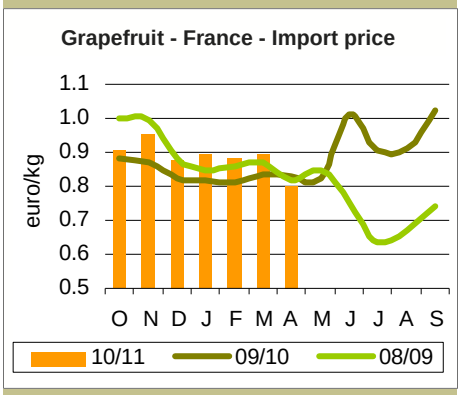
VOLUMES

Varieties by source	Comparison		Observations	Cumulated total / cumulated average for last 2 years
	previous month	average for last 2 years		
Valencia late from Morocco	↗	- 27%	Very limited volumes for the EU because of market conditions.	+ 18%
Navelate from Spain	↘↘	- 20%	The season slowed very early because of production losses caused by frost. Volumes distinctly smaller than average.	- 30%
Valencia from Spain	↗	- 38%	Very gradual start to the season even though 'Salustiana' had finished.	- 50%
Maltese from Tunisia	↘	na	Steady, moderate supply throughout the month.	- 19%

Grapefruit

April 2011

Performance was somewhat mixed during the month, especially for fruit from Florida. Arrivals slowed early, at the beginning of the month and the last deliveries were at the end of the period. However, demand slowed and rather than improving, prices remained more than 10% lower than usual. Supply of Mediterranean fruits was average. Strong arrivals from Israel and Spain made up for the small shipments from Turkey, while a few batches from Corsica complemented French supply. Demand for small fruits was medium to slow. Nevertheless, prices held at a fairly satisfactory level, especially for Israeli and Corsican fruits. The first batches from South Africa were delivered early, reaching Northern Europe at the end of the month.

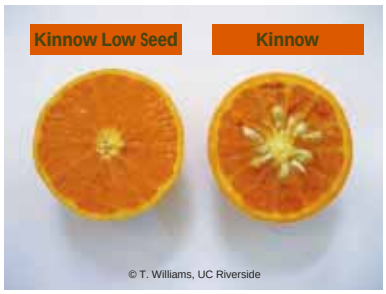


PRICE

Type	Average monthly price euro/box 17 kg box eq.	Comparison with average for last 2 years
Tropical	15.75-16.25	- 3%
Mediterranean	11.00-12.00	+ 7%

VOLUMES

Type	Comparison	
	previous month	average for last 2 years
Tropical	↘↘	- 13%
Mediterranean	↘	+ 1%



■ A new late easy peeler variety developed by University of California - Riverside. 'Kinnow Low Seed' was bred from a parent of the same name also created at Riverside about a century ago. The fruit has strongly coloured peel, is fairly large with 10 to 11 segments containing very sweet juice. But the variety differs from its parent above all in the number of seeds: usually two or three in comparison with 15 to 30. It is ripe between February and April under cultivation conditions in California. Distributed from June 2011, seedlings will not be sold outside the United States for three years.

Contact: iqbal@ucr.edu

Source: Eurekalert

■ 2010-11 Florida grapefruit export season: an unsurprising decrease. Figures published by FDOC confirm the downward trend in Florida grapefruit exports. The volumes sold outside the United States should hardly exceed 10 million 42.5 lb (19.3 kg) boxes in comparison with 11.3 million in the two preceding seasons. The decrease is of comparable proportions on the two main markets, that is to say Japan and the European Union. In contrast, the quantities shipped to Canada are stable at slightly over one million boxes. The other markets, mainly in Asia (South Korea and Thailand) were also practically stable, taking a little more than 400 000 boxes.

Source: FDOC

Grapefruit — Florida — Exports
thousand boxes of 42.5 pounds (19.3 kg)

	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11*	Variation 2010-11/2008-10 average
EU	2 786	2 115	4 395	5 011	3 923	3 455	3 100	- 16%
Japan	4 832	4 559	7 860	7 018	6 036	6 277	5 400	- 12%
Canada	768	773	1 282	1 163	1 088	1 151	1 150	+ 3%
Others, incl.	135	240	335	455	261	430	457	+ 32%
South Korea	64	58	197	210	147	226	235	+ 26%
Taiwan	31	146	68	143	43	141	117	+ 27%
Total	**8 616**	**7 891**	**14 137**	**14 000**	**11 498**	**11 680**	**10 342**	**- 11%**

* estimates / Source: FDOC

VOLUMES

Source	Comparison		Observations	Cumulated total / cumulated average for last 2 years
	previous month	average for last 2 years		
Florida	↘↘	- 13%	Early decrease of arrivals at the beginning of the month, both in the EU and Japan. Last limited volumes at the end of the month.	- 16%
Israel	=↘	+ 18%	Arrivals substantial for the season, especially in mid-month.	+ 11%
Turkey	↘↘	- 54%	Exports decreased from the beginning of the month. Supply to the EU was particularly limited, especially during the second half of the month.	- 19%

Sea freight

April 2011

Operators' optimism of a shallow decline in the average TCE yield after this year's encouraging peak faded quickly as charterers capitalised on a tonnage surplus following the redelivery of units from the Chilean grape programme. Although the supply of capacity was never greatly in excess of demand (until the end of the month) there was always sufficient for charterers to be able to exert downwards pressure on rates.

At a time when more bananas are being loaded out of Ecuador in reefer boxes than in specialised reefers for the first time ever, there were insufficient Spot banana cargoes from the Med traders to absorb the surplus. Hopes that Argentinean citrus exporters would start shipping early proved unfounded while the late demand for squid that underpinned the long seasonal peaks in 2007 and 2008 did not materialise.

Over the course of April the box rate for bananas fell from USD 8-plus to USD 6 while the TCE yield fell from 90c/cbft to 35c/cbft. The April monthly average of 55c/cbft for the large segment means that the Reefer Trends' average for the first four months of 2011 calculates at 77c/cbft compared to last year's 55c/cbft (60c/cbft in 2009 and 103c/cbft in 2008), despite a 35% rise in bunker costs over the 12 months.

The small segment meanwhile recorded an average of 103c/cbft for the period, up from last year's 58c and the 70c/cbft in 2009. In a high bunker price environment the market for the smaller vessels is, to a large extent, at the mercy of the market for the larger units, which are most cost-efficient. Operators of larger vessels are able to offer lower box/pallet/MT rates and still net a higher c/cbft yield. This is an unwelcome new variable and will inevitably result in a disproportionate number of smaller vessels being demolished this year.

REEFER

MONTHLY SPOT AVERAGE

US$cents/cubic foot x 30 days	Large reefers	Small reefers
April 2011	55	83
April 2010	48	53
April 2009	30	44

■ The European litchi market in April. European supply in April followed the trend that started in the second half of February. Consisting exclusively of fruits shipped from Thailand by air, very limited import flows reached the Dutch and Belgian markets. Thai litchis sold steadily on the Dutch market at around EUR 11.25 per kg during the first three weeks of April; this was slightly down in comparison with the first arrivals in March. Prices fell markedly at the end of the month to about EUR 8.75 per kg. In spite of this considerable fall, prices remained high and firm. In contrast with last year, it seems that the first shipments from Thailand by sea are running somewhat late. In 2010, the first batches were received at the end of April. These fruits will probably not reach the European market until May this year.

Source: Pierre Gerbaud

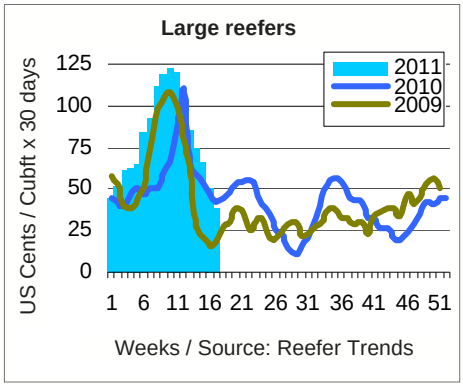
■ From Katopé to Univeg Katopé France. A large stakeholder in the international fresh produce market and very active in fruit and vegetables, the Univeg company (sales of EUR 3 billion, 9 500 employees) has operated in France since 2008 through the Katopé Group. Univeg Katopé France (sales of EUR 145 million in 2010) has just inaugurated its new operations centre at Rungis wholesale market. The facility has a large capacity, is modular, multi-temperature and multitask. Special attention has been paid to

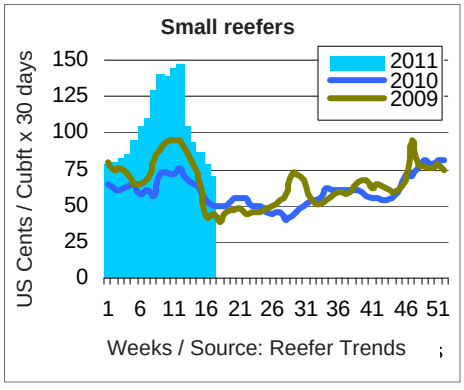
the reduction of impacts on the environment during the use of this immense storage, ripening and packing facility. For example, ammoniac, whose GWP (Global Warming Potential) is nil, replaces the usual refrigeration liquids that contribute to global warming. Summarised in a few figures, the facility has 7 000 m² of warehousing with controlled temperature, a 2 700 m² ripening facility (capacity 35 000 t) for bananas and other fruits (15 000 t), 1 000 m² of packing facilities, 15 quays and 1 500 m² offices, with an investment cost of EUR 12 million.

Source : CIRAD

■ Isabelle Chmitelin head of Odeadom (Office de développement de l'économie agricole d'outre-mer, France) since 1 May 2011. Trained as a veterinary surgeon, she was previously regional director of Food, Agriculture and Forestry in the 'Centre' region. Paul Luu, after managing Odeadom for six years, becomes the director of Agropolis International (Montpellier, France).

Source : CIRAD





European stone fruit season

2011 harvest forecasts

Peach & nectarine
A better calendar and good potential without excess

Forecasts for the European stone fruit crop released at the recent EuroMéditerranée (Medfel) show held in Perpignan from 4 to 6 May confirm a fairly good crop of peaches and nectarines as flowering was excellent. In contrast, a small apricot crop is forecast for both structural and conjunctural reasons.

The 2011 peach and nectarine season started under better conditions than in 2010, when everything was very late. European potential should be good overall at 2.85 million tonnes, 2% more than in 2010 and the average for the last three years. This is the result of very good flowering, even if the fruit setting percentage was small, especially in early production zones, as thinning operations were reduced. It is noted that the clingstone peach potential is continuing to decrease as a result of grubbing up (784 427 t, that is to say 6% less than in 2010). This is partly replaced by flat peaches and nectarine (81 550 t forecast in Europe in 2011). Spanish production should be excellent again (804 604 t, that is to say 10% more than in 2010). Because of Sharka disease, the Italian and French crops should decrease further to 1.44 million tonnes (- 2%) and 308 700 t (- 3%) respectively, with a fairly distinct decrease in the later zones. However, Greek production should recover to 298 200 t (+ 8%) after last year's deficit, but will remain stable in time at 1% more than the average for the last three years.

Apricot
Small potential and considerable disparity according to variety

The apricot season also promises to be fairly early as flowering was ten days sooner than usual. European potential may be limited with 416 722 t (23% less than in 2010 and 18% less than the three-year average) for structural reasons as the traditional orchards are ageing in Murcia, Campania and the Peloponnese. But there are also conjunctural reasons as flowering was affected by rain and the fruit setting percentage was low. It should be noted that the European harvest will be the smallest since 2003. Spanish production is continuing to decrease as a result of insufficient replacement of 'Bulida' apricots, damage caused by Sharka disease and increased competition from other fruits such as flat peaches and table grapes. The 2011 harvest may therefore be only 51 000 t (21% less than in 2010 and 37% less than the three-year average) whereas it still reached 150 000 t in 2000! Likewise, Italian orchards are still not being replaced sufficiently in spite of the plantation of modern varieties carried out in the last five years. The potential could therefore fall to 188 900 t (22% less than in 2010 and 15% lower than the three-year average), with a marked fall in southern Italy. Likewise, French production should dip further to 134 000 t (3% less than in 2010 and 1% lower than the three-year average), with substantial variations according to variety and a fairly marked decrease in late varieties whose flowering was seriously affected by rain. Greek production should also be very small with potential of no more than 42 500 t (43% less than in 2010 and 37% down on the three-year average) ■

Cécilia Céleyrette, Consultant
c.celeyrette@infofruit.fr

Peach and nectarine — Evolution of production in the main European countries

tonnes	2011	Comparison with	
		2010	last 3-year average
Italy	1 445 790	- 2%	- 1%
Spain	802 604	+ 10%	+ 11%
France	308 713	- 3%	- 2%
Greece	298 200	+ 8%	+ 1%
Total	**2 855 307**	**+ 2%**	**+ 2%**

Source: Medfel / Processed by INFOFRUIT

Apricot — Evolution of production in the main European countries

Tonnes	2011	Comparison with	
		2010	last 3-year average
Italy	188 980	- 22%	- 15%
France	133 829	- 3%	- 1%
Spain	51 413	- 21%	- 37%
Greece	42 500	- 43%	- 37%
Total	**416 722**	**- 23%**	**- 18%**

Source: Medfel / Processed by INFOFRUIT

Trends in citrus diseases

The situation in Italy

Italy has to face up to structural difficulties after the world downturn that affected the country's economy. This is the case in particular in the citrus sector, which also has to handle the threat of pests and diseases like Mediterranean fruit fly and tristeza. Initiatives are emerging at the Mediterranean scale to contain these problems.

Difficulties in the economy and citrus growing

After coming through the acute phase of the world economic crisis that is continuing in certain European countries, Italy is preparing for a difficult recovery. The country has to get over the substantial losses in GDP—estimated at about 6%—suffered over a period of three years.

Italian economic growth still seems too slow. Forecasts indicate an increase in GDP of hardly 1.1% in 2011. This is still very far from the strong growth seen in emerging countries including China, India and Brazil and also differs from the trend in OECD member countries (+ 3.2%).

The weak dynamism of the Italian economy results mainly from several negative factors including colossal public debt of some 120% of GDP, with harmful effects on employment, especially among young people, high production costs and fiscal pressure, low productivity, insufficient funding of research and technological innovation and the limited size of companies that prevents them from addressing foreign markets effectively.

Except in a few rare sectors, the combination of these weaknesses and others affects the competitiveness of Italian companies in the face of foreign competition and therefore hinders the development of exports essential for economic growth in the present situation.

The Italian citrus sector is directly affected by some of these difficulties that are now structural. Proof of this is that weakening citrus exports are unable to total more than an average of 7 to 8% of total production estimated at 3.5 million tonnes.

Previously, the difference in production costs, which are more marked if related to labour, was partially smoothed by CAP interventions that were initially favourable to community preference before weakening as the international citrus trade became globalised. Under the pressure of resolutions adopted by the GATT and then within the framework of the World Trade Organisation, community incentives were reduced and practically complete equality established in the conditions of access for citrus exported from third countries.

Efforts are being made on better produce quality in Italian citrus growing in order to maintain margins. Many varieties of Italian citrus thus have community quality labels and in particular Sicilian blood oranges and especially 'Tarocco' (PGI), whose specific qualities are not only organoleptic but also immunological because of the anthocyanin content, known for its effectiveness in combating free radicals.

Other commercially important results have been obtained by breeding cultivars that consumers like better, the mass introduction of organic produce, especially in the citrus sector, and finally the industrial production of a broad range of natural fruit juices.

The imminent threat of tristeza

The quality of Italian citrus fruits is compromised by various pests and diseases that affect plants and fruits. However, following studies, their harmful effects seem to be limited by the effectiveness of crop treatments that have prevented a dramatic decrease in crop potential.

The main pests and diseases that affect the Italian citrus sector are the Mediterranean fruit fly (*Ceratitis capitata*),

© Eric Imbert

Citrus — Italy — Production areas

hectares	Orange	Easy peelers		Lemon	Grapefruit	Total
		Clem.	Others			
Lazio	764	160	14	35		**973**
Campania	1 218	406	575	1 157		**3 356**
Puglia, incl.	6 165	4 754	122	277		**11 318**
Taranto	5 200	4 550	31	10		**9 791**
Basilicata, incl.	5 842	2 117	32	52		**8 043**
Matera	5 800	2 071		52		**7 923**
Calabria, incl.	22 615	17 364	2 026	1 407		**43 412**
Reggio di Calabria	14 240	2 589	1 424	846		**19 099**
Cosenza	2 850	11 965	102	366		**15 283**
Sicily, incl.	60 665	3 594	5 901	24 632	300	**95 092**
Catania	25 000	1 300	1 500	6 000		**33 800**
Siracusa	18 000	850	320	5 300	300	**24 770**
Messina	3 000	100	1 000	7 000		**11 100**
Palermo	400	50	2 300	5 000		**7 750**
Sardinia	3 043					**3 043**
Others	22	0	16	48	3	**89**
Total	**100 334**	**28 395**	**8 686**	**27 608**	**303**	**165 326**

Source: ISTAT

which results in serious problems of sales on the domestic market and also on export markets as some countries place an embargo on infested fruits, citrus mal secco disease that has killed a large number of lemon trees, various pests, the most harmful being California Red Scale (*Aonidiella aurantii*) and Citrus Leafminer (*Phyllocnistis citrella*), although the latter seems to be less virulent. Fortunately, Italian production is not affected by greening, a very serious disease that has ravaged citrus groves in Florida and Brazil.

However, tristeza disease has increased in worrying proportions in areas that were already affected. New cases have been identified in Sicily, Calabria, Basilicata, Sardinia and Campania.

Tristeza is caused by a closterovirus (Citrus Tristeza Virus or CTV) and is one of the most devastating diseases of citrus, except for lemons. It is spread over long distances by infected planting material and at the local scale by various aphid vectors. The CTV genome displays extraordinary variability, even after recombination in plants, with symptoms of varying seriousness.

Tristeza originated in South-East Asia and has spread to all the citrus-growing areas in the world, causing the loss of more than 70 million trees. It has gained the proportions of an epidemic, especially in Argentina, Florida, Brazil and Venezuela. Its spread in the Mediterranean basin has particularly affected Cyprus, Israel and Spain, where it was necessary to fell more than 40 million trees, but Morocco, Tunisia, Turkey and Malta are also concerned. The disease first spread to Italy from Spain in 1956 and remained latent for decades, with isolated outbreaks displaying negligible propagation indexes. However, it has spread exponentially in recent years.

Tristeza causes slow or sudden wilting of trees, which generally display defoliation and branch dieback caused by the gradual death of the roots. CTV attacks are more intense on trees grafted on sour orange, the case of practically all the groves in Italy and elsewhere around the Mediterranean. However, the rootstocks 'Rough Lemon' (*Citrus jambhiri*), 'Cleopatra' mandarin, grapefruit, *Poncirus trifoliata* and its hybrids (citrange) are more tolerant to the disease.

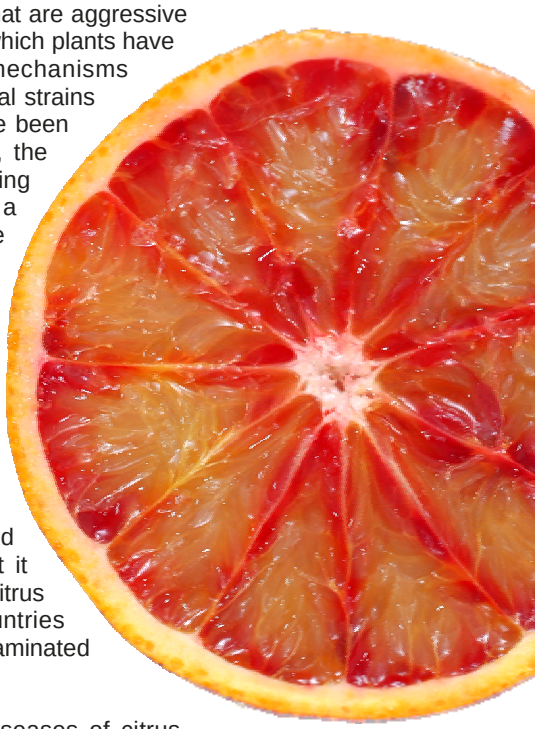
Forecasts indicate that the disease will continue to spread and the risk of epidemic will remain, especially

if it is not possible to prevent the introduction of the vectors of the virus, including *Toxoptera citricida* (the brown citrus aphid). This spreads five times as fast as other aphid vectors of CTV found in Italy and around the Mediterranean and capable of overcoming the resistance of the rootstocks now recommended as replacements for sour orange. The presence of this aphid was reported recently in Spain, increasing fears of illegal imports—escaping quarantine—of infected plant material and produce infested by brown citrus aphid. As a result, it is urgent to strengthen phytosanitary protection and revise frontier control criteria, currently in conformity with European Council directive 2000/29/EC, transposed into Italian law by legislative decree 214 of 2005.

At the national scale, obligatory control of tristeza is regulated by the ministerial decree of 22 November 1996. It has since been revised to address the new scenario displayed by the disease in the various regions. As the use of insecticides to fight insect vectors does not give effective results, the ministerial decree specifies the immediate eradication of infested trees and the felling of the entire citrus plantation if more than 30% of the trees are infected, the replacement of sour orange rootstock by *Poncirus trifoliata* hybrids and the use of healthy propagation germplasm from rigorously certified nurseries. A vast programme of varietal conversion of citrus plantations is currently being designed with the aim of producing CTV-resistant rootstocks. All the actions planned are coordinated by the competent institutions, including the Council for Research and Experimentation in Citrus growing (Centro de ricerca per l'agrumicoltura, CRA) in Acireale, the phytosanitary services in the regions concerned, the plant protection and applied microbiology department at the University of Bari, the National Research Council's Plant virology institute (Bari section) and the Mediterranean agricultural research institute at Valenzano (Apulia).

Technological projects and financial investments

A system of partial characterisation of CTV has been presented by Professor Antonino Catara, former president of the International Organisation of Citrus Virologists and currently research delegate at the Science and Technology Park of Sicily. He uses new analytical and sequencing techniques for the rapid analysis of the profiles of certain genomes of various virus isolates and discrimination between those that are aggressive and those that are not and for which plants have developed natural defence mechanisms over the decades. Once the viral strains and their effects on plants have been determined for a given region, the rational compilation of data using bioinformatics is used to select a mechanism that will interfere with the action of CTV. It is thus possible to perform a kind of vaccination to prevent infection by aggressive strains. The technique will be effective on condition that infection by viruses from other countries is prevented at the same time.


© Régis Domergue

The project has EU funding and is aimed at covering Sicily but it could be usefully extended to citrus growing in Mediterranean countries that are already seriously contaminated by tristeza.

As part of the fight against diseases of citrus, another project defined by the Sicilian agricultural development body (Ente di sviluppo agricolo della Regione Sicilia) would appear to be opportune. It consists of setting up in Tunisia a biological farm where the sterile insect technique would be used to produce sterile males to control the proliferation of *Ceratitis capitata*. This initiative is a response to the need to reduce the considerable damage caused to Mediterranean fruit growing by this plant pest.

The adoption of these measures forms part of the determination to set up a community policy aimed at allocating massive financial resources to the countries in the southern Mediterranean (like the Marshall Plan after World War 2) and to finally establish a fully operational free trade zone. These interventions should also significantly reduce the problems caused by the mass exodus of Mediterranean populations, exasperated by the steep increase in the price of foodstuffs ■

Armando Jatosti

Citrus — Italy — Evolution of production

000 tonnes	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11
Easy peelers	612	617	591	690	527	826	835
Orange	2 105	2 261	2 356	2 346	1 500	2 350	1 885
Lemon	597	610	583	573	656	486	450
Grapefruit	7	7	7	8	8	10	8
Total	**3 321**	**3 496**	**3 537**	**3 617**	**2 691**	**3 672**	**3 178**

Source: CLAM

KiNi®

What else ?*

IVORY COAST

Tel : 33 (0)491 43 44 45
www.kini-productions.com

*Quoi d'autre ?

Banana

A report prepared by
Denis Loeillet, Eric Imbert,
Carolina Dawson, Eric Fouré,
Luc de Lapeyre and
Thierry Lescot

European consumption is decreasing slowly but surely. A few ACP and community sources recovered in 2010 but the trend is still poor, as is shown by the first statistics for 2011. The situation is all the more worrying as the United States displays a very strong increase in volume together with an improvement in unit price. Europe is thus paying for deregulation while the US is garnering the fruits of its very concentrated organisation. That's one in the eye for the WTO!

Contents

La filière Banane et la Biodiversité en Guadeloupe et Martinique

Alors que 2010 est l'année de la biodiversité, la filière Banane nous parle des pratiques mises en place par les producteurs pour préserver et développer la diversité des animaux, insectes et plantes vivant au sein des bananeraies aux Antilles.

Photo : Pierre-Damien Lucas

La richesse de la biodiversité dans les bananeraies

Des inventaires de la faune et de la flore dans les bananeraies ont permis de répertorier **273 espèces de plantes différentes** (contre 80 à 115 sur des vignobles métropolitains en comparaison) et **72 espèces d'oiseaux !**

L'étude ADVENTILLES menée par les CTCS* de Guadeloupe et de Martinique et le CIRAD, en partenariat avec les filières Banane et Canne a pour objectif la conception d'**un guide exhaustif de la flore présente en bananeraies** et dans les champs de canne à sucre.

Les pratiques qui favorisent la biodiversité

La filière Banane de Guadeloupe & Martinique met en place des pratiques durables concourrant de manière croissante au **retour et à la préservation de la biodiversité** dans les bananeraies.

Parmi ces pratiques : la réduction de 72% de l'emploi des produits phytosanitaires ; la généralisation des **jachères** permettant la mise au repos temporaire d'une terre entre deux cultures ; la **rotation des cultures** avec pour objectif la **reconstitution de la richesse du sol et donc de sa faune et de sa flore** ; la sélection de plantes dites de couverture sous les bananiers ; la mise en place de corridors biologiques : haies et bandes enherbées en bordure des parcelles.

Quand on travaille avec la nature...

Dans la logique de développement de la biodiversité et de réduction de l'utilisation de produits phytosanitaires, la filière recherche des moyens naturels de lutte contre les ravageurs en favorisant la présence de leurs ennemis naturels. Par exemple, les plantes de couverture au pied des bananiers augmentent de 4 à 5 fois le nombre de prédateurs du charançon, un coléoptère dont la larve se développe à l'intérieur du bananier.

D'ailleurs, l'étude réalisée par l'IT**, en partenariat avec la FREDON***, montre une présence importante et variée d'insectes ennemis des ravageurs : coccinelles, larves prédatrices et araignées. Un premier résultat prometteur !

LE GRAND LIVRE DE LA BIODIVERSITÉ EN GUADELOUPE ET EN MARTINIQUE

Parti du constat qu'il n'existait pas d'ouvrage commun à tous les écosystèmes de Guadeloupe et de Martinique, **Éric de Lucy**, Président de l'Union des Groupements de Producteurs de Bananes de Guadeloupe & Martinique, a eu l'idée originale, avec **Lyne-Rose Beuze**, Conservateur en chef du patrimoine de Martinique, de réaliser un **ouvrage de référence accessible au grand public sur la richesse de la biodiversité des Antilles.** Cet ouvrage a été réalisé grâce au travail de 15 scientifiques de renommée internationale (dont des spécialistes du Museum d'Histoire Naturelle de Paris et des universitaires spécialisés) et du photographe naturaliste Grégory Guida. De grands écrivains martiniquais et guadeloupéens ont également apporté leur regard sur la biodiversité comme, par exemple, Patrick Chamoiseau (Prix Goncourt 1992 pour son roman *Texaco*).
La parution du livre est prévue pour le mois de mars 2011.

*Centre Technique de la Canne et du Sucre
**Institut Technique Tropical
***Fédération Régionale de Défense contre les Organismes Nuisibles

RCS UGPBAN Fort de France 450 833 314

CAMPAGNE CO-FINANCÉE PAR L'UNION EUROPÉENNE ET L'OFFICE DE DÉVELOPPEMENT DE L'ÉCONOMIE AGRICOLE D'OUTRE-MER

UNION DES GROUPEMENTS DE PRODUCTEURS DE BANANES DE GUADELOUPE ET MARTINIQUE

Ces logos attestent de l'origine et de la qualité d'une production agricole cultivée dans des régions éloignées de l'Union européenne, appelées régions ultrapériphériques.
Ils garantissent le respect des réglementations sociales et environnementales en vigueur dans l'Union européenne.

Review of banana supply to the European market

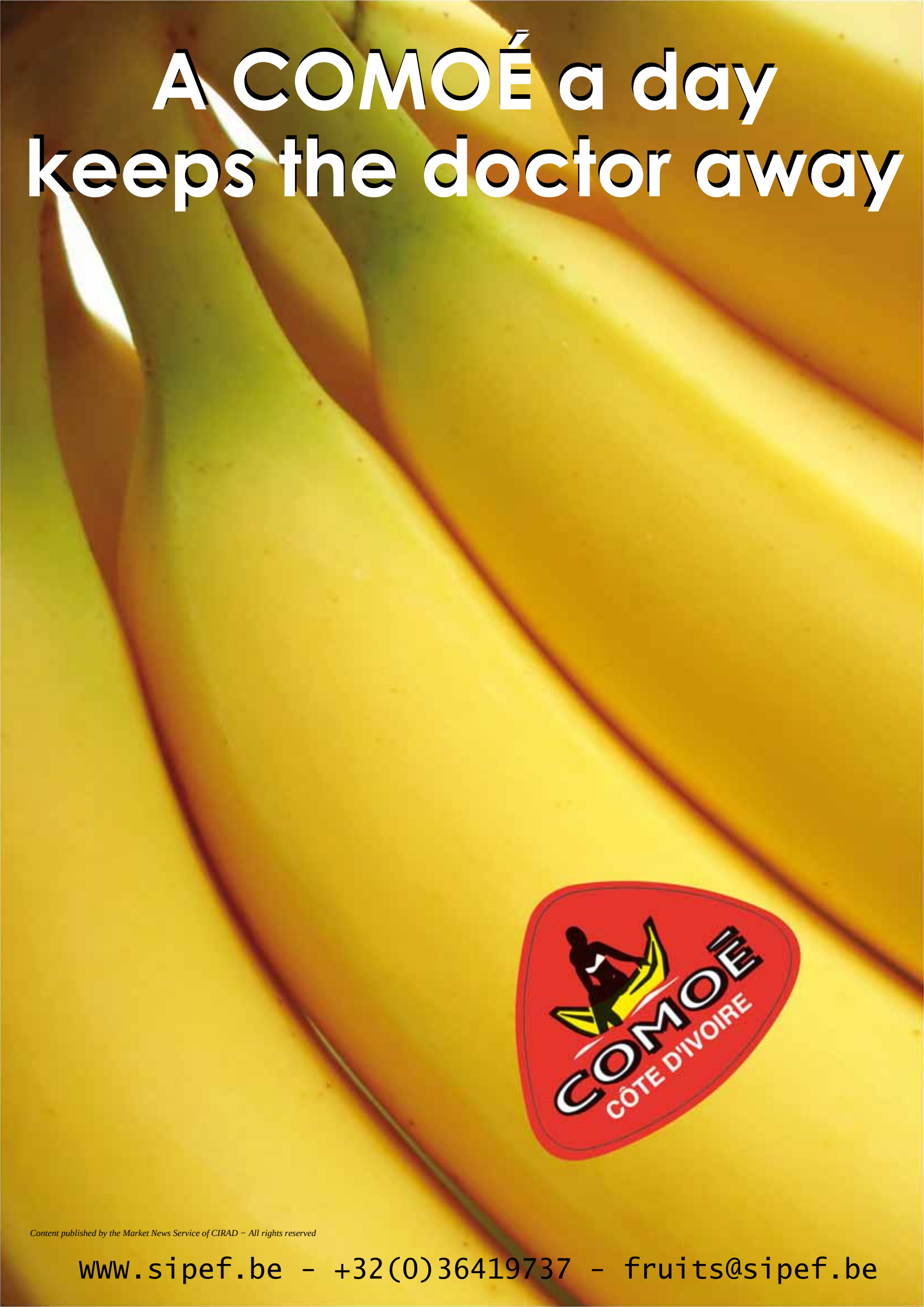
Poor market!

© Régis Domergue

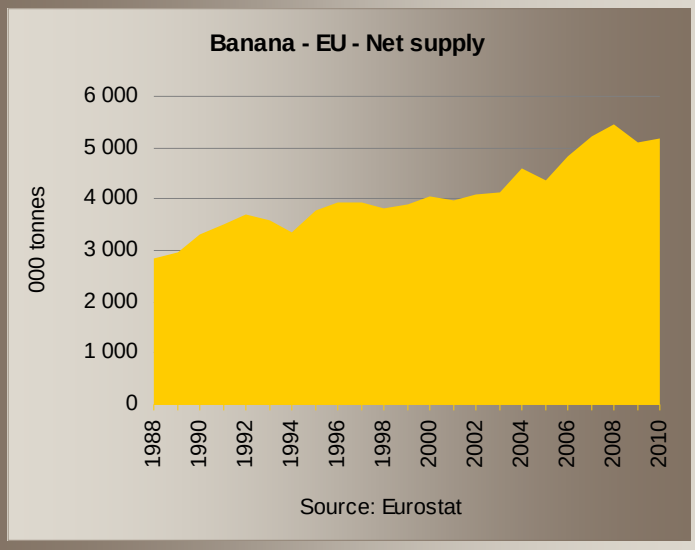
The price review published in FruiTrop 185 (January 2011) is perfectly clear: regulation by a public power—in this case the common organisation of the market for banana (CMOB)—has been replaced by non-regulation by supply. As banana is an agricultural sector, it is in fact weather that now serves to regulate or deregulate the banana market. Last year has been exemplary from this point of view for both banana and for competing fruits: supply of bananas was plethoric at the beginning of the year, red fruits and summer fruits were hit by bad weather in the spring, the citrus season was light and banana supplies became larger again at the end of the summer, in particular as regards fruits from Colombia, more weather damage in the autumn, hitting apples this time, followed by a grand finale in the form of a very difficult period of floods, gales and cyclones that truly saved the banana market at the end of the year.

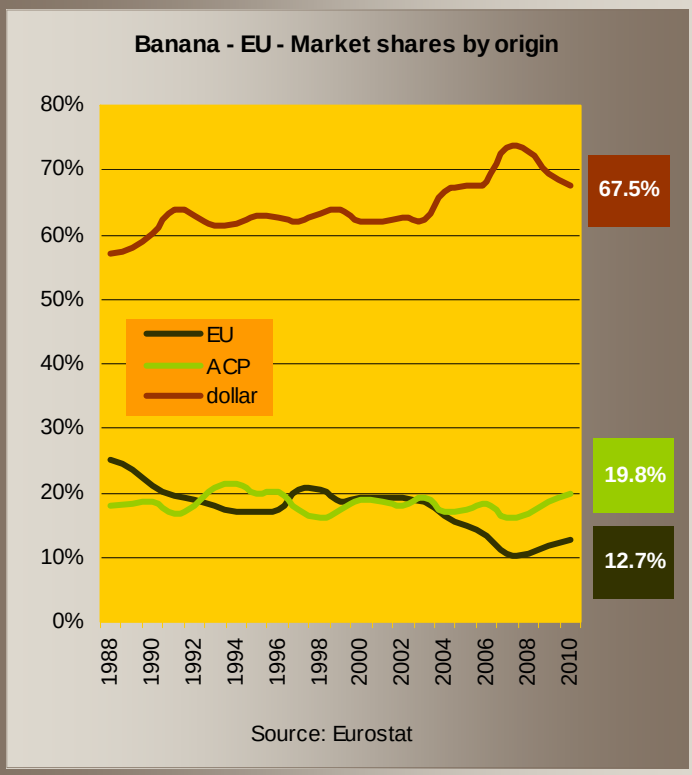
The interdependence of world and European prices is strong, with Europe gradually becoming the low reference for the banana market. It is long since the CMOB made it possible to ensure an extra return of up to EUR 9 per box for the greatest number! Today, although all operators have unlimited access to the European market they all run the risk of losing … unless they just put their trust in the heavens!

It is therefore not surprising that European consumption shows no signs of a recovery in this very disturbed atmosphere. The figures are clear. Net European supply increased by a tiny 1% from 2009 to 2010, reaching 5.2 million tonnes, that is to say annual per capita consumption of 10.3 kg, a very small 100 g increase. The strong growth dynamics of 2006, 2007 and 2008 is over. Growth observed between before and after liberalisation on 1 January 2006 exceeded a million tonnes, a phenomenal 24% increase (including EU enlargement)! Consumption increased to 10.9 kg per



www.sipef.be - +32(0)36419737 - fruits@sipef.be





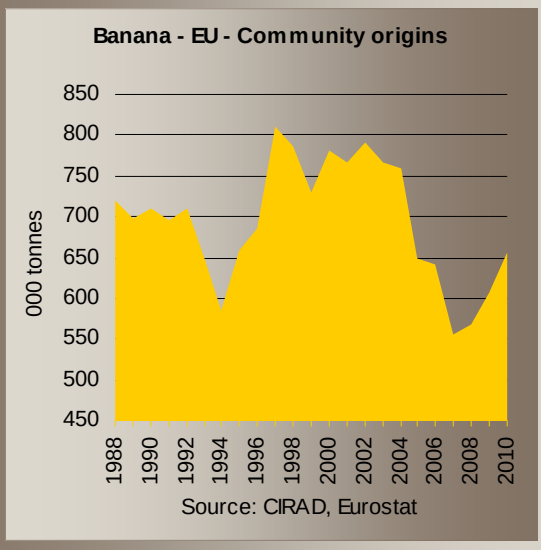
person per year in 2008. The beneficial effect of liberalisation and EU enlargement then became a distant memory. Indeed, the market stagnated at between 5.1 and 5.2 million tonnes, and the first trends observed in 2011 confirm this.

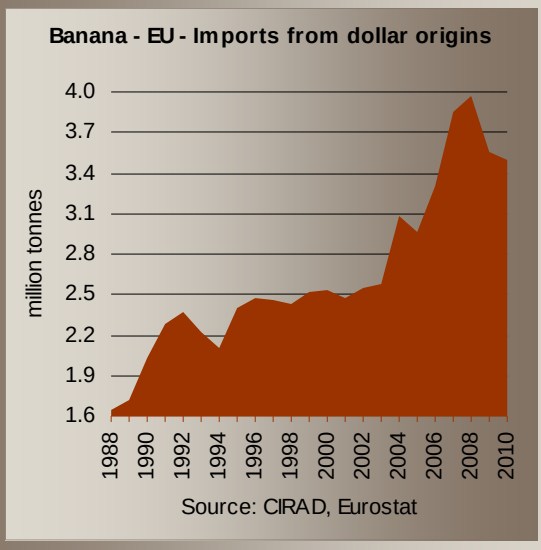
European bananas back again

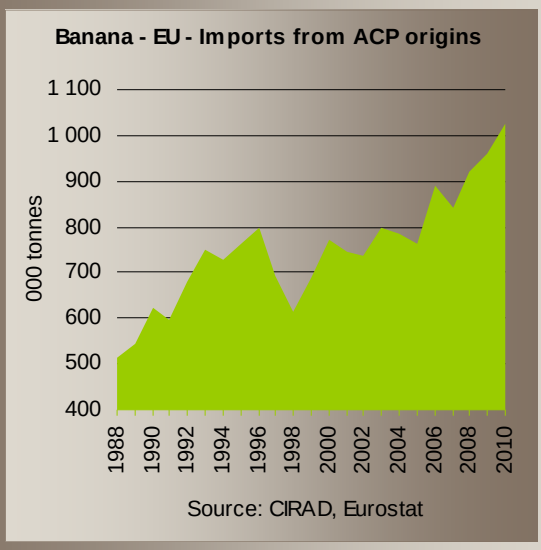
The European banana market is dull, although others might call it mature. However, there are a few readjustments between sources of supply. The three main types of supplier are European producers, ACP sources and dollar sources (MFN, the most-favoured nation clause) and it is observed that 2010 was a year of reconquest, especially for European producers, and of conquest for some ACP sources.

European producers sold more than 650 000 tonnes for the first time since 2004, thanks to 8% growth in 2010. The Canary Islands and Martinique, the two main European production zones, gained 13% and 11% respectively. For Martinique, it can be considered that 2010 marked the end of the effects of hurricane Dean that hit the island in 2007. The figure is very close to the ten-year average (207 000 tonnes) and, weather permitting, this should be exceeded in 2011 in spite of the losses caused by hurricane Tomas (November 2010). Guadeloupe has not been as fortunate. Performance had improved steadily since 2007 but at the beginning of the year ash from the volcano in Montserrat and the effect of the fringe of hurricane Tomas halted the favourable trend. Shipments fell by 23% to 43 000 tonnes. Unfortunately, the trend was the opposite for Spanish production which leaped by 13% to some 400 000 tonnes, a figure that had not been achieved since 2003! The word 'unfortunately' is used deliberately. The downside of this growth is the profound deterioration of the Spanish market. This resulted directly in a 24% decrease in the price of Super Extra fruits and the destruction of 36 0000 tonnes of bananas before shipment (see below). Shipments from the minor European sources (Madeira, Cyprus and Greece), fell by from 6 to 27% and totalled 18 210 tonnes.

Europe thus increased its presence on its domestic market, with its share increasing from 11.9 to 12.7% after a downward trend that lasted for three years. But this performance is not completely satisfactory. The time when one in five bananas in the EU was European has long gone. The successive enlargements of the EU to purchasers of Latin American bananas and the gradual opening of the market (an in-







crease in quotas and then a tariff-only basis) hit European production which now tries to hold up but not necessarily to develop.

Confirmation for ACP exporters

In 2010, ACP exports increased their market share and currently approach 20% (19.8%). No comparable figure has been observed since 1996, except that then the EU had 15 member-states and banana consumption was 4 million tonnes, in comparison with 27 member-states and 5.2 million tonnes today. ACP sources gained 7% in comparison with 2009 and exceed the symbolic figure of a million tonnes sold in the EU. As always, these fairly flattering figures hide a strongly uneven situation. The only thing the components of the ACP group seem to have in common is the name. Schematically, there are dynamic sources that are maintaining their positions or growing, sometimes very strongly (Dominican Republic, Côte d'Ivoire, Cameroon, Surinam, Ghana and Belize), and others that are losing ground on the world market (Jamaica, St Lucia, St Vincent, Dominica). The separation is a clear and longstanding one. It was accentuated in 2010 by particularly serious damage in St Lucia and Dominique caused by hurricane Tomas in November. Jamaica ceased all exports in 2088 after a series of such events.

On the bright side of the ACP statistics scene, the Dominican Republic stands out with unusually strong growth. In spite of gales and above all repeated, sometimes serious flooding in the northern part of the country where most bananas are grown, export records are broken every year. The sector is thus extremely resilient. This unmatched dynamics is owed partly to its organisation and structure. Bananas from the Dominican Republic are shipped only to the EU, which received more than 300 000 tonnes in 2010, a 20% increase on 2009. Exports to the EU have been multiplied by more than 7 since the end of the 1990s! The Dominican Republic accounts for more than three-quarters of the growth of ACP banana exports.

The other contributors are Ghana (52 000 tonnes) and Surinam (70 000 tonnes). The export sectors were relaunched a few years ago in these countries. Côte d'Ivoire is not lagging behind and set a new in spite of the difficult political situation in recent years and a civil war in early 2011. Shipments from Cameroon to the EU have stabilised at 243 000 tonnes, very close to the 10-year average.

Consolidation for dollar bananas

It is obvious that if European production and imports from ACP sources are increasing, the dollar sources are losing ground. It is true that the decrease is measured (- 1.6%) but it is seen for the second year running. The dollar group has lost 466 000 tonnes since it peaked at nearly 4 million tonnes in 2008.

At first sight, Ecuador and Colombia seem to have been hit hardest with 6% and 3% decreases in exports respectively. Except that in contrast with the other types of suppliers of the EU market, these banana giants do not have just one outlet. For example their exports to the United States, a rapidly growing market, increased by 2% and 9% respectively. If the national statistics of these countries are to be believed, Ecuador scored 2% better than the 2006-09 four-year average (258 million boxes) and Colombia gained 7% (98 million boxes. The increase would have been even greater if

© Denis Loeillet

Du Roi
LABORATORY

Tel +27 15 3451217
www.duroilab.co.za
enquiries@duroilab.co.za

Marketing Director
Alan Davson
alanne@mweb.co.za
Tel +27 834554315







World Class Technology For Africa.

Superior disease-free material for higher yields and improved profitability. Internationally acclaimed technical and advisory services.

Banana Tissue Culture Plants:
Avaliable Varieties
Grand Nain, Williams, Chinese Cavendish

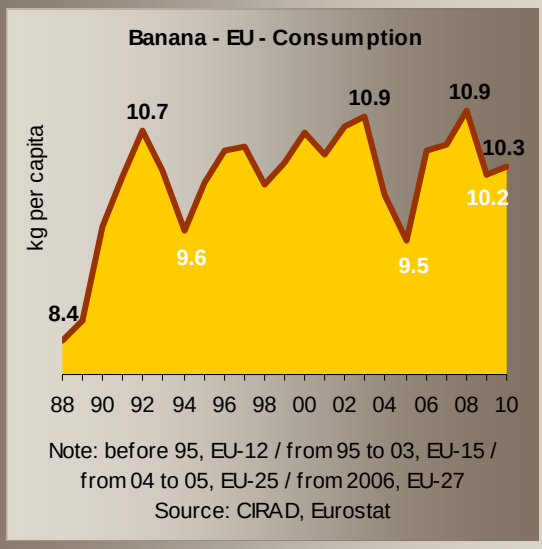
Elite single clone Cavendish selections
with a potential of 10% higher annual yield than conventional Cavendish cultivars:
Asdia, Nandi, Grand Negra, El Dorado

Technologie de classe mondiale pour l`Afrique.

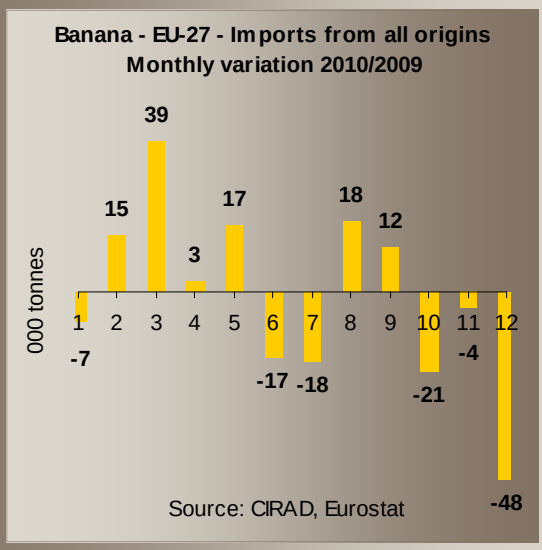
Matériel de haute qualité certifié sans-maladie pour des rendements supérieurs et une amélioration de la profitabilité. Service technique et d`appui reconnu au niveau international.

Vitro-plants de banane:
Variétés disponibles
Grand Nain, Williams, Chinese Cavendish

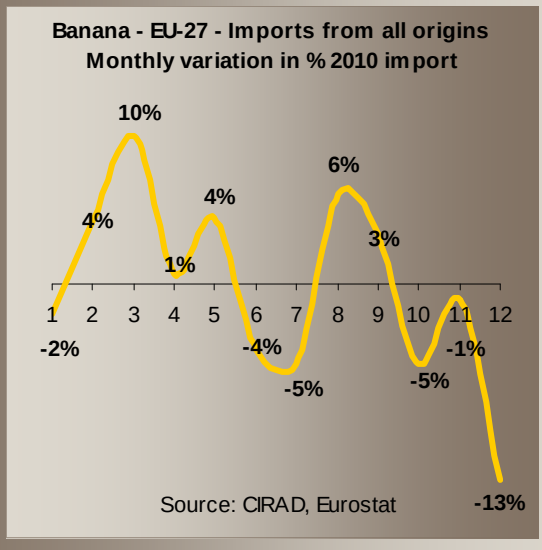
Sélections Cavendish de géniteurs d`élite
Accroissement potentiel de 10% du rendement annuel comparé à un cultivar Cavendish traditionnel:
Asdia, Nandi, Grand Negra, El Dorado



Note: before 95, EU-12 / from 95 to 03, EU-15 / from 04 to 05, EU-25 / from 2006, EU-27
Source: CIRAD, Eurostat



Source: CIRAD, Eurostat



Source: CIRAD, Eurostat

damage resulting from La Niña in the last quarter had not slowed or reduced their export potential.

The increase in Costa Rican exports to the EU were moderate (+ 3%), but phenomenal to the United States (at + 34%! This source has recovered to full capacity after the major meteorological damage sustained in recent years and, like the countries mentioned above, has chosen to focus on the excellent and profitable US market. Here the US market is thumbing its nose at the European market. Because of its very special organisation, the worst enemy of the CMOB has become the most profitable market in the world, also making the European market one of the most volatile and fought over.

With stable volumes in 2010, Panama completes supply from the three major sources. Exports from Brazil and Honduras increased strongly (by 13% and 79% respectively) but this just interrupted the slow decrease that began in 2007 in Brazil and at the beginning of the century in Honduras. Among minor sources, Peru is a more interesting case as 15% growth was recorded in 2010, confirming dynamics that took shape at the beginning of the 2000s. Exports from Peru to the EU have doubled since 2006 and, together with the Dominican Republic, has become a major player in the organic and fair trade banana market.

New EU member countries (NMCs) as second stage importers

Trade in bananas between the 27 EU member countries totalled 2.2 million tonnes. Intracommunity trade was stable in comparison with preceding years. The figure reaches 2.5 million tonnes for exports from the member countries rather than imports but the trend is stable here too. The figure is extremely high and shows that bananas are much traded after their initial release on the market in a European port. Overall, the entry ports clearly structure the European banana map. The Belgian ports are favourite points of entry for dollar bananas for example and handled 1.3 million tonnes of extra-community bananas, both dollar and ACP. Germany, France, the Netherlands and Italy also serve as redistribution platforms for the whole of Europe. These countries supply Eastern European markets such as Poland, the Czech Republic, Slovakia, Hungary, etc. On markets where goods move freely from one country to

The group with five subsidiaries at your service

ConHexa
VALUE ADDED LOGISTICS

DUNFRESH · DUNFROST · FRIGO A25 · HEXATRANS · Y-FROST (B)

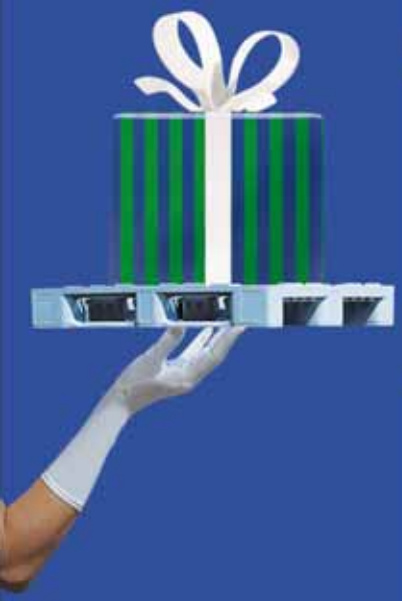
During 35 years of client satisfaction, the ConHexa group has based its operations on its staff expertise, innovation and partnership working.

Our highly experienced teams can discuss innovative and lasting solutions with you.

KEY BENEFITS OF THE GROUP

- Located in the heart of Europe, with easy access to:
  France / UK / Benelux countries / Germany
- Global logistics solutions
- Traceability (EDI, WMS)
- Multimodal, multi-temperature service offering
- Complete agrifood expertise
- Warehouses 200 m from the Dunkirk container terminal
- Optimisation of your supply chain

ConHexa
Excellent references, a broad range of products (frozen, dried and fresh foods) and three location centres (Dunkirk, Steenvoorde and Ieper)



haulage warehousing picking distribution

ConHexa
VALUE ADDED LOGISTICS

CHEMIN DES CENDRES
59114 STEENVOORDE France
T. 00 33 (0) 328 438 438 - F. 00 33 (0) 328 438 540
www.conhexa.com

another, as is the case in the EU, it is always very difficult to obtain a clear picture of supply in each country. However, it seems that the 12 NMCs (NMC-12) receive 80% of their dollar bananas, ACP bananas and also community bananas (Guadeloupe and Martinique) from EU-15. The remaining 20% consists practically entirely of direct imports from Ecuador. When they joined the EU, NMC-12 still purchased 40% of their supplies directly. It is now 'old' Europe that supplies these countries with bananas.

Review of EU trade would not be complete without mentioning re-exports to third countries. These are very modest at less than 8000 tonnes per year, that is to say 0.14% of net EU supply. One of the reasons would seem to be the payment of customs dues on entry to the EU and refunding of this when the goods leave the EU customs zone. The operators who supply countries adjoining the EU therefore import directly and sometimes re-export to the EU if their markets are over-supplied. This is the case of Russia, which uses the Polish market as an overspill.

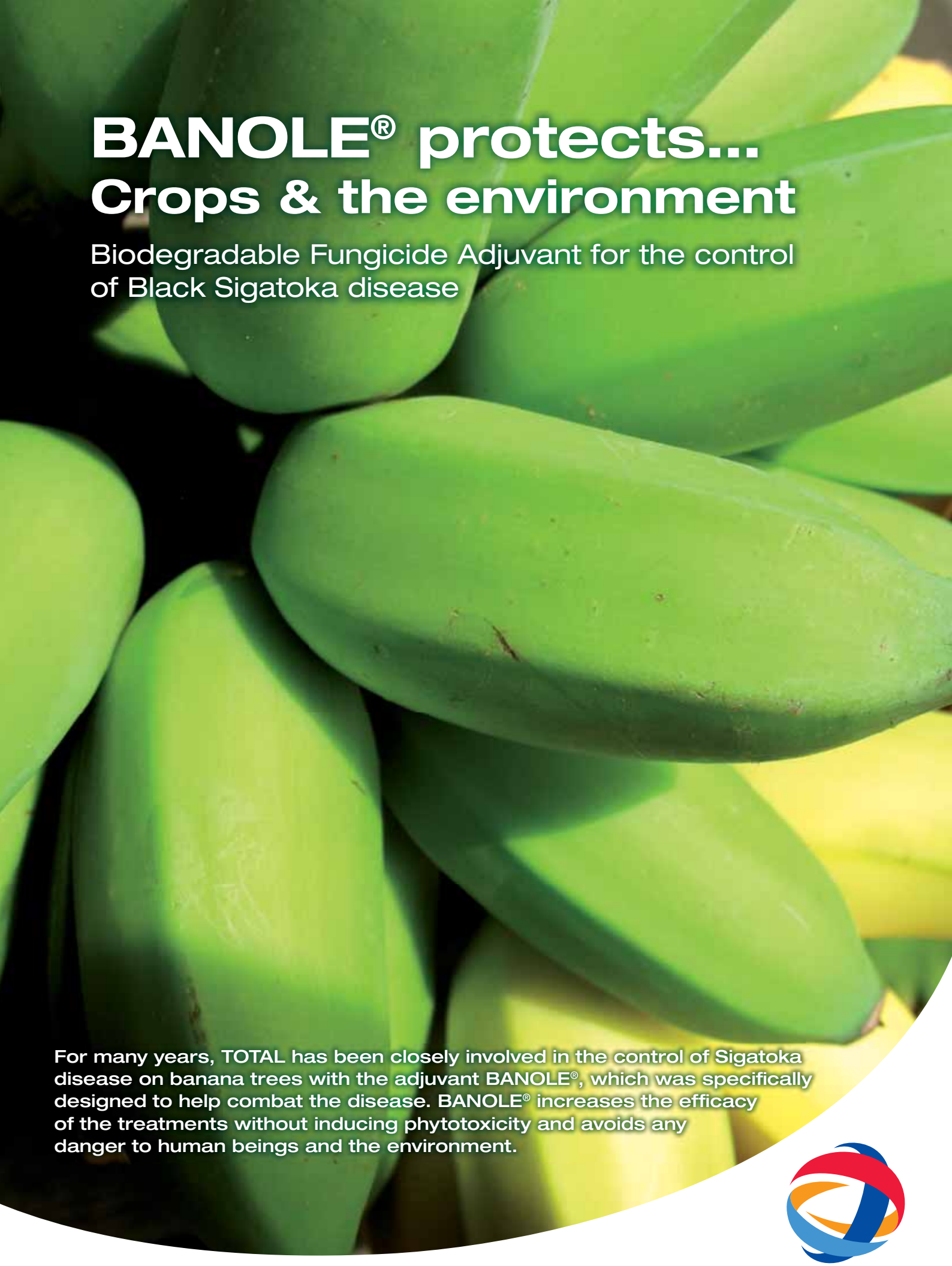
A drowning man will grasp at a straw

It has been seen that the European market is anything but dynamic. 2010 was an average year in terms of volumes and price when viewed as a whole, but very disturbed as regards weekly or monthly data. It was a year that was saved by the weather once again. The whole thing is to know whether the miracle will be repeated every year, with it being understood that 'miracle' also means desolation for the zones affected by serious weather events. The major operators were not mistaken when they planned drastic cuts in their programme for supplying Europe while aiming at the US market, the only one over which they have conserved a certain

Banana— European Union — Evaluation of supply — Tonnes

Year	Banane type or origin			Sub-total	Exports	Net supply
	Community	ACP	Others ($)			
1988	719 270	514 061	1 644 100	2 877 431	17 265	**2 860 166**
1989	698 925	544 441	1 716 175	2 959 541	13 415	**2 946 126**
1990	710 635	621 875	2 024 248	3 356 758	36 219	**3 320 539**
1991	695 402	596 416	2 286 019	3 577 837	53 468	**3 524 369**
1992	711 191	680 191	2 365 883	3 757 265	39 689	**3 717 576**
1993	646 242	748 120	2 219 721	3 614 083	36 138	**3 577 945**
1994	584 622	726 927	2 102 303	3 413 852	58 044	**3 355 808**
1995	658 206	763 886	2 405 180	3 827 272	43 082	**3 784 190**
1996	684 605	798 109	2 471 263	3 953 977	30 598	**3 923 379**
1997	810 537	692 731	2 464 412	3 967 680	16 571	**3 951 109**
1998	786 232	614 459	2 426 419	3 827 110	26 448	**3 800 662**
1999	729 303	688 170	2 522 455	3 939 928	27 359	**3 912 569**
2000	782 176	770 095	2 528 170	4 080 441	35 327	**4 045 114**
2001	767 268	747 131	2 474 665	3 989 064	34 284	**3 954 780**
2002	790 622	738 439	2 554 508	4 083 569	8 011	**4 075 558**
2003	765 416	797 269	2 578 827	4 141 512	6 020	**4 135 492**
2004	758 206	782 979	3 077 361	4 618 546	11 029	**4 607 517**
2005	648 375	763 974	2 959 463	4 371 812	4 970	**4 366 842**
2006	641 559	889 176	3 306 538	4 837 273	8 386	**4 828 887**
2007	554 734	842 959	3 848 266	5 245 959	9 270	**5 236 689**
2008	567 560	918 923	3 964 866	5 451 349	10 002	**5 441 347**
2009	608 048	958 144	3 555 462	5 121 654	7 840	**5 113 814**
2010	657 155	1 023 586	3 498 574	5 179 315	7 334	5 171 981
	(1)	(2)	(2)		(3)	

(1) 1988 to 1993 inclusive: Eurostat + European Commission data for Madeira and Greece. From 1994 onwards: supplementary aid data or POSEI.
(2) Eurostat data: all imports from non-community and non-ACP countries.
(3) Duty-paid bananas (released for free circulation) in one of the EU-27 member countries and then exported outside EU-27.
General note: before 1994: dessert bananas + plantains / From 1994 onwards: dessert bananas. Before 1995: EU-12 / From 1995 to 2003: EU-15 / From 2004 to 2006: EU-25 / Since 2007: EU-27. The study concerns extra-community import data for ACP and dollar bananas and re-export. The rules of operation of the common market organisation of banana (1993 version) have been applied to the data from 1988 onwards in order to give comparable results. Source: Eurostat, European Commission / Processing: Cirad Market News Service

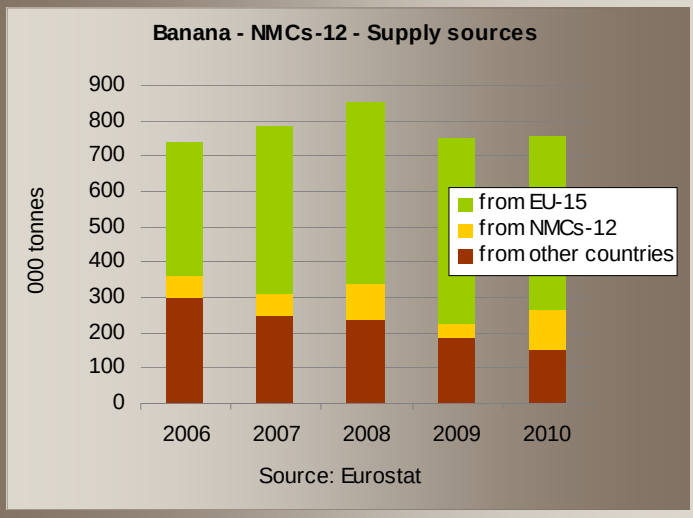


BANOLE® protects...
Crops & the environment

Biodegradable Fungicide Adjuvant for the control of Black Sigatoka disease

For many years, TOTAL has been closely involved in the control of Sigatoka disease on banana trees with the adjuvant BANOLE®, which was specifically designed to help combat the disease. BANOLE® increases the efficacy of the treatments without inducing phytotoxicity and avoids any danger to human beings and the environment.

You know where to turn TOTAL



mastery. Reports of increased business for the main companies in the sector confirm that their strategy was very good. Good for them, but it's too bad for the European market that is confirming its position as practically a junk market.

As we cannot work directly on the weather, at least in the short term, increasing demand could be a pathway to follow in order to handle the extra volumes that might be released on the world market. But Europe is not going in this direction. There is no further scope for growth and nothing shows any initiative whatsoever to increase consumption. The first two months of 2011 confirm the past trend with total net supply estimated by CIRAD to have fallen by a further 3%. In addition, on a more long term basis, some large banana consuming countries like Germany forecast a decrease in population from a current 82 million to 68 million in 2050.

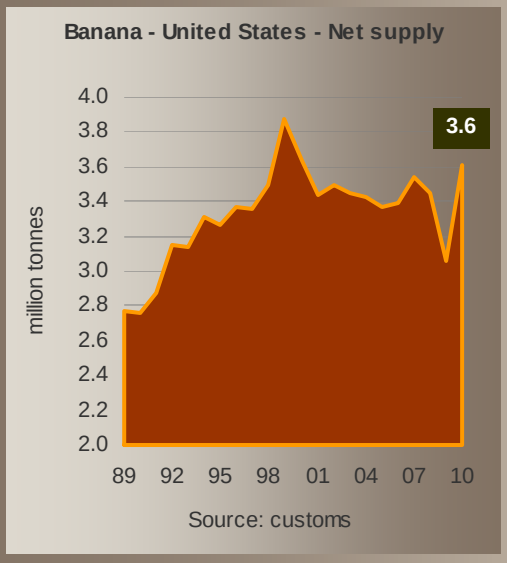
It can be hoped that initiatives aimed at greater regulation of supply emerge. This will never be the case in a multilateral framework (UPEB has been dead and buried since 1975). But what has been happening for months in Ecuador, the world's leading banana exporter, might be somewhat reassuring for the markets. Indeed, the Ecuadorean government wants to make relations between producers and exporters more transparent and fair: contractualisation involving both parties, respect of the payment of the official minimum price to growers, the drafting of lists of authorised exporters, financial sanctions, etc. It is setting up more or less strict measures for control, blowing hot and cold in a sector that has been used to doing what it wants for years. The adjustment variable is Ecuador's immense production base to which came and still come all the operators in the world to get spot bananas. It is clear that the rationalisation of the sector could partially halt the speculation which makes Europe an overflow. Export volumes decreased by about 1.2 to 1.6 million boxes per week for three weeks at the end of April 2011 following a temporary hardening of national regulations. This proves that the public authorities still have some leverage in business matters.

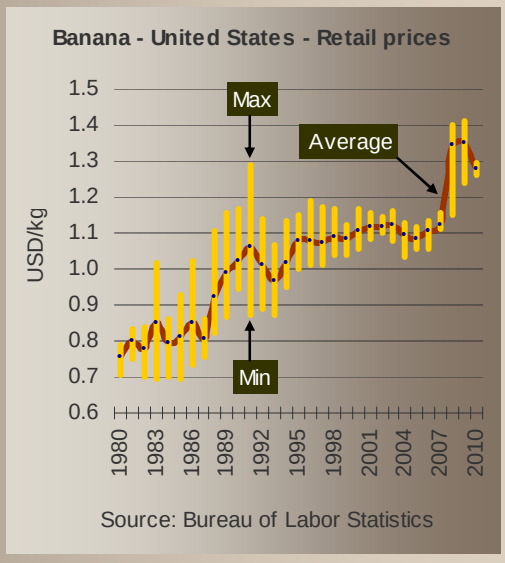
In short, we should now worship either Zeus, the king of the gods who reigns over the skies, or Simon Bolivar, the liberator of the Latin American peoples. For want of anything better, the best thing is probably to make offerings to both of them! ■

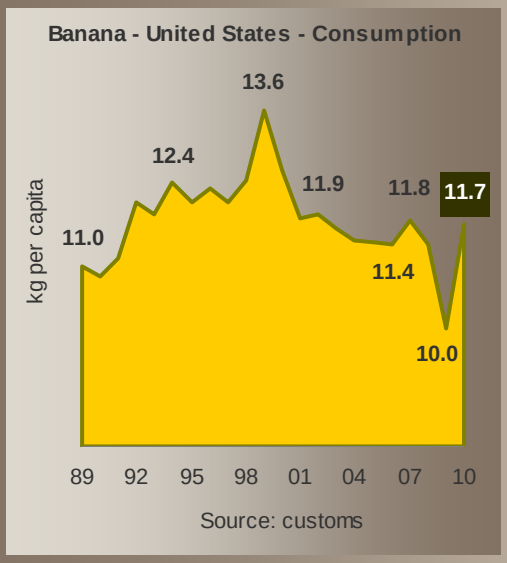
Denis Loeillet, CIRAD
denis.loeillet@cirad.fr

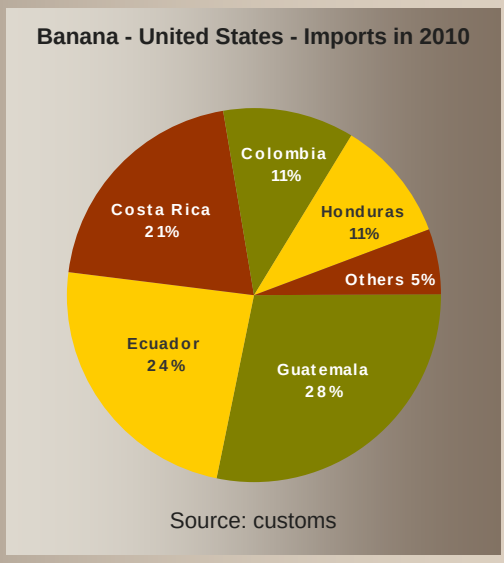
United States market: doing very well...

We have already reported the way import prices are holding magnificently in the United States (FruiTrop 185, January 2011, page 29). The excellent economic situation of the banana sector is accompanied by a phenomenal increase in consumption. Net consumption increased by 15% from 2009 to 2010, that is to say by more than 500 000 tonnes. It is true that imports had been comparatively small in 2009 but 2010 was nonetheless a record year for consumption with 3.6 million tonnes. Gross imports exceeded 4 million tonnes for the first time, with some 500 000 t re-exported, practically entirely to neighbouring Canada. All Latin American sources benefited from this Eldorado: Ecuador (+ 2%), Costa Rica (+ 34%), Colombia (+ 9%) and Honduras (+ 11%). Thus there were no surprises in supply structure, except perhaps for Mexico (+ 28%) which is making progress year after year. As we saw in the analysis of the European market (see the article in the Close-up section), it is clear and perfectly logical for dollar sources to direct their exports to the most profitable market, the United States. Per capita consumption increased to 11.7 kg in 2010 in comparison with 10 kg in 2009. As population growth is faster than the increase in supply, the 2007 record of 11.8 kg still holds, but only just.









Banana — EU-27 imports — 2010

tonnes	AT	BE-LU	BG	CY	CZ	DE	DK	EE	ES	FI	FR	UK	EL	HU	IE	IT	LT	LV	MT	NL	PL	PT	RO	SE	SI	SK	UE-27
Total intra EU	**124 002**	32 126	**6 071**	**6 939**	**194 245**	**488 781**	**72 645**	**11 414**	**53 627**	**56 109**	**236 158**	**65 881**	**27 658**	**69 546**	**18 306**	**130 315**	**27 177**	**10 138**	**3 926**	**109 462**	**211 354**	**47 027**	**4 905**	**93 065**	**3 158**	**55 839**	**2 159 874**
incl. NMS-12	**5 664**	1 206	**3 974**	**0**	**8 348**	**1 023**	**0**	**4 740**	**0**	**311**	**11**	**39**	**1 003**	**10 702**	**0**	**9 629**	**2 773**	**5 185**	**638**	**1 148**	**8 343**	**0**	**3 661**	**0**	**2**	**31 435**	**99 834**
Belgium	23 822	3 367	0	0	41 978	334 874	1 573	278	738	7 447	63 342	9 595	32	21 266	454	21 096	13 110	1 757	25	77 283	88 518	0	141	6 472	577	9 601	**727 345**
Germany	70 652	6 685	0	0	34 761	0	57 817	5 948	90	20 849	11 726	348	0	10 588	1 452	7 702	8 579	1 355	0	26 844	88 419	0	77	57 128	27	5 867	**416 914**
France	3 631	12 557	0	0	86 593	39 693	197	0	34 650	0	0	8 012	0	11 490	10	58 144	2 317	1 096	0	3 496	7 037	6 132	20	592	59	7 438	**283 161**
Netherlands	19 987	8 004	1	6	20 218	79 150	5 310	1	2 621	3 582	34 388	29 923	34	584	872	16 464	337	745	932	0	12 097	4	561	16 097	265	87	**252 269**
Spain	0	44	57	18	2	1 299	0	0	0	100	39 736	606	0	459	0	544	21	0	0	19	5 294	40 848	0	4	0	0	**89 048**
UK	0	22	0	0	378	61	0	0	226	0	66 228	0	0	2 974	15 517	376	0	0	5	587	650	0	0	486	0	21	**87 531**
Italy	246	111	9	3 745	1 022	2 501	0	0	5 155	0	18 446	0	26 589	488	0	0	40	0	2 326	8	991	44	253	0	1 953	1 277	**65 204**
Czech Rep.	53	1 155	3 250	0	0	42	0	0	0	0	10	0	0	7 957	0	0	12	1 169	0	0	5 235	0	438	0	0	30 931	**50 251**
Ireland	0	0	0	38	0	25 072	0	0	0	0	268	17 335	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**42 713**
Portugal	0	93	0	0	0	0	0	0	10 148	0	1	23	0	0	0	16 106	0	0	0	0	0	0	0	0	0	0	**26 371**
Sweden	0	26	0	0	63	1 494	242	0	0	23 820	101	0	0	0	0	0	0	0	0	67	0	0	0	0	0	0	**25 812**
Austria	0	0	0	0	884	3 553	0	0	0	0	1 389	0	0	10 733	0	232	0	0	0	0	5	0	0	0	277	113	**17 187**
Slovakia	152	30	19	0	7 484	0	0	0	0	0	0	0	0	2 297	0	3 227	0	0	0	0	4	0	20	0	2	0	**13 235**
Slovenia	4 423	0	58	0	506	98	0	0	0	0	0	0	0	390	0	5 247	0	0	0	19	557	0	1 106	0	0	55	**12 459**
Denmark	0	11	0	0	0	61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12 277	0	0	**12 349**
Finland	0	0	0	0	0	0	7 506	448	0	0	451	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	**8 415**
Lithuania	0	0	0	0	0	0	0	4 657	0	41	0	0	0	0	0	0	0	3 250	0	21	232	0	0	0	0	0	**8 202**
Greece	0	0	2 031	3 132	0	0	0	0	0	0	0	0	0	262	0	21	0	0	0	0	0	0	192	0	0	0	**5 638**
Poland	501	0	0	0	319	883	0	0	0	0	0	39	0	58	0	865	1 351	751	6	0	0	0	559	0	0	20	**5 353**
Hungary	531	0	38	0	0	1	0	0	0	0	0	0	0	0	0	272	0	0	0	1 107	0	0	1 267	0	0	283	**3 499**
Estonia	0	0	0	0	0	0	0	0	0	265	0	0	0	0	0	0	0	15	0	0	2 302	0	0	0	0	0	**2 582**
Latva	0	22	0	0	0	0	0	83	0	0	0	0	0	0	0	0	1 388	0	0	0	12	0	0	0	0	0	**1 505**
Romania	4	0	609	0	38	0	0	0	0	0	0	0	203	0	0	18	0	0	0	0	0	0	0	0	0	145	**1 017**
Cyprus	0	0	0	0	0	0	0	0	0	0	0	0	277	0	0	0	22	0	632	0	0	0	0	0	0	0	**931**
Bulgaria	0	0	0	0	0	0	0	0	0	5	1	0	523	0	0	0	0	0	0	0	0	0	272	0	0	0	**802**
Total extra EU	**1 443**	**1 322 835**	**16 516**	**0**	**0**	**744 932**	**14 664**	**164**	**104 249**	**1 254**	**314 396**	**913 516**	**92 642**	**0**	**39 384**	**528 038**	**3 112**	**195**	**79**	**100 248**	**28 294**	**100 436**	**48 972**	**90 429**	**56 363**	**0**	**4 522 160**
incl. MFN	**1 443**	**1 104 120**	**16 516**	**0**	**0**	**735 962**	**14 664**	**164**	**80 863**	**1 254**	**2 335**	**485 655**	**92 642**	**0**	**24 861**	**518 397**	**3 112**	**195**	**79**	**94 348**	**28 294**	**100 315**	**48 972**	**88 022**	**56 363**	**0**	**3 498 574**
Ecuador	145	284 509	15 666	0	0	236 947	10 100	164	30 595	1 254	1 352	64 519	76 079	0	1 722	267 510	2 956	195	0	72 520	24 535	35 811	43 670	4 567	48 314	0	**1 223 128**
Colombia	1 161	525 255	0	0	0	225 127	4 556	0	16 119	0	564	202 146	6 078	0	370	146 232	85	0	79	3 629	3 526	25 321	1 396	343	6 118	0	**1 168 105**
Costa Rica	137	222 283	811	0	0	140 624	8	0	16 324	0	0	201 706	8 514	0	18 955	88 174	31	0	0	911	137	37 219	2 317	37 306	1 846	0	**777 304**
Panama	0	2 271	0	0	0	120 572	0	0	0	0	0	3 145	1 758	0	0	6 886	0	0	0	335	96	1 922	1 590	45 766	21	0	**184 360**
Brazil	0	26 747	0	0	0	6 745	0	0	11 474	0	418	10 392	0	0	19	7 190	0	0	0	497	0	0	0	0	0	0	**63 483**
Peru	0	32 283	0	0	0	5 173	0	0	0	0	0	234	0	0	674	0	0	0	0	12 355	0	0	0	0	0	0	**50 719**
Honduras	0	10 693	0	0	0	740	0	0	0	0	0	1 494	0	0	2 303	0	0	0	0	0	0	0	0	0	0	0	**15 230**
Mexico	0	60	19	0	0	20	0	0	6 351	0	0	684	213	0	814	288	39	0	0	4 022	0	42	0	40	0	0	**12 591**
Guatemala	0	0	0	0	0	0	0	0	0	0	0	1 239	0	0	0	2 077	0	0	0	0	0	0	0	0	0	0	**3 315**
Chile	0	0	0	0	0	0	0	0	0	0	0	96	0	0	0	42	0	0	0	0	0	0	0	0	0	0	**138**
Philippines	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	37	0	0	0	0	65	0	**102**
incl. ACP	**0**	**218 716**	**0**	**0**	**0**	**8 971**	**0**	**0**	**23 386**	**0**	**312 061**	**427 860**	**0**	**0**	**14 523**	**9 641**	**0**	**0**	**0**	**5 901**	**0**	**121**	**0**	**2 407**	**0**	**0**	**1 023 586**
Dom. Rep.	0	73 469	0	0	0	8 909	0	0	6 180	0	14 545	191 005	0	0	1 005	0	0	0	0	5 899	0	121	0	2 406	0	0	**303 539**
Côte d'Ivoire	0	73 572	0	0	0	0	0	0	7 188	0	91 578	71 690	0	0	0	284	0	0	0	0	0	0	0	0	0	0	**244 312**
Cameroon	0	44 726	0	0	0	1	0	0	10 018	0	116 243	62 709	0	0	0	9 321	0	0	0	0	0	0	0	0	0	0	**243 018**
Belize	0	0	0	0	0	0	0	0	0	0	0	65 298	0	0	13 519	0	0	0	0	0	0	0	0	0	0	0	**78 817**
Surinam	0	0	0	0	0	0	0	0	0	0	70 437	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**70 437**
Ghana	0	26 878	0	0	0	0	0	0	0	0	19 258	6 223	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**52 358**
St Lucia	0	0	0	0	0	0	0	0	0	0	0	23 154	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**23 154**
St Vincent	0	0	0	0	0	0	0	0	0	0	0	4 054	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**4 054**
Dominica	0	0	0	0	0	0	0	0	0	0	0	3 728	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**3 728**
Uganda	0	3	0	0	0	61	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	0	**67**
Burundi	0	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**47**
Mozambique	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	0	0	0	0	0	0	0	0	0	0	**36**
Rwanda	0	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**21**

Country codes according to the official EU norm / Source: Eurostat

Fruidor, cultivating the difference

The leading ripening network in France with 9 facilities (including 8 with ISO 9001: 2008 and/or IFS certification) spread over the whole of the country, Fruidor bananes is the French banana market leader with output of nearly 180,000 metric tonnes ripened in 2010.

Our know-how in the supply of green bananas and our expertise in ripening and packing mean that we can supply a broad range of fruits (organic bananas, pink bananas, small bananas, plantains, 'Planteur' and 'Montagne' bananas from Guadeloupe and Martinique) together with marketing accompaniment throughout the year (games/competitions, promotion operations, point-of-sale operations).

Ile de France (Rungis)
01 45 12 82 00

Centre (Tours)
02 47 44 11 52

Britanny-Vendée (Nantes)
02 40 12 10 13

Britanny-Vendée (UNAPA)
02 40 71 01 70

Aquitaine (Bordeaux)
05 56 49 99 83

Flandres-Artois (Lomme)
03 20 22 65 70

Alsace-Lorraine (Metz)
03 87 73 60 50

Rhône alpes (Mions)
04 72 23 47 20

Mediterranean (Cavaillon)
04 90 76 14 00

562 089 748 RCS Créteil

The banana market in France

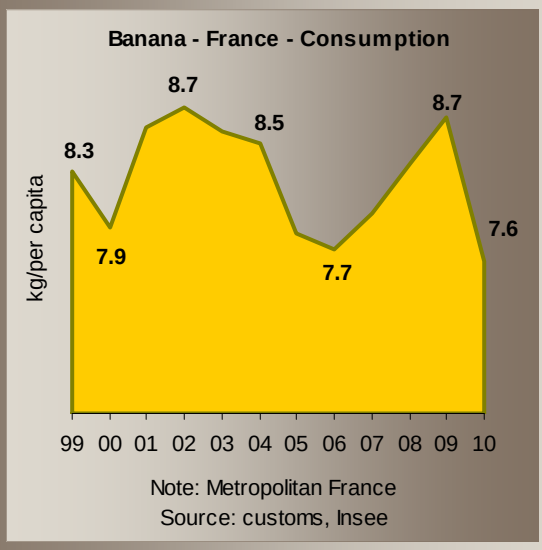
The sector stumbled in 2010

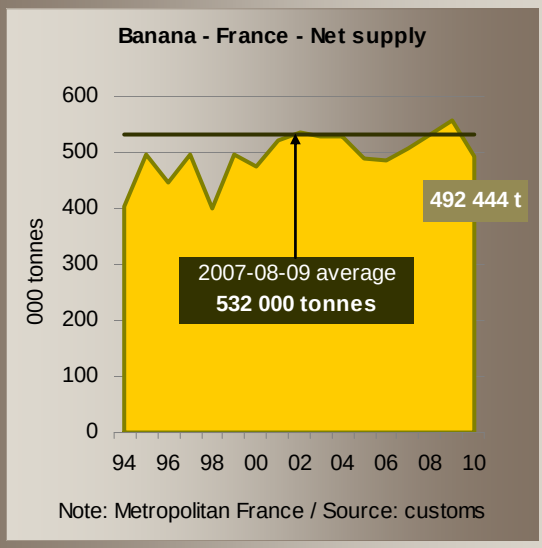
© Denis Loeillet

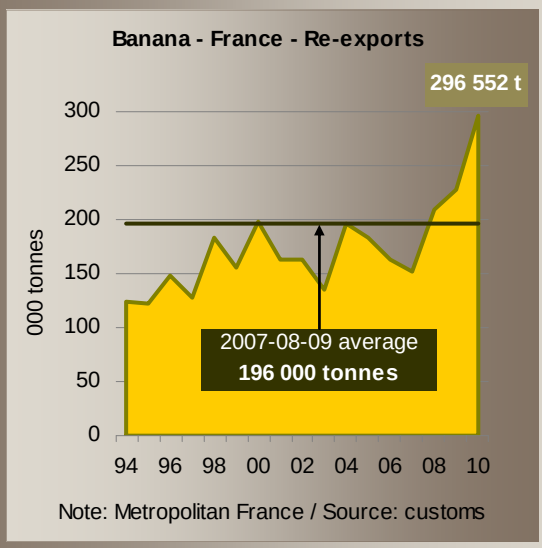
The French exception is on the agenda once again. Since 2007, with a movement counter to the European trend, it has proved that the banana market is anything but mature and that per capita consumption can increase. This singular behaviour led to reaching net supply totalling 557 000 tonnes in 2009. This all-time record pushed consumption up to 8.7 kg per year. During a period of strong decrease in world supply for reasons of numerous and varied problems of weather, the structure of the French market, with an important national production base and a major point of entry to Europe, allowed the country to secure its supply in a way. This is doubtless what happened in 2009. We also observed (FruiTrop 177, April 2010, page 33 ff) that 'The increase in volume has created value rather than destroyed it'. We had finally discovered how to square the banana circle by increasing the volumes sold and improving value-added.

2010 marked the end of the virtuous period

This virtuous behaviour of the French market exploded in 2010. The unweighted average import price fell slightly to EUR 0.65 per kg from 0.67 in 2009 (all sources and all categories). Simultaneously, volumes plummeted to 492 000 tonnes. This takes us back four years to 2006, except that that was the first year of the major change in European regulations, the switch from a quota system to a tariff-only system. Supply had been strongly disturbed, with extreme caution at the beginning of the year and then an avalanche of spot volumes in the spring.







At 12%, the decrease was dramatic in comparison with 2009! Consumption fell by 1 kg per capita to 7.6 kg per year. This was even far from the historic trend (about 8 kg) as the level had not been so low since 1996. Comparison with the three-year average (2007-08-09) shows this vertiginous fall in relative terms as 2009 was such a record year. But the fall was nonetheless 7%. Furthermore, the unit value of fruits did not improve. As if further demonstration were necessary, the simple equation that says that prices fall when volumes increase or vice versa is horribly untrue for banana. What happened in 2009 and 2010 even shows that precisely the opposite is true.

It must be specified that the figures presented confirm what the main operators we spoke to told us (both upstream and downstream). However, it is noted that these very pessimistic results are contradicted by the consumer panel Kantar Wordpanel which reports a 4% increase in the quantities purchased.

France is out of step with the EU once again. For even if the European market made only very little progress in 2010 (+ 1%), this is nonetheless a positive trend that accentuates the French collapse even more. French consumption currently forms about 10% of the net supply of EU-27; this is 1% less than in 2009.

The first trend in 2011 confirms this negative movement. Net supply for the first two months of the year is 7% down on the 2009 figure, dipping below 80 000 tonnes, worse than the figure for the very bad performance in 2006. France is now following the same downward trend as the EU (- 3%) but at an even faster rate.

France: a European distribution platform

The main trends by source reveal a number of interesting phenomena. First and foremost, re-exports caused the fall in net supply. They increased by a third from 2009 to 2010, reaching practically 300 000 tonnes of the 789 000 tonnes that arrived in France. The proportion of re-exports is at its highest level ever (38%). Nearly four bananas in ten sold in France are re-exported to other EU countries. The new member countries (NMCs) in Eastern Europe took 90 000 tonnes in comparison with 67 000 ton-

A new management tool for **Black Sigatoka** control

AGRIPHAR

New, Different & Efficient !

Agriphar s.a.
Rue de Renory 26/1 B-4102 Ougree- Belgium
Tel: +32 4 385 97 11 – Fax: +32 4 385 97 49
info@agriphar.com

SYLLIT

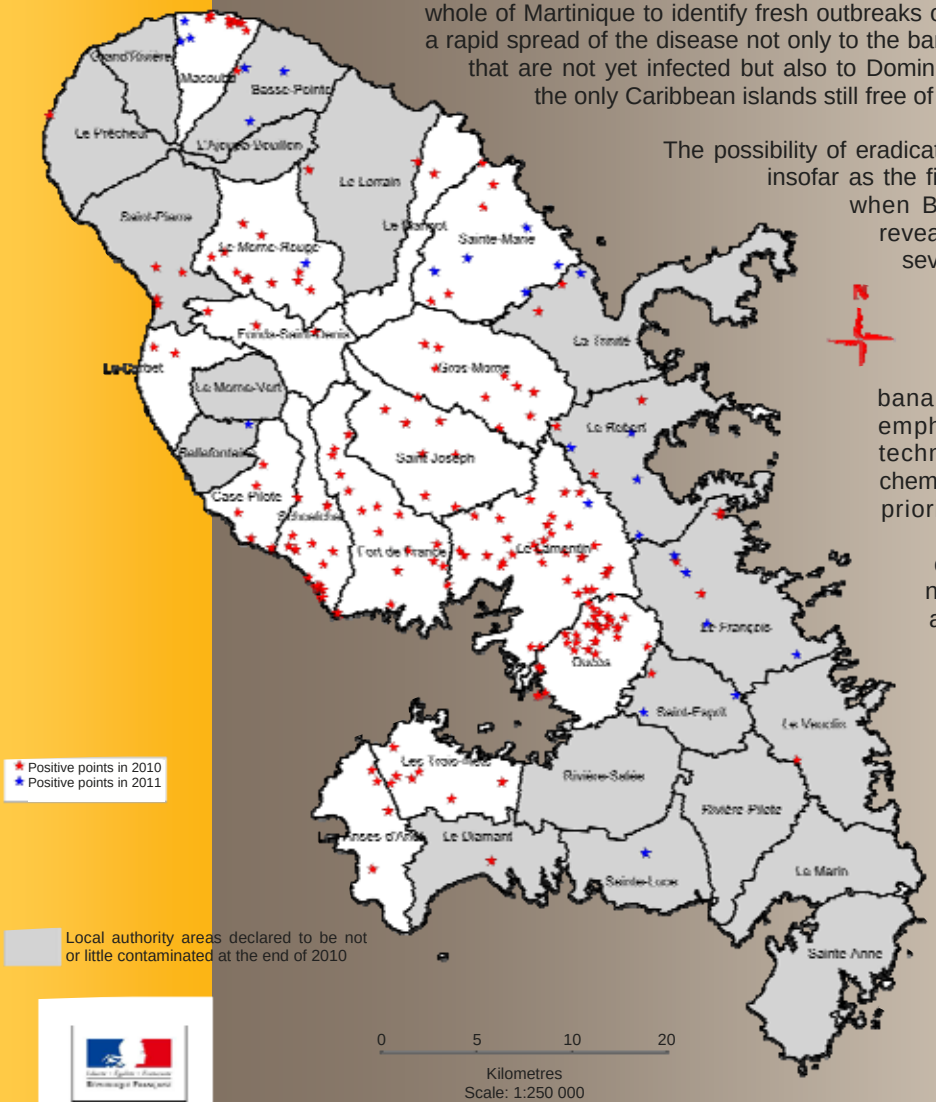
Black Sigatoka disease of banana and plantain in Martinique

Greatly feared, Black Sigatoka (or Black Leaf Streak) was found in Martinique in September 2010. A large number of outbreaks were detected simultaneously in different places in the island. Contamination was probably caused by the massive arrival of wind-borne ascospores of *Mycosphaerella fijiensis* (the pathogen responsible for Black Sigatoka) from neighbouring St Lucia. Not all the production zones are affected yet. The sanitary situation is currently very contrasted depending on the zone and the plantation. The impact on commercial production is slight so far. However, Black Sigatoka is strongly present in some fields of plantain and also on some varieties of dessert banana that are strongly susceptible to the disease ('Figue pomme', etc.) in Creole gardens and private gardens. This multiplies the centres of infection. The Plant Protection service (SPV) has performed a systemic survey of the whole of Martinique to identify fresh outbreaks of Black Sigatoka. The fear is that of a rapid spread of the disease not only to the banana production zones in Martinique that are not yet infected but also to Dominica and Guadeloupe which are now the only Caribbean islands still free of the disease.

The possibility of eradicating the disease was soon ruled out insofar as the first surveys performed in Martinique when Black Sigatoka was first identified revealed the simultaneous presence of several centres of infection distributed among several geographic zones. Control methods were applied immediately combining chemical spraying of commercial dessert banana plantations and preponderant emphasis on complementary cultural techniques that are inseparable from chemical control. Among these methods, priority must be given to mechanical cleansing of the plantations. Periodic rational deleafing can remove necrotic or pre-necrotic lesions that are the site of sexual sporulation of the fungus. This sustainable cleansing of the plantations has a very strong effect on the dispersal capacity of the pathogen and, as a result, reduction of the risk of the rapid emergence of strains resistant to the fungicides used and of fresh outbreaks of Black Sigatoka. In order to be effective, these cultural control methods must be applied not only to commercial plantations of dessert bananas but also to private gardens and plantain fields ■

Eric Fouré, CIRAD
eric.foure@cirad.fr

Spatial distribution of Black Sigatoka in Martinique. Points detected as positive from 20 September 2010 to 7 April 2011.



Source: IGN BD CARTO, datas DAAF/SALIM, FREDON, SICA TG, 7 April 2011

© Régis Domergue

nes in 2009. Spain received about 55 000 tonnes from France in comparison with 47 000 tonnes in 2009. The quantity shipped to Germany increased by 10 000 tonnes and that to the UK by 8 000 tonnes.

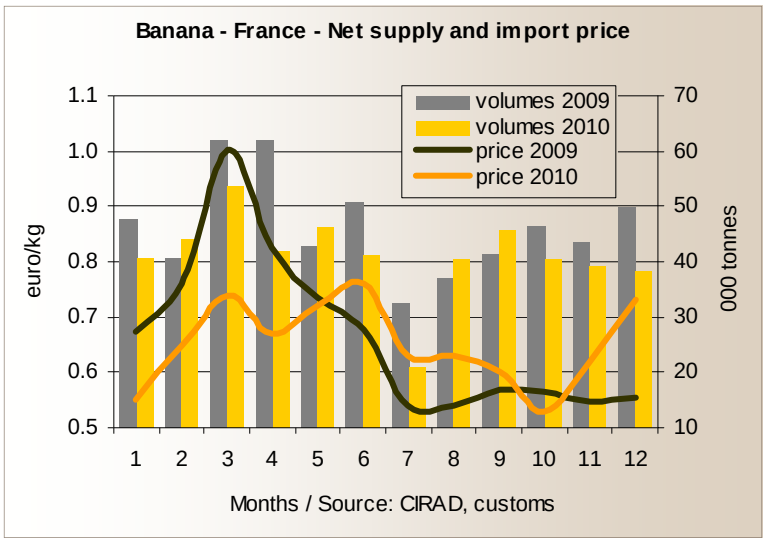
French production from Martinique and Guadeloupe released in France before possible forwarding within the EU increased very slightly (+ 3%). Imports from third countries were stable at 550 000 tonnes, with a knock-on effect between dollar sources that plummeted by 51% and ACP sources that gained 16%. Colombia, Ecuador and Costa Rica were the sources of 94% of imports from dollar zones. Cameroon, Côte d'Ivoire and Surinam shipped 80% of supply from ACP countries.

Finally, in terms of imports month by month, supply was generally very uneven with over-supply during some months and under-supply during others, especially in the last quarter with - 10 to - 23% in comparison with 2009 depending on the month.

All you can do is shed a tear

In conclusion, we observed a lifeless French market, regret the decrease in per capita consumption and finally despair of seeing a joint initiative by all stakeholders in order to relaunch consumption. For if this situation continues, it will no longer be a question of enhancing market growth but one of halting the decline ■

Denis Loeillet, CIRAD
denis.loeillet@cirad.fr



Guides for improving banana production

ENDURE, a European network for the sustainable use of crop protection strategies, assembled for four years (2007-2010) more than 300 scientists working in agriculture, biology, ecology, economics and social sciences and representing 18 organisations in 10 European countries. It received financial support from the European Commission as part of Thematic Priority 5, 'Food quality and safety'.

The objectives of the ENDURE network are as follows:

- building a sustainable research community focused on crop protection;
- providing producers with a broader range of short-term solutions for solving their specific problems;
- developing a holistic approach to the management of pests and diseases;
- taking into account the changes in crop protection policies and becoming a centre of reference in this area.

Like wheat and tomato, banana was one of the model plants studied. FruiTrop is participating in the broad dissemination of the results of the project by supplying all the guides on banana with this issue .

- Guide 1: Challenging short and mid-term strategies to reduce the use of pesticides in banana production
- Guide 2: *Mycosphaerella* foliar diseases of bananas: towards an integrated protection
- Guide 3: Integrated Pest Management of black weevil in banana cropping systems
- Guide 4: Integrated management of banana nematodes — Lessons from a case study in the French West Indies
- Guide 5: Banana production under Integrated Pest Management and organic production criteria: the Canary Islands case study

Find the guides at:
http://www.endure-network.eu

THE CARRIER BEYOND OCEANS

360 Quality
Member of the 360 Quality Association

The carrier beyond...

- Beyond expectations of their clients with one of the world's biggest and most diverse fleet of modern reefer ships
- Beyond limits with extensive capacity and experience in the carriage of perishables as well as vehicles, yachts, project and deck cargoes
- Beyond tradition, by pioneering new services and fostering existing trade lanes

Seatrade Reefer Chartering is truly the carrier beyond oceans

Seatrade Reefer Chartering N.V.
Branch Office: Atlantic House (4th floor)
Noorderlaan 147, PO Box 10.012
2030 Antwerp 3, Belgium

Tel. (32) 3 544 9493
mailbox@seatrade.com
www.seatrade.com

Seatrade
REEFER CHARTERING N.V.
GENERAL AGENT FOR SEATRADE GROUP INC. CURAÇAO N.A.

The banana market in Spain

The end of the Canary Island banana myth?

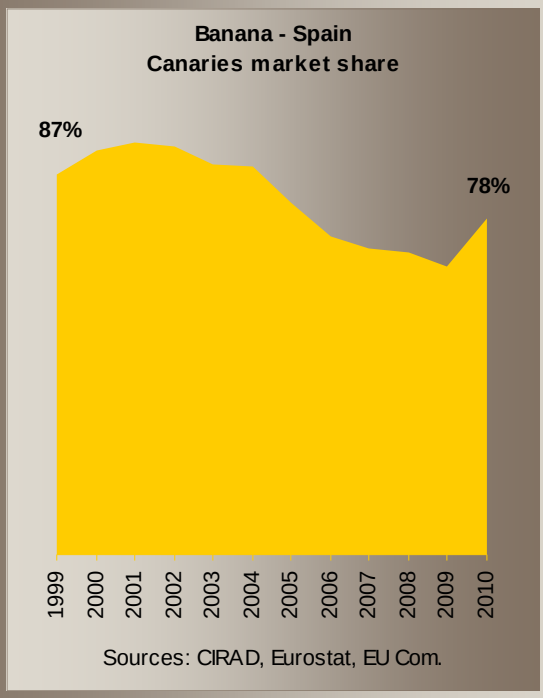
© Charles de Wulf

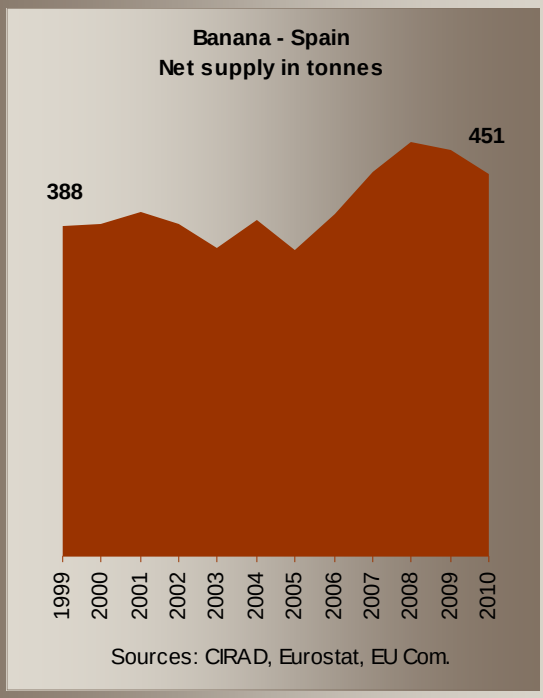
The Spanish curse or how an income can become a financial catastrophe

We know the theory of oil income in which large deposits are associated with poverty in producer countries. With a little exaggeration, it would be possible to draw a parallel between this theory and the banana sector in the Canary Islands. Indeed, we can remember the wonderful time when Spanish growers profited to a maximum from the regime of compensatory aid for loss of income decided in 1993 when the single banana market was set up. It will also be remembered that the Spanish market was dedicated entirely to Canary Island bananas as all imports were forbidden before 1993 and substantial marketing work was performed after that year. Spanish growers even succeeded in segmenting the market by the name of the produce sold: 'plátano' for Canary Island bananas and 'banana' for those from the rest of the world. Apologies to sybarites with delicate palates, but succeeding in making scratched, stained and bumped Canary Island bananas the last word in quality was in no way a conjuring trick or a collective hallucination. It is the result of long, steady and costly marketing work performed by Canary Island growers for many years.

The sin of gluttony

However, what was an example and even the Holy Grail of bananas for all other sources and especially for growers in the French overseas departments in the West Indies is no longer





quite what it was. The myth is beginning to crumble, doubtless because of a decline of the sector but also because of the deep-seated changes in the balance of power on the community market. A guaranteed income is turning into a financial disaster. We noted last year (FruiTrop 177, page 38 ff) that 'the end of the Canary exception' had arrived. In 2009, competing sources finally launched an assault on the Spanish citadel. The market share held by Canary Island bananas fell to below 70%. But above all the difference in retail price between Canary fruits, the top of the range reference, and basic bananas became unreasonable. At EUR 2 per kg, Canary fruits were priced as much as 50 cents higher than the competition. Stimulated by the economic downturn, consumers soon made their choice. In a way, the Canaries had given in to gluttony. And remember, this is one of the seven deadly sins!

In 2010, the mechanism of the Canary Island crisis was different. In contrast with 2009, the Canaries increased their market share in mainland Spain, attaining 78% of total consumption, and imports from other EU member countries and third countries decreased strongly to 101 000 tonnes against 160 000 in 2009. The market even shrank by about 6% overall. However, simultaneous over-production in the Canaries put the Spanish market on its knees for almost the entire year, with Canary Island growers making the somewhat true but greatly exaggerated accusation that European producers were invading their Spanish patch. In our article 'Banana prices in Europe in 2010' (FruiTrop 185, January 2011, page 21ff), we mentioned '... the disastrous 2010 season in Spain [...] green prices did not get very far, even at the end of the year when they rocketed everywhere in Europe. The average import price of Super Extra category fruits fell to EUR13.3 per box, 25% lower than in 2009. Such a level had not been observed since 2001!'.

© Charles de Wulf

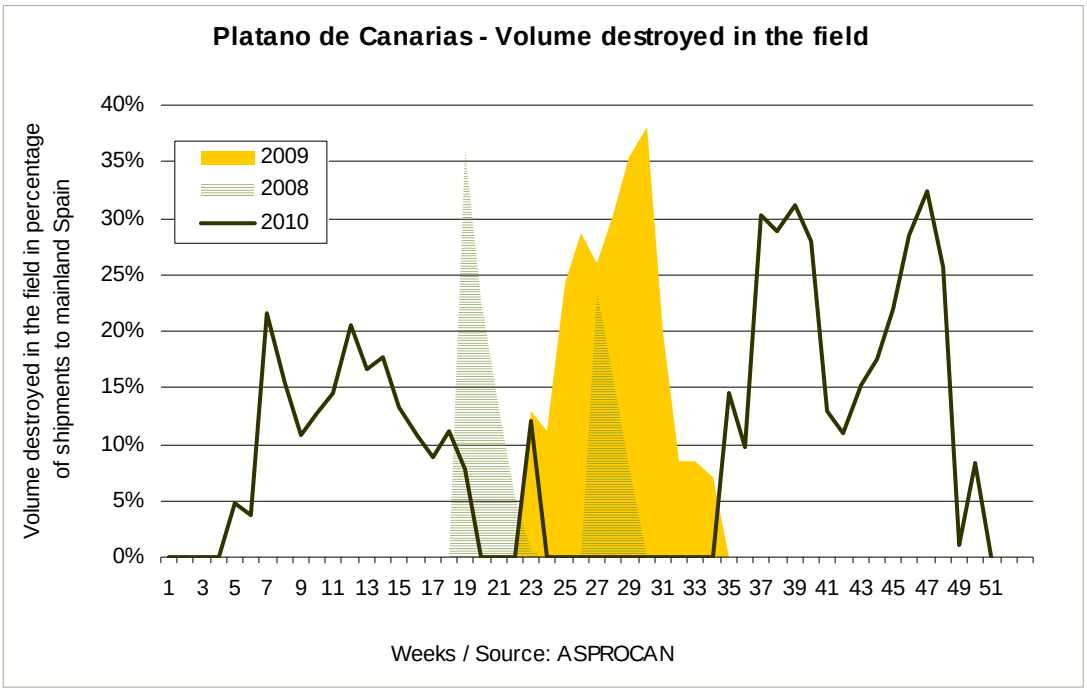
One banana destroyed for every ten shipped

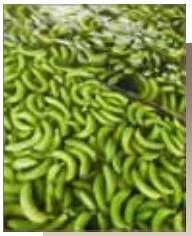
There is therefore something amiss in the kingdom of Spain. The remedies in such cases are classic. Supply is reduced on the encumbered market either by destroying goods or by gaining new markets. The European system of aid for Spanish growers is convenient in the case of the first lever. Volumes destroyed at the production stage give a right in all cases to the payments of so-called POSEI (Programme of Options Specifically Relating to Remoteness and Insularity) aid. In 2008, 2% (8 000 tonnes) of the annual volumes shipped was destroyed preventively. In 2009, the proportion increased to 4% (12 400 tonnes). An all-time record was set in 2010 with 36 000 tonnes, that is to say 10% of annual shipments to the mainland. This is economically disastrous in spite of the aid and shocking from the environmental point of view in an archipelago where attention is paid to saving every single drop of water. Finally, it is bad for the image of Canary Island bananas.

The second lever is more difficult to apply because of the specific nature of Canary bananas. As regards investing in other markets, Germany has been identified, as has been mentioned. The objectives are ambitious at one lorry per week, that is to say about a thousand tonnes per year. If they can find another 35 markets like that there will be no more problems ■

Denis Loeillet, CIRAD
denis.loeillet@cirad.fr

© Régis Domergue





Producer country sheet

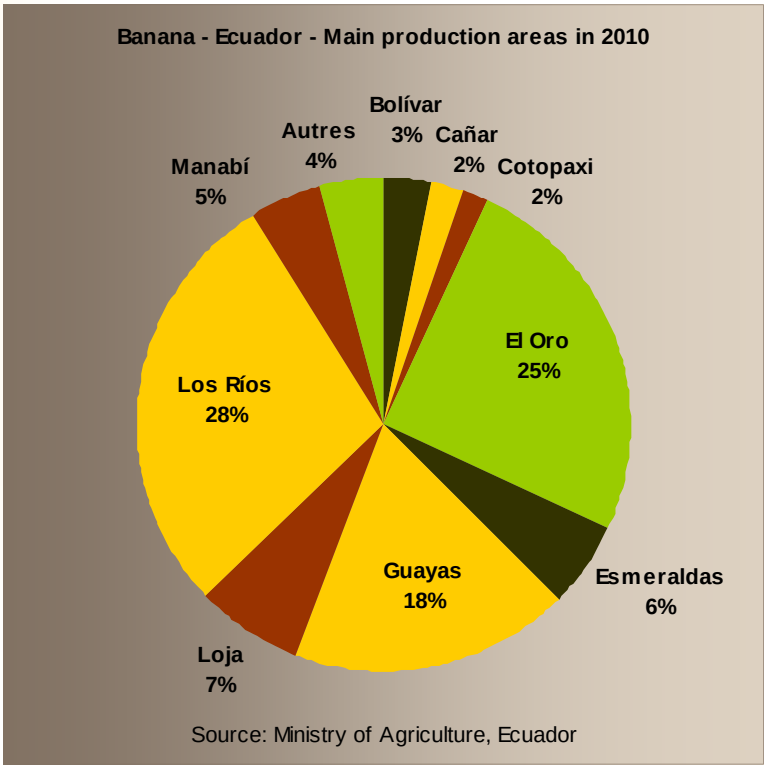
Banana in Ecuador

by Carolina Dawson

With annual exports of more than 5 million tonnes, Ecuador dominates the international banana trade thanks to an original production structure consisting of large and small growers. Although productivity is only average, Ecuador is the only exporting country to supply all the world markets on a contractual or spot basis. The sector accounts for 50% of agricultural GDP and is increasingly supervised by the government.

Production structure

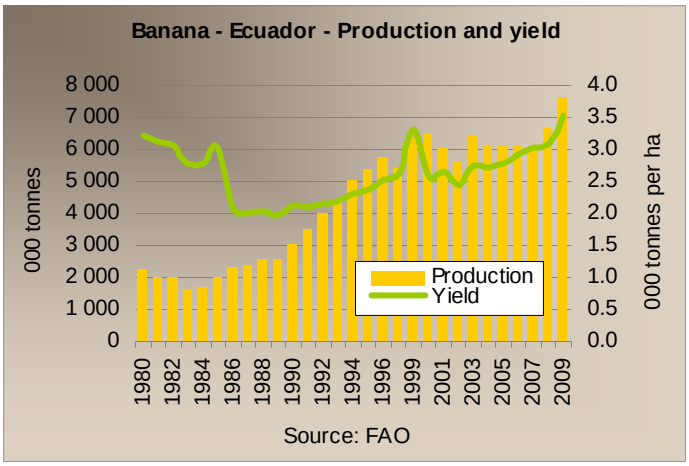
About 30% of the huge area devoted to bananas (more than 230 000 ha) is in the regions in the north of the country: Esmeraldas, Manabí and Pichincha. However, this zone is losing ground because of strong logistic constraints and above all because of the agronomic problems (especially Black Sigatoka disease) that weigh on yields. Thus more than 70% of the area is concentrated in three regions in the south-west close to the main export ports: Los Rios, El Oro and Guayas. Most of the medium-sized to large production structures are located in the Los Rios region. Cultivated areas are increasing strongly with large planters using former cocoa plantations with very rich soils. Even if Sigatoka pressure is still strong, yields in this region are the highest in the country because of the high technical level. Conversely, the production structure is very traditional in El Oro province where small planters cultivate small scattered fields as the land is more hilly. The climate is drier, making irrigation necessary during the dry season but limiting Sigatoka outbreaks and making it possible to grow organic bananas. The areas under banana are stagnating or decreasing in the Guayas plains where more profitable sugar cane is taking over from plantations of very varied sizes.

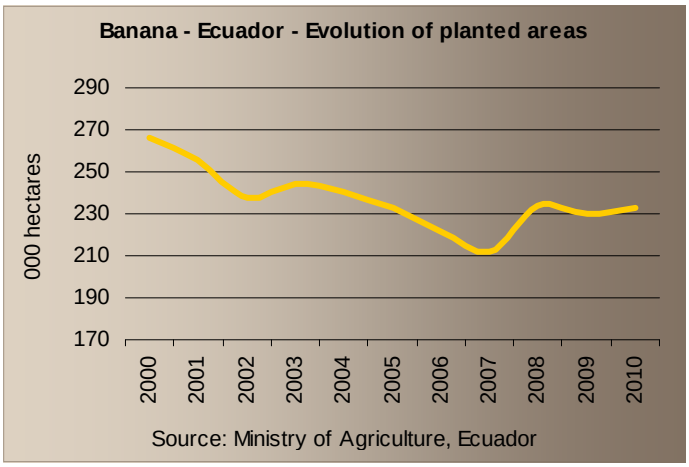


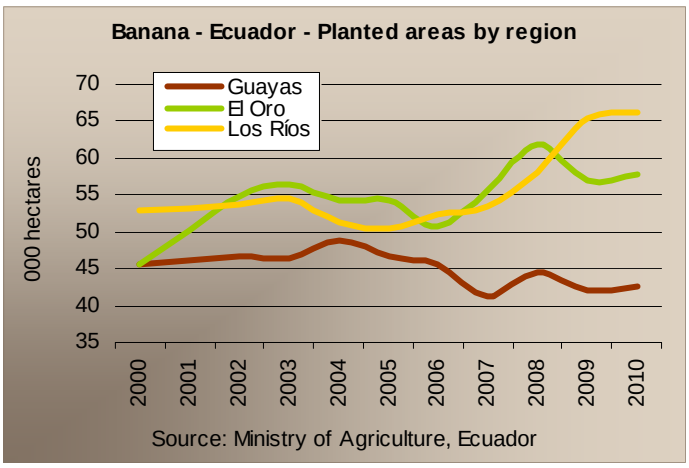
Production

The banana sector grew very strongly from 1985 to 1995, driven by a governmental plan (Ley de fomento bananero). Areas doubled and yields increased and Ecuador became the third largest world producer. The increase in yields in the past decade has compensated the decrease in cultivated area, which has remained stable at 230 000 ha since 2008. However, productivity is still modest. First, the climatic constraints are sometimes strong: rainfall induces strong attacks of Black Sigatoka and there are periods of cold during La Niña years. In addition, support structures are weaker and, above all, production structures are more varied. Most of the export supply is controlled by large growers operating on a national basis with a high level of technical skills (Wong group, Noboa), unlike other countries in the dollar zone. However, 30% of the plantation area is in the hands of 5 000 small producers who sell their fruits via cooperatives to large exporting groups on a contract or spot basis.

© Denis Loeillet

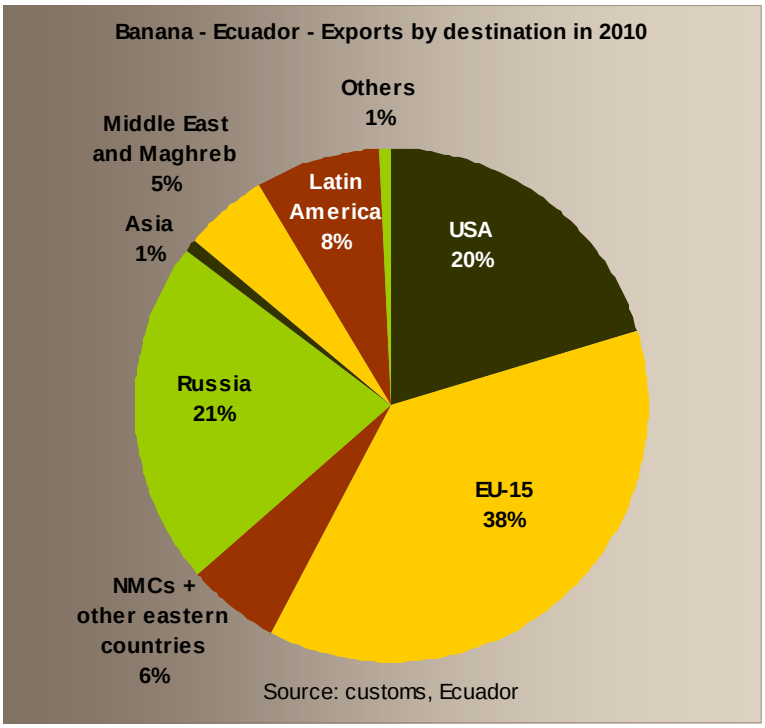






Exports

Nearly 95% is for the international market only. Ecuador is the world's leading exporter with annual volumes of around 5 million tonnes. Its customer country portfolio is the most varied of all exporters. More than 60% of the volumes are for the two main markets, the European Union and the United States. However, exports to Eastern Europe have increased steadily in recent years and Ecuador is practically the only supplier of Russia thanks to Russian operators in the country. Likewise, it also covers the imports of other South American countries (Argentina, Chile, Peru, Central America). Ecuador also supplies Asia and the Middle East but shipments are dwindling as a result of increasing competition from the Philippines for more than a decade. As the country has large production potential, it can supply large additional spot volumes depending on market conditions. Some 25% of exports are reported to be non-contractual, in contrast with the other competitors in the dollar zone such as Colombia and Costa Rica where 100% of production is sold under contract. In this context, the government is seeking to rebalance relations between growers and exporters by setting up legislation to ensure the respect of the minimum price to be paid to growers.



Logistics

Exports are shipped mainly from the port of Guayaquil (66.5%) and from Puerto Bolivar (33.3%).

© Denis Loeillet

Banana — Ecuador Transit time	
Miami	10-13 days
Newark	12-17 days
Algeciras	19-23 days
Hamburg	18-21 days
Rotterdam	15-19 days
St Petersburg	22-24 days
Yokohama	26-39 days
Istanbul	33-39 days
Tripoli	31-37 days
Shanghai	27-35 days

Producer country sheet

Banana in Costa Rica

Dating back for more than a century, the Costa Rican banana export industry is among the four largest in the world, with some 2 million tonnes of fruits shipped annually. Centred on large multinational groups, it plays a key role on the EU and US markets.

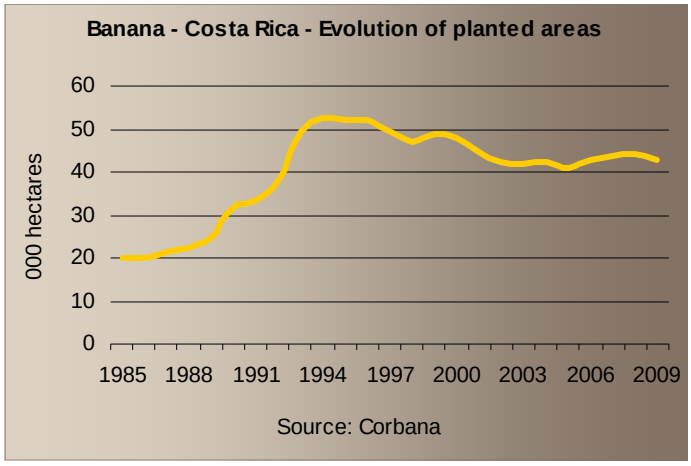
by Eric Imbert

Location

Most of the cultivated areas, totalling 42 500 ha in 2009, are in Limon province on the Caribbean coast. Some 40% of the plantations are concentrated in Limon and Guacimo cantons on alluvial plains developed at the end of the nineteenth century because they are close to the port of Limon. Most of the other plantations were established at the end of the 1980s and are grouped further north (Pococi and Sarapiqui cantons in Herredia province). Rainfall is well distributed but very abundant in this part of the country, requiring drainage and costly control of Black Sigatoka, which has become resistant to systemic fungicides. The rest of the plantations, covering a small area, are in drier zones south of Limon (Talamanca canton) and in Puntarenas province on the Pacific coast (Corredores and Parrita cantons).

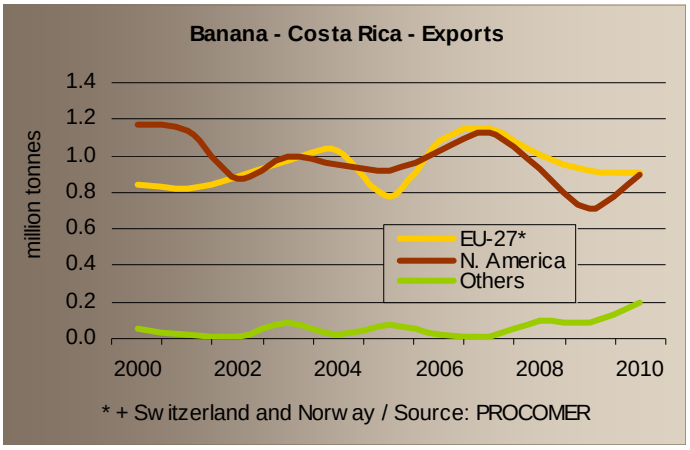
Production

Costa Rica is one of the pioneer countries where cultivation of bananas for export was developed at the end of the nineteenth century at the initiative of the first multinationals in the sector. The 'Ley de fomento bananero', a government plan aiming at making Costa Rica one of the world leaders in fruit exports generated an explosion of production between the end of the 1980s and the mid-1990s, with areas increasing from some 20 000 ha to more than 50 000 ha. Yields are among the highest of Latin America thanks to highly technical production structures that are medium-sized to large and often depend directly on large transnationals. Research facilities (CORBANA) also provide effective support for the structure. However, falling world market prices and the decrease in Costa Rica's competitiveness (high cost of the labour and social policy and among the highest costs of Sigatoka disease control in the world) resulted in a decrease in plantation areas until 2006. The strategy currently used by professionals is that of strengthening and drawing benefit from Costa Rica's advance in social and environmental terms, in particular within the framework of the national 'zero carbon' plan.



Exports

Costa Rica is one of the four largest banana exporters in the world. Volumes have been stable since the beginning of the 2000s at some 2.0 to 2.2 million tonnes in years with no weather problems. The main markets for Costa Rican bananas are the European Union and the United States. Volumes were very equally distributed between the two destinations until 2006 but have subsequently been more focused on the EU. At 200 000 t in 2010, the quantities shipped to diversification markets are still minimal but display a degree of growth. Shipments to Russia have developed strongly (JFC has set up in production), as have those to the Mediterranean (Turkey, Libya) and the Arab peninsula. The four main multinational groups control nearly three-quarters of exports by means of their own production or purchases of fruits.



Banana — Costa Rica — Exports

tonnes	2005	2006	2007	2008	2009	2010
EU-27*	775 915	1 088 225	1 143 236	1 010 631	913 574	912 304
North America	917 527	1 032 363	1 130 113	932 183	715 111	900 637
Med./Middle East	33 628	1 041	5 127	2 992	30 335	117 266
Eastern Europe	39 120	18 053	347	82 230	33 438	44 386
South America	8 558	3 357	5 112	8 481	22 734	25 586
Others	37	0	1 377	664	1 132	5 718
Total	**1 774 784**	**2 143 040**	**2 285 312**	**2 037 179**	**1 716 324**	**2 005 897**

* + Switzerland and Norway / Source: PROCOMER

Banana — Costa Rica — Volume exported by operator

	million boxes	% total export	% own production
Corporacion Desarollo Agricola Del Monte	26.5	30 %	78.0 %
Standard Fruit company*	24.1	28 %	42.0 %
Compania Bananera Atlantica**	16.6	19 %	67.0 %
Tropicalrica international SA	6.6	8 %	0.0 %
Com. Bananeros de Costa Rica	3.2	4 %	94.0 %
Cosefruta	1.9	2 %	0.4 %
Fyffes International	1.9	2 %	0.2 %
Bonanza Fruit Costa Rica***	1.5	2 %	1.0 %
Others	5.0	6 %	
Total	**87.2**		

* subsidiary of Dole / ** subsidiary of Chiquita / *** subsidiary of JFC / Source: CORBANA 2009

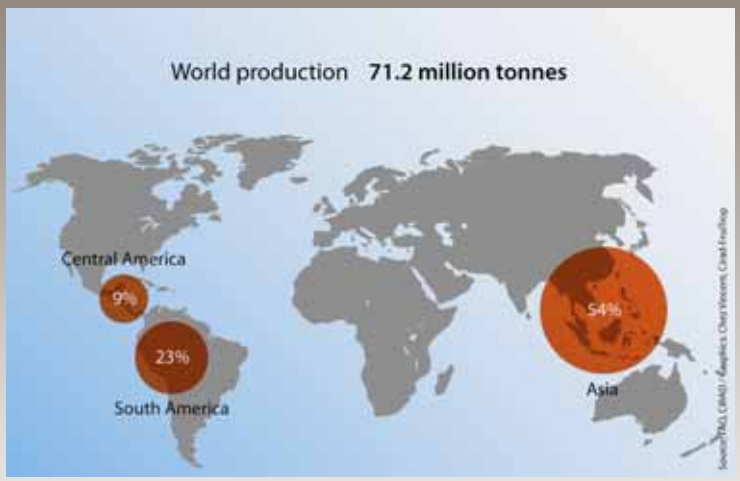

© Thierry Lescot


© Thierry Lescot

Logistics

Preliminary transport from the plantation is by road. Practically all exports are shipped from the ports of Limon and Moin, a few kilometres apart on the Caribbean coast. Maritime logistics is handled using dedicated shipping operated by the multinationals, with the regular lines of general all-purpose companies handling the complement. Thanks to its Atlantic seaboard, Costa Rica can ship to Northern Europe in 10 to 14 days (Rotterdam and Antwerp) and the East Coast of the USA in less than a week (4 days for Florida and 6 days for more northerly ports).

Banana — Production



Banana — The 10 leading producer countries	
tonnes	**2009**
India	18 582 400
China	7 540 427
Brazil	6 709 839
Ecuador	5 320 000
Philippines	5 100 000
Indonesia	3 753 056
Colombia	2 689 000
Costa Rica	2 020 000
Mexico	1 769 545
Guatemala	1 510 000

Professional sources, FAO

Banana — Imports

Banana — The 10 leading importing countries	
tonnes	**2010**
United States	4 114 891
Belgium	1 322 647
Japan	1 109 068
Russia	1 068 571
United Kingdom	913 516
Germany	744 932
China (2009 figure)	575 183
France*	556 360
Italy	528 038
Spain*	501 230

* of which island production sold locally or shipped to the continent.
Sources: national customs

USA — Imports — Main supplier countries						
000 tonnes	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
Guatemala	1 029	913	1 093	1 189	1 112	1 152
Costa Rica	904	994	929	830	958	982
Ecuador	823	927	1 037	874	563	854
Honduras	514	474	377	451	422	461
Colombia	453	423	483	506	389	436
Nicaragua	34	39	32	66	105	146
Mexico	38	30	33	31	25	36
Peru	2	8	1	8	5	29
Dominican Rep.	22	25	18	23	20	20
Panama	4	6	2	-	1	-
Others	1	-	-	-	-	-
Total	**3 824**	**3 839**	**4 004**	**3 978**	**3 599**	**4 115**

Source: USDA

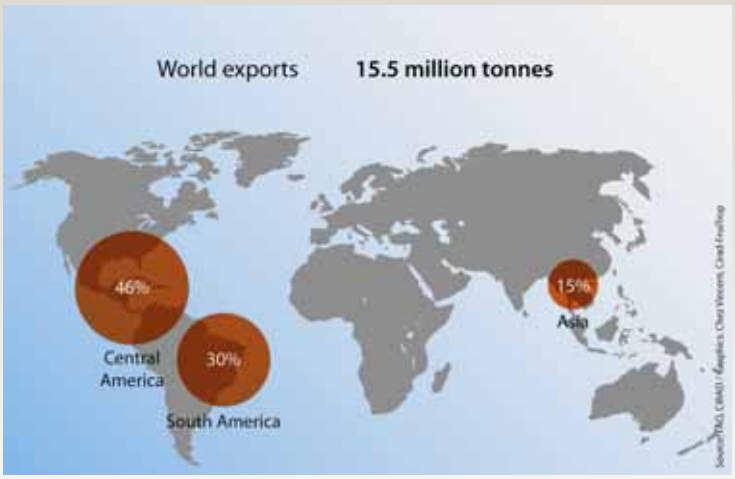
Canada — Imports — Main supplier countries						
000 tonnes	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**
Ecuador	54	94	100	121	164	147
Colombia	106	174	138	122	129	115
Costa Rica	62	88	125	115	71	106
Guatemala	57	79	75	81	93	90
Honduras	12	10	23	29	17	30
Panama	1	5	4	3	3	4
Others	7	7	6	6	5	6
Total	**299**	**459**	**472**	**478**	**482**	**496**

Source: COMTRADE

Latin America + Carribean — Imports						
000 tonnes	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**
Argentina	303	302	296	319	347	344
Chile	160	168	169	169	175	179
Salvador	105	109	105	119	113	96
Colombia	71	67	31	89	72	67
Honduras	-	1	20	16	0	63
Uruguay	443	48	45	42	43	42
Costa Rica	11	26	18	24	28	26
Nicaragua	-	-	-	3	3	6
Guatemala	14	4	5	12	7	5
Trinidad	3	2	3	4	4	5
Aruba	0	0	0	0	0	3
Total	**711**	**727**	**691**	**798**	**792**	**835**

Source: COMTRADE

Banana — Exports



Banana — The 10 leading exporting countries	
tonnes	**2010**
Ecuador	4 935 414
Costa Rica	2 005 897
Philippines	2 002 848
Colombia	1 802 581
Guatemala	1 686 705
Honduras	518 487
Canaries	350 000
Panama	295 270
Côte d'Ivoire*	244 000
Cameroon*	243 000

* EU volumes / Professional sources and national customs

EU-27 — Imports — Main supplier countries						
000 tonnes	2005	2006	2007	2008	2009	2010
Total EU prod., incl.	**648**	**642**	**554**	**568**	**608**	**657**
Canaries	345	348	361	371	352	397
Martinique	226	221	129	125	180	199
Guadeloupe	54	48	38	47	56	43
Madeira	14	15	17	18	14	14
Cyprus	6	7	6	4	3	3
Greece	3	3	3	3	3	2
Total dollar, incl.	**2 959**	**3 290**	**3 847**	**3 964**	**3 555**	**3 498**
Ecuador	1 059	1 026	1 186	1 349	1 278	1 223
Colombia	878	948	1 156	1 281	1 206	1 168
Costa Rica	623	825	971	902	753	777
Panama	281	311	354	295	183	184
Brazil	63	96	86	58	56	63
Peru	12	23	34	39	44	51
Honduras	19	18	32	24	9	15
Mexico	3	1	0	2	22	13
Guatemala	3	27	19	14	4	3
Venezuela	17	15	10	0	0	0
Total ACP, incl.	**764**	**906**	**837**	**920**	**957**	**1 023**
Dominican Rep.	145	177	206	171	228	304
Côte d'Ivoire	184	228	189	217	229	244
Cameroon	253	259	222	280	250	243
Belize	74	73	62	82	80	79
Surinam	35	45	59	66	57	70
Ghana	4	24	34	46	36	52
St Lucia	28	36	30	39	33	23
St Vincent	15	17	14	9	8	4
Dominica	12	13	7	10	36	4
Jamaica	12	32	18	0	0	0
Other ACP	2	2	2	0	0	0
Total	**4 371**	**4 838**	**5 238**	**5 452**	**5 120**	**5 179**

Source: EUROSTAT

Other Western Europe countries — Imports						
000 tonnes	2004	2005	2006	2007	2008	2009
Norway	66	73	75	78	84	81
Switzerland	74	74	74	78	82	81
Iceland	5	5	5	6	6	6
Total	**144**	**152**	**154**	**162**	**171**	**168**

Source: COMTRADE

Russia — Imports — Main supplier countries						
000 tonnes	2005	2006	2007	2008	2009	2010
Ecuador	791	798	920	903	911	977
Costa Rica	15	27	2	66	33	48
Philippines	21	30	25	32	25	30
Colombia	28	21	22	-	5	10
China	2	2	6	5	4	3
Mexico	-	-	0	0	3	1
Vietnam	1	1	-	-	-	-
Brazil	0	-	-	0	-	-
Others	6	16	3	-	-	-
Total	**865**	**895**	**979**	**1 007**	**981**	**1 069**

Source: COMTRADE

Ukraine — Imports — Main supplier countries						
000 tonnes	2004	2005	2006	2007	2008	2009
Ecuador	61	221	220	289	270	202
Colombia	3	15	5	1	2	9
Costa Rica	2	9	22	2	5	8
Guatemala	0	0	13	6	0	5
Mexico	0	0	7	-	0	-
Panama	0	2	2	0	0	3
Honduras	1	2	2	0	0	0
Others	-	-	-	-	1	-
Total	**68**	**249**	**272**	**298**	**278**	**227**

Source: COMTRADE

Other Central and Eastern Europe countries — Imports						
000 tonnes	2004	2005	2006	2007	2008	2009
Croatia	51	54	51	55	57	52
Serbia	0	58	56	66	69	43
Bosnia	47	45	38	38	41	37
Belarus	26	29	29	33	42	37
Albania	17	17	17	20	17	17
Macedonia	21	18	15	16	15	17
Moldavia	5	7	8	11	13	12
Montenegro	0	0	8	9	8	8
Total	**166**	**227**	**222**	**248**	**263**	**223**

Source: COMTRADE

Japan — Imports — Main supplier countries						
000 tonnes	2005	2006	2007	2008	2009	2010
Philippines	944	911	879	1 019	1 159	1 035
Ecuador	91	101	52	46	62	46
Taiwan	15	16	19	9	9	10
Peru	4	4	8	7	11	8
Mexico	4	4	5	5	5	4
Thailand	2	2	2	2	2	2
Colombia	2	2	3	2	4	3
Dominica	1	2	1	-	1	1
China	3	2	2	1	1	1
Others	0	-	-	-	-	-
Total	**1 067**	**1 044**	**971**	**1 093**	**1 253**	**1 109**

Source: national customs

Far East — Imports						
000 tonnes	2004	2005	2006	2007	2008	2009
China	449	430	463	402	437	575
South Korea	210	254	280	308	258	257
Singapore	35	36	36	37	38	40
Thailand	1	5	13	7	20	9
Total	**695**	**725**	**793**	**754**	**753**	**881**

Source: COMTRADE

Asia minor — Imports						
000 tonnes	2004	2005	2006	2007	2008	2009
Kazakhstan	19	22	25	34	38	47
Afghanistan	0	0	0	0	0	38
Azerbaijan	5	8	10	14	15	18
Armenia	4	8	9	17	8	8
Kirghizia	2	2	2	3	5	7
Georgia	7	7	10	11	10	-
Total	**37**	**47**	**55**	**80**	**77**	**118**

Source: COMTRADE

Middle East — Imports						
000 tonnes	2004	2005	2006	2007	2008	2009
Saudi Arabia	212	233	235	248	257	252
Bahrain	11	11	10	10	0	14
Oman	3	4	6	9	11	10
United Arab Emirates	0	50	0	123	127	-
Koweit	30	0	68	89	96	-
Qatar	7	13	15	18	22	-
Total	**263**	**311**	**333**	**497**	**512**	**277**

Source: COMTRADE

Africa — Imports						
000 tonnes	2004	2005	2006	2007	2008	2009
South Africa	3	5	13	22	24	23
Mali	-	-	31	11	21	*21*
Senegal	14	15	16	17	17	17
Botswana	3	6	6	6	7	8
Rwanda	0	0	-	6	3	4
Mauritania	-	-	3	3	3	*3*
Namibia	3	3	2	2	3	*3*
Burkina Faso	1	2	0	0	0	3
Total	**25**	**31**	**70**	**66**	**78**	**81**

Source: COMTRADE

Mediterranean — Imports						
000 tonnes	2004	2005	2006	2007	2008	2009
Syria	94	112	323	193	219	*219*
Turkey	110	151	184	224	219	182
Algeria	205	157	147	163	164	180
Tunisia	54	21	20	41	34	37
Morocco	1	5	5	17	19	27
Jordan	2	6	9	20	33	26
Egypt	1	3	6	5	3	2
Total	**467**	**455**	**695**	**663**	**691**	**673**

Source: COMTRADE

Oceania — Imports						
000 tonnes	2005	2006	2007	2008	2009	2010
New-Zealand	85	88	87	88	84	81

Source: COMTRADE

Tissue culture production of tropical fruit plants

Your banana tissue culture plant specialist

A unique range of elite varieties

What we promise you

The most productive selected elite varieties

Prime bunch quality

Optimum homogeneity in the field

The best sanitary guarantees of the market

Unequalled responsiveness

Tel: +33 (0)4 67 55 34 58
Fax: +33 (0)4 67 55 23 05
vitropic@vitropic.fr

ZAE des Avants
34270 Saint Mathieu de Tréviers
FRANCE
www.vitropic.fr

Black Sigatoka disease

A challenge for the world banana industry

Banana production is confronted with two main types of leaf streak disease: Yellow Sigatoka and Black Sigatoka. They are caused by parasitic leaf fungi. The pathogen of Yellow Sigatoka is *Mycosphaerella musicola* and that of Black Sigatoka is *Mycosphaerella fijiensis*.

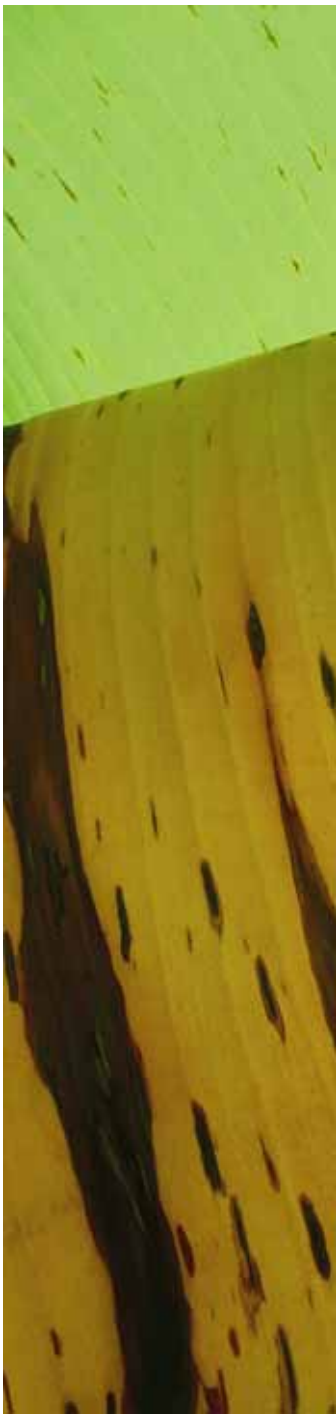
A new fungal species, *Mycosphaerella eumusa*, that may be responsible for a new, even more aggressive form of Black Sigatoka, seems to be spreading in Asia and the Indian Ocean, but this remains to be confirmed.

Propagation is from banana plant to banana plant in continental zones. Maritime zones form a natural obstacle. Although the risk of natural spread of spores by wind does exist, the spread of the disease from one zone to another is usually the result of uncontrolled transfers of germplasm. Black Sigatoka is present in all the producer countries in Latin America, Africa and Asia. The countries of the Caribbean arc were long protected by their island status. Presence of the diseases in St Vincent and Guiana was confirmed in 2009. It was demonstrated officially in St Lucia in early 2010 and in Martinique in September 2010.

In the Caribbean, only Dominica and Guadeloupe are still free of the disease but Black Sigatoka is certain to reach these islands, probably in the short term.

The fungus destroys the foliage. The disease takes the form of small elongated black streaks that soon become necrotic. Necrosis spreads

Distribution of Black Sigatoka in the Caribbean arc



© Denis Loeillet


Yellow Sigatoka

and finally destroys all the leaves of the plant before the bunch is cut. This results in smaller yields and very ripe fruits that are unsalable.

The sequence is precisely the same as that caused by Yellow Sigatoka, a fungal disease present on all the continents for about 60 years. Rational chemical control of the disease was established by professionals in Martinique and Guadeloupe. Warning methods (biological and meteorological) based on the weekly observation of biological and meteorological descriptors in plantations make it possible to monitor the dynamics of the disease and to apply appropriate treatments. Today, Yellow Sigatoka is controlled with a small number of sprayings: an average of five to seven a year in West Indian plantations.

There are fundamental differences between the two leaf streak diseases. Unlike Yellow Sigatoka, Black Sigatoka can develop on export bananas and also on plantains and other cultivated varieties that are also very susceptible to the disease. It spreads rapidly and is very difficult to control. Depending on the country and the control facilities and strategies used, management requires from 12 to more than 50 sprayings per year .

Different control strategies

In the main Latin American producer countries, export banana plantations form vast agroindustrial units in alluvial plains. Given the areas of the estates (several hundred or even several thousand hectares), contamination from outside is weak. There are no outbreaks of the disease in the immediate neighbourhood of agroindustrial plantations. Agroclimatic homogeneity makes it possible to organise and rationalise the spraying of large units. Low labour costs facilitate the cleansing work required in the form of regular deleafing. In this context, the impact of spraying in terms of nuisance is not always taken into account by the large companies, who do not hesitate to use systematic control strategies leading to more than 50 sprayings per year. These sprayings are often performed at less than weekly intervals, and generally involve contact fungicides that are not very curative (chlorothalonil, dithiocarbamates, etc.) and whose effectiveness is small by definition. System fungicides are sometimes used but usually in 'cocktails' that are mixes of systemic, penetrating and contact substances prepared as emulsions in oil.

CIRAD has developed rational control strategies that, for the control of Yellow and Black Sigatoka, are based on warning systems involving either scouting in the plantation or the observation of meteorological descriptors (evaporation, temperature, etc.). This strategy has been applied in different countries to control Yellow Sigatoka and also Black Sigatoka. This is the case in particular in Guadeloupe, Martinique, Cameroon and Côte d'Ivoire. The main objectives are as follows:

- improving the effectiveness of control while reducing the number of sprayings per year;
- limiting the risks of the selection of fungal strains that are resistant to the systemic fungicides used;
- reducing pollution and thus achieving greater respect of human health and the environment (urban centres, rivers, water bodies, reservoirs, etc.).

The strategy is also based on the rational, alternate use of systemic fungicides (benzimidazoles, triazoles, strobilurins) and penetrating fungicides (morpholines) which are mixed with refinery oils that are also fungistatic and applied at a low volume (13 to 15 litres per hectare), prolonging the effectiveness of each spraying and hence reducing the number of sprayings required each year.

The systemic fungicides on the market have a single-site mode of action on the pathogen and the risk of the appearance of resistant strains is high if they are used irrationally or abusively. In Central America, benzimidazoles were used massively when they came on to the market and resistance was observed only two years after they began to be used to control Black Sigatoka. This made it necessary to use more contact fungicides (15 to 40 kg active substance per hectare per year). The same phenomenon was then observed in these production zones with Black Sigatoka when triazoles and them strobilurins were used.

Thanks to the warning methods and hence the reduced number of sprayings, the phenomenon did not appear in Cameroon and Côte d'Ivoire for 10 or even 15 years of use of the fungicides to control Black Sigatoka.

In Guadeloupe and Martinique, the problems started to appear with control of Yellow Sigatoka after 20 or even 30 years of rational use of these fungicides using warning methods.

New essential control methods

Present control strategies cannot be used indefinitely. The European legislation in force in the French West Indies makes it technically impossible to use rational control strategies based on the alternating of several active substances with different modes of action. Only two fungicides in the triazole family can currently be used for aerial spraying.


© Régis Domergue

Black Sigatoka

A strobilurin fungicide and another in the morpholin group received marketing authorisations at the end of 2008, but they are not used to control Yellow Sigatoka as the authorisation is accompanied by a 100-metre unsprayed buffer zone and this is incompatible with aerial spraying.

Actions can be envisaged to address this problem of regulations, such as reducing the buffer zone to 50 metres, using land-based sprayers and technical developments to reduce the drift of fungicide sprays, the registration of new systemic fungicides, requests for derogations, etc. — but the legislation may well become increasingly restrictive in the future.

The feasibility of the implementation of rational control is based on the status of the fungal strains with regard to curative fungicides. If the strains are (see status of invasive strains) or become resistant to these fungicides (see risks of the rapid mutation of *M. fijiensis*), this will irremediably compromise the implementation of such strategies.

Other methods must therefore be sought for the control or regulation of biological pests of banana. Breeding new hybrid varieties with lasting resistance and good agricultural and organoleptic potential is a component of integrated management to be favoured, in particular for the control of Black Sigatoka.

These varieties must be incorporated in innovative, sustainable cropping systems that also include cultural control methods (optimum plant management, rational management of inoculum using mechanical cleansing techniques, etc.) that will thus make it possible to reduce the negative environmental impacts of commercial plantations and in particular reduce the application of pesticides.

Thinking of adopting an overall approach combining new hybrids resistant to leaf streak diseases and cropping systems that make it possible to conserve this resistance is an urgent matter ■

Eric Fouré and Luc de Lapeyre, CIRAD
odm@cirad.fr

Post harvest diseases

Storage diseases (wound anthracnose, ripe-fruit (quiescent) anthracnose and crown rots) strongly limit the sale of exported bananas. *Colletotrichum musae* causes both forms of anthracnose, while crown rots result from a larger parasite complex consisting of *C. musae* but also other organisms: *Fusarium*, *Verticillium*, *Botryodiplodia*, etc.

Distinction is made between two forms of anthracnose:

- ripe-fruit (quiescent) anthracnose: brown lesions develop on fruits after ripening and subsequently in the sales channel. This disease rarely has serious commercial consequences.
- wound (non-quiescent) anthracnose: broad brown lesions occur on fingers wounded during harvesting or packing. The symptoms are observed when fruits are unpacked after sea transport and have serious commercial consequences.

Crown rots are fungi that spread from cut surfaces when fruits are prepared at the packing stage. This damage is also visible after sea transport and has serious commercial consequences.

The fungi that cause post-harvest diseases are widespread in banana plantations and hence on bunches if these are not protected. In other words, control of infection begins when the inflorescence shoots at the top of the leaf cluster. Anthracnose results mainly from contamination by *Colletotrichum musae* in the field. It is not possible to detect infected fruit with the naked eye at harvesting but a test can be performed more than three weeks before cutting. Fruits are infected mainly during the first month of flowering. Spores are spread by water and develop on the organs when they start to decompose (old leaves, bracts and above all flowers). Control of the disease must begin in the field and then continue in the packing shed.

Hands can be contaminated by crown rot at various stages in the chain. This greatly complicates the implementation of control measures, but hand contamination by washing water is probably the main cause.

Chemical control of these diseases does not always give satisfactory results. Indeed, it is sometimes ineffective according to the production zone and the time of the year and resistance to fungicide has developed in the various fungal species involved. Finally, interest in developing methods other than chemical control is increasing. Indeed, these post-harvest treatments raise two crucial problems—the risks of residues in fruits and the processing of the fungicide preparations discharge near packing stations.

Banana quality defects in the field

Photos © Luc de Lapeyre, Marc Chillet, Marie-José Rives, Fruidor

Pests

Flower thrips

Red rust thrips

Silver rust thrips

Snail damage

Damage by

Physiological defects and other imperfections

Double fruit and deformed fruits

Scarring by a fruit tip

Scarring by a leaf

Scarring by guying cord

Sunscald

Chemical burns

Banana quality defects at packing

Photos © Luc de Lapeyre, Marc Chillet, Marie-José Rives, Fruidor

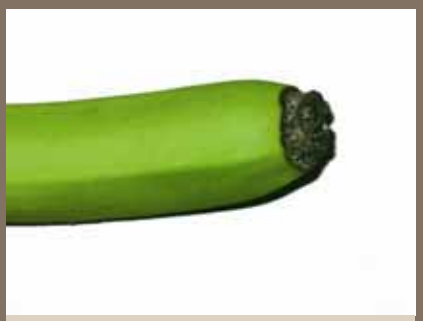
Diseases

Speckle

Red speckling at ripening

Deightoniella

Sooty mould on fruit stalk



Cigar-end rot

Dehanding problems

Crown cut too short

Detached crown

Selection problems and miscellaneous defects

Fruit too thin

Fruit too short

Latex stains

Incomplete flower removal

Bruising

Bruising caused by impact during packing

Banana quality defects after transport

Photos © Luc de Lapeyre, Marc Chillet, Marie-José Rives, Fruidor

Ripening problems

'Ship ripe' fruits

Unevenness after ripening

Storage problems

Chilling injury

'Green ripe' fruits

Storage diseases

Latent anthracnose infection

Wound anthracnose

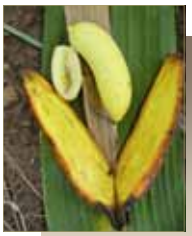
Crown rot

Crown rot

Pointed crown

Knife wound

Flexed fruit stalks



The genetic diversity of banana in figures

Over a period of thousands of years, population migrations and movement of plant material have placed banana in very different ecological contexts in the various continents. Farmers have succeeded in profiting from the natural mutations resulting from vegetative multiplication. This combination of natural reproduction and selection by man since ancient times results in the present genetic diversity.

Bananas originated in South-East Asia as wild seminiferous plants. Natural crosses built up a large base of genetic diversity that still exists today. These crosses were the origin of the seedless varieties. These bananas have food qualities that soon interested man, who incorporated them in agriculture using their vegetative multiplication potential.

From the botanical point of view, the genus Musa is divided into seminiferous species with inedible fruits and parthenocarpic varieties with fleshy seedless fruits. The Eumusa section includes *Musa acuminata* (genome symbol: A) and *Musa balbisiana* (genome symbol: B). These are wild species at the origin of the cultivated varieties.

The latter are classified according to their ploidy level and their genetic make-up. Some 1 200 varieties have been counted and classified around the world.

The inedible wild species with seed-containing fruits can be used for purposes other than human foodstuff (fibre, livestock feedingstuff, etc.). They are all diploid (AA and BB). About 180 have been counted to date, all from South-East Asia, but the census is not definitive (especially for the BBs). These fertile varieties are nonetheless important since they possess different levels of resistance to pests and diseases. They therefore form base material for the various present and future conventional genetic improvement and varietal creation programmes. Numerous cultivars have been bred by man. They are classified in groups according to their genetic make-up and then in subgroups assembling the various cultivars derived from each other by natural mutation starting from a common genetic ancestor. Distinction is made between the following groups:

diploid groups: AA (such as Figue sucrée or Frayssinette) and AB. These total about 290 cultivars grown mainly in South-East Asia where they originated;

three triploid groups (650 cultivars): AAA, AAB and ABB. The subgroups of each of these distinguish between the dessert varieties richer in sugar at maturity, cooking varieties with fruits that are firm and not sweet even when ripe, and sometimes bananas for beer-making by fermentation of the pulp (East Africa).

Even if the plants within the same subgroup display only weak genetic diversity, they do have a great range of phenotypes, resulting essentially from mutations and many centuries of selection by man. This is the case of the Cavendish (more than 20 cultivars), East African highland bananas (more than 50) and central and West African plantain (more than 150) subgroups.

Although the intensive cultivation system used for approximately 25 percent of world production favours monovarietal production, it is important to remember that most production is based on less intensive family farming with stress on varietal mixing. This contributes to the continuing of selection and hence ensures the diversity of banana ■

Thierry Lescot, Cirad
thierry.lescot@cirad.fr

Banana — Estimated world production in 2009

Tonnes	Cooking bananas		Dessert bananas		Total
	Plantain AAB group	Highland bananas + ABB group + others	Cavendish	Gros Michel + others	
North America	0	4 000	6 985	100	11 085
South America	4 927 743	581 175	12 311 521	3 899 437	21 719 876
Central America	953 800	103 693	6 570 545	98 000	7 726 038
Caribbean	946 216	465 846	1 115 491	228 841	2 756 394
West and Central Africa	8 191 008	907 396	2 397 810	451 742	11 947 956
East Africa	1 337 036	13 836 780	2 327 386	680 950	18 182 152
North Africa and Middle East	31	9 667	1 939 449	46 964	1 996 111
Asia	1 299 184	11 710 299	30 175 723	8 067 347	51 252 553
Oceania	1 431	543 210	361 032	69 924	975 597
Europe	101	1 010	434 456	1 020	436 587
World total	17 879 550	29 328 640	56 643 171	12 562 332	116 413 693

Source: Thierry Lescot - Cirad after references, surveys, professional sources, FAO, etc.

Estimates in tonnes Production and commerce 2009 data (or 2008 data in italics)	Production					Exports		Imports	
	Cooking bananas		Dessert bananas						
	Plantains AAB	Highland bananas + ABB + other AAB	Cavendish	Gros Michel & others	Total	Cavendish	Plantain	Dessert banana	Plantain
North America									
Canada					**0**	39	*17*	496 133	150
United States		4 000	6 985	100	**11 085**	524 526		4 114 891	271 637
Greenland					**0**			250	
Saint Pierre & Miquelon								*65*	
Total	**0**	**4 000**	**6 985**	**100**	**11 085**	**524 565**	**17**	**4 611 339**	**271 787**
	0.0%	36.1%	63.0%	0.9%	**100.0%**	11.4%	0.0%		
Central America									
Belize	3 800	200	87 000	1 000	**92 000**	79 442	*100*	*20*	
Costa Rica	60 000	2 000	2 000 000	20 000	**2 082 000**	1 860 000	*18 230*	22 368	*377*
Guatemala	320 000	25 000	1 500 000	10 000	**1 855 000**	1 215 380	*115 870*	5 110	*143*
Honduras	110 000	20 000	710 000	20 000	**860 000**	562 340	1 728	63 086	*13 917*
Mexico	195 000	10 000	1 739 545	30 000	**1 974 545**	88 004	299	59	19
Nicaragua	90 000	30 000	82 000	5 000	**207 000**	5 733	*7 862*	6 068	118
Panama	85 000	10 000	390 000	9 000	**494 000**	344 660	862	20 892	24
Salvador	90 000	6 493	62 000	3 000	**161 493**	*5*		111 907	*60 231*
Total	**953 800**	**103 693**	**6 570 545**	**98 000**	**7 726 038**	**4 155 564**	**144 951**	**229 510**	**74 829**
	12.3%	1.3%	85.0%	1.3%	**100.0%**	63.2%	15.2%		
South America									
Argentina			181 950	50	**182 000**	300		344 106	159
Bolivia	160 000	11 000	122 000	60 000	**353 000**	*79 466*	*50*		
Brazil	453 350	30 000	3 809 839	2 900 000	**7 193 189**	130 888	25	37	
Chile					**0**	*51*		179 318	3 578
Colombia	2 650 000	366 784	2 200 000	489 000	**5 705 784**	1 802 581	*120 000*	25 147	*66 327*
Ecuador	500 000	49 388	5 200 000	120 000	**5 869 388**	4 944 968	162 051	1 550	
Guiana	4 193	1 000	5 892	1 000	**12 085**	*50*	110		*22*
French Guiana	2 200	1 000	3 000	1 500	**7 700**				
Falkland Isl.								*20*	
Paraguay		300	48 840	9 700	**58 840**	*27 809*		*1 091*	
Peru	800 000	80 000	270 000	200 000	**1 350 000**	78 166	*117*	41	
Surinam	8 000	1 384	70 000	6 000	**85 384**	57 000	10		*200*
Uruguay					**0**	*1*		41 611	
Venezuela	350 000	40 319	400 000	112 187	**902 506**	13	1 397		
Total	**4 927 743**	**581 175**	**12 311 521**	**3 899 437**	**21 719 876**	**7 121 293**	**283 760**	**592 921**	**70 286**
	22.7%	2.7%	56.7%	18.0%	**100.0%**	57.8%	5.8%		
Caribbean									
Anguilla			1					70	12
Antigua & Barbuda	1	3	212	4	**220**			905	355
Netherlands Antilles			10		**10**	*10*		2 070	*558*
Aruba					**0**			2 697	*580*
Bahamas	5	20	3 690	35	**3 750**	*17*		*2 254*	*1 521*
Barbados	5	25	675	15	**720**	1		*2 263*	1 353
Bermuda	400	30	363	50	**843**	*160*	179	1 015	
Cuba	180 000	245 000	88 000	182 400	**695 400**	*30*		*25*	
Dominica	3 600	600	13 500	500	**18 200**	10 934	*1 309*		
Grenada	740	200	1 300	36	**2 276**	191	4		
Guadeloupe	8 450	550	64 000	2 000	**75 000**	55 675			400
Haiti	305 000	72 000	100 000	18 000	**495 000**	*2*	300	7 515	3 803
Cayman Isl.	20	1	200	9	**230**			551	
Turks & Caicos Isl.								487	*136*
Virgin Isl. (USA)	250	50	1 300	100	**1 700**				1
Virgin Isl. (UK)	70	10	260	20	**360**	*73*		*40*	27
Jamaica	14 000	1 035	30 000	4 000	**49 035**	40		19	*3*
Martinique	15 000	3 000	193 000	3 000	**214 000**	179 440			3
Montserrat	75	3	80	2	**160**			*60*	50
Puerto Rico	109 000	2 000	100 000	2 200	**213 200**			1 738	800
Dominican Republic	300 000	139 569	450 000	10 370	**899 939**	249 654	2 480		
St Kitts et Nevis					**0**			*617*	*500*
St Vincent & Grenadines	2 800	800	15 000	2 000	**20 600**	11 000	1 150	*20*	*1*
St Lucia	2 300	450	47 000	4 000	**53 750**	41 215	*200*		*1*
Trinidad & Tobago	4 500	500	6 900	100	**12 000**	*1*		4 933	*63*
Total	**946 216**	**465 846**	**1 115 491**	**228 841**	**2 756 394**	**548 443**	**5 622**	**27 209**	**10 166**
	34.3%	16.9%	40.5%	8.3%	**100.0%**	49.2%	0.6%		

Estimates in tonnes Production and commerce 2009 data (or 2008 data in italics)	Production					Exports		Imports	
	Cooking bananas		Dessert bananas						
	Plantains AAB	Highland bananas + ABB + other AAB	Cavendish	Gros Michel & others	Total	Cavendish	Plantain	Dessert banana	Plantain
East Africa									
South Africa	20	117	271 000	2 500	**273 637**	718		36 685	
Botswana					**0**	*5*		9 341	
Burundi	170 000	1 268 679	131 321	280 000	**1 850 000**	*40*			*10*
Comoros	3 000	11 000	40 000	2 000	**56 000**			*7*	
Djibouti			1		**1**			*1 995*	
Eritrea			10	1	**11**	*20*		*15 000*	
Ethiopia	100	1 000	192 274	959	**194 333**	*2 574*			
Réunion Isl.	10	500	7 200	4 790	**12 500**				
Kenya	305 000	200 000	290 000	80 000	**875 000**	*22*		*20*	*10*
Lesotho					**0**			*3 000*	
Madagascar	15 000	12 000	210 000	15 000	**252 000**	*104*			
Malawi	130 000	40 000	140 000	10 000	**320 000**				
Mauritius	10	700	9 410	800	**10 920**			1	
Mayotte	640	6 400	6 000	1 000	**14 040**				
Mozambique	5 000	5 300	76 700	3 000	**90 000**	*19 971*			
Uganda	200 000	8 907 000	241 000	164 000	**9 512 000**	12 400	1 505		*20*
Rwanda	200 000	2 180 000	120 000	100 000	**2 600 000**	16	1	13 100	*10*
Seychelles	100	530	1 120	250	**2 000**			*3*	
Somalia	8 000	2 000	26 000	2 000	**38 000**	18	1		
Sudan		1 000	71 000	2 000	**74 000**	*65*			
Swaziland	5	4	10 000	1	**10 010**	*6 000*		3 000	
Tanzania	300 000	1 200 000	400 000	12 000	**1 912 000**	*50*	1	*2*	
Zambia	1	50	600	49	**700**	*62*		1 585	
Zimbabwe	150	500	83 750	600	**85 000**	*5 716*			
Total	**1 337 036**	**13 836 780**	**2 327 386**	**680 950**	**18 182 152**	**47 781**	**1 508**	**83 739**	**50**
	7.4%	76.1%	12.8%	3.7%	**100.0%**	2.1%	0.1%		
West and Central Africa									
Angola	120 000	10 000	156 000	14 000	**300 000**			*20*	*100*
Benin	45 000	100	14 500	9 000	**68 600**		200	*237*	2 100
Burkina Faso	100	10	15 000	10	**15 120**	*210*		2 968	5 600
Cameroon	1 200 000	200 000	600 000	220 000	**2 220 000**	281 000	*30 000*	*36*	
Cape Verde	10	30	6 730	30	**6 800**			*3*	
Congo	61 000	4 000	35 000	8 000	**108 000**			*11*	*2 000*
Congo (Dem. Rep.)	1 001 690	205 000	291 470	24 000	**1 522 160**	1 848	*3 000*		
Côte d'Ivoire	1 350 000	205 454	420 000	6 000	**1 981 454**	264 344	35 000	*150*	
Gabon	70 000	10 000	12 000	1 000	**93 000**			*2*	11 000
Gambia	8	1	180	1	**190**			*380*	
Ghana	1 400 000	150 000	160 000	20 000	**1 730 000**	50 000	400		*200*
Guinea	420 000	16 000	142 000	20 000	**598 000**	*19*	20		
Guinea Bissau	36 000	4 000	4 800	400	**45 200**	1			
Equatorial Guinea	28 000	3 000	8 000	1 000	**40 000**	*4*			*9 000*
Liberia	43 000	5 000	40 000	10 000	**98 000**			*1*	*14*
Mali	6 500	500	80 000	500	**87 500**			21 290	5 500
Mauritania		1	70	1	**72**	*2*		3 343	
Namibia					**0**	*8*		2 805	
Niger			350		**350**			*1 414*	2 500
Nigeria	2 296 000	83 000	263 000	85 000	**2 727 000**		*1*		*1 000*
Centra African Rep.	78 000	7 000	90 000	30 000	**205 000**				*2 000*
St Helena								*50*	
Sao Tomé & Principe	3 000	1 000	1 500	1 000	**6 500**				*10*
Senegal	200	100	40 100	100	**40 500**	*34*		16 513	*2 300*
Sierra Leone	23 000	2 000	9 000	1 000	**35 000**		1	*10*	
Chad			10		**10**			*15 000*	*1 500*
Togo	9 500	1 200	8 100	700	**19 500**	15	2	2	100
Total	**8 191 008**	**907 396**	**2 397 810**	**451 742**	**11 947 956**	**597 485**	**68 624**	**64 235**	**44 924**
	68.6%	7.6%	20.1%	3.8%	**100.0%**	24.9%	0.8%		
North Africa & Middle East									
Algeria		1	198	1	**200**			179 578	
Saudi Arabia			1		**1**	*441*		252 375	
Bahrain			700	50	**750**			13 835	
West Bank		5	6 150	5	**6 160**			*10 000*	
Egypt	1	3 000	1 056 999	40 000	**1 100 000**	*4 016*		10 145	
United Arab Emirates			200		**200**	*14 797*		126 713	
Iraq			10		**10**			*848*	
Iran		3 000	69 000	3 000	**75 000**	*10*		5 663	
Israel		1 000	91 400	1 110	**93 510**	2 261		*25*	
Jordan		800	42 294	740	**43 834**	*739*		39 630	
Koweit					**0**	*186*		96 097	
Lebanon	10	600	88 500	590	**89 700**	*59 181*		538	
Libya		1	2	1	**4**			11 584	
sub-total (contd. p. 61)	**11**	**8 407**	**1 355 454**	**45 497**	**1 409 369**	**81 631**	**0**	**747 031**	**0**

Estimates in tonnes Production and commerce 2009 data (or 2008 data in italics)	Production					Exports		Imports	
	Cooking bananas		Dessert bananas						
	Plantains AAB	Highland bananas + ABB + other AAB	Cavendish	Gros Michel & others	Total	Cavendish	Plantain	Dessert banana	Plantain
North Africa & Middle East (concluding)									
Morocco		500	219 000	500	**220 000**	*79*		26 712	
Oman		500	27 900	492	**28 892**	*614*		9 716	
Qatar					**0**	*460*		21 543	
Western Sahara					**0**			*2 500*	
Syria			790	10	**800**			219 430	
Tunisia		10	55	50	**115**	*20*		37 118	
Turkey		50	204 352	115	**204 517**	*97*		182 438	
Yemen	20	200	131 898	300	**132 418**	*80 077*		22	
Total	**31**	**9 667**	**1 939 449**	**46 964**	**1 996 111**	**162 978**	**0**	**1 246 510**	**0**
	0.0%	0.5%	97.2%	2.4%	**100.0%**	8.4%	0.0%		
Asia									
Afghanistan					**0**			37 566	
Azerbaijan					**0**			18 371	*18*
Bangladesh	13 000	120 000	527 603	216 520	**877 123**	*260*	*10*	*150*	
Bhutan	74	500	3 000	400	**3 974**			*9*	
Brunei		40	690	70	**800**			*90*	
Cambodia	10 000	45 000	50 000	25 000	**130 000**				
China	60	667 215	7 402 432	137 995	**8 207 702**	24 096		575 183	
South Korea					**0**	*255*		257 024	
North Korea					**0**			*20*	
Hong Kong					**0**	*14 712*		68 104	
India	898 000	3 724 400	14 581 900	4 000 500	**23 204 800**	*30 401*	1		
Indonesia	70 000	2 450 000	2 531 704	1 221 352	**6 273 056**	1 970	1	*56*	
Japan			205		**205**	*14*		1 109 068	*6 380*
Kazakhstan					**0**			46 603	*6*
Kirghizia					**0**	*39*		8 987	
Laos	1 000	7 000	22 000	18 000	**48 000**			*526*	
Macau					**0**			*1 175*	
Malaysia	40 000	210 000	255 000	120 000	**625 000**	*15 624*		*244*	
Maldives	40	80	4 000	220	**4 340**			*1 432*	*31*
Mongolia					**0**			*85*	
Myanmar	40 000	400 000	130 000	60 000	**630 000**				
Nepal		20 000	56 209	12 640	**88 849**			*7 855*	
Uzbekistan					**0**			*699*	
Pakistan	2 000	26 000	113 378	18 000	**159 378**	12 988		*1*	
Philippines	1 000	2 500 564	3 300 000	1 800 000	**7 601 564**	2 192 600		*52*	
Singapore					**0**	*76*		39 666	
Sri Lanka	162 000	293 760	45 920	10 000	**511 680**	230	*1 751*	3	*26*
Tajikistan								*120*	
Taiwan		100	700	200	**1 000**	10 000		*150 000*	
Thailand	60 000	650 000	594 082	224 000	**1 528 082**	21 079	100	9 214	
East Timor	10	40	1 900	50	**2 000**			*20*	
Turkmenistan								*100*	
Vietnam	2 000	595 600	555 000	202 400	**1 355 000**	*10 574*	11		
Total	**1 299 184**	**11 710 299**	**30 175 723**	**8 067 347**	**51 252 553**	**2 334 918**	**1 874**	**2 332 423**	**6 461**
	2.5%	22.8%	58.9%	15.7%	**100.0%**	7.7%	0.1%		
Oceania									
Australia	50	500	247 843	22 000	**270 393**	*3*		*317*	
Fiji	100	2 300	3 409	100	**5 909**	*98*			
Guam		145	205		**350**			*1 000*	
Cook Isl.		100	60		**160**	*22*			
Marshall Isl.								*50*	
Solomon Isl.		90	330		**420**				
Kiribati		3 800	1 600	400	**5 800**				
Micronesia	350	840	1 250	10	**2 450**				
Niue		20	140		**160**	*120*			
New Caledonia	130	1 800	2 000	600	**4 530**			*2*	
New Zealand					**0**	*1*		81 314	130
Palau								*50*	
Papua-New Guinea	500	500 000	90 000	42 000	**632 500**	*1 000*			
French Polynesia		2 300	3 100	500	**5 900**			*3*	
Samoa	100	13 900	6 000	3 000	**23 000**	*1*			
Samoa (USA)		230	500	60	**790**			*1*	
Tokelau		10	5		**15**				
Tonga	100	3 200	740	100	**4 140**				
Tuvalu	1	165	110	4	**280**				
Vanuatu	100	9 900	3 500	1 000	**14 500**	*4*			
Wallis & Futuna		3 910	240	150	**4 300**				
Total	**1 431**	**543 210**	**361 032**	**69 924**	**975 597**	**1 249**	**0**	**82 737**	**130**
	0.1%	55.7%	37.0%	7.2%	**100.0%**	0.3%	0.0%		

Estimates in tonnes Production and commerce 2009 data (or 2008 data in italics)	Production					Exports		Imports	
	Cooking bananas		Dessert bananas						
	Plantains AAB	Highland bananas + ABB + other AAB	Cavendish	Gros Michel & others	Total	Cavendish	Plantain	Dessert banana	Plantain
Europe									
Azores			1 000		**1 000**				
Albania					**0**	*20*		17 535	
Germany					**0**	463 847	8 284	1 388 028	*10 000*
Andorra					**0**			*600*	
Armenia					**0**	*2 304*		8 458	
Austria					**0**	18 683		120 706	43
Belarus					**0**			36 669	*20*
Belgium - Luxembourg					**0**	828 813	52 364	960 000	55 000
Bosnia Herzegovina					**0**	*10*		36 951	*96*
Bulgaria					**0**	1 538	*5*	*35 541*	5 137
Canaries	1	5	398 000	5	**398 011**	371 000			
Cyprus			5 765	5	**5 770**	1 086		3 772	191
Croatia					**0**	*30*		49 379	*280*
Denmark					**0**	14 629	*3*	98 992	784
Spain			250	5	**255**	56 444	*969*	550 000	29 738
Estonia					**0**	161		13 297	
Finland					**0**	16 363		56 762	821
France					**0**	197 329	12 222	742 022	13 193
Georgia					**0**	*2 111*		12 472	
Gibraltar								*150*	
Greece		5	3 590	5	**3 600**	9 306	*5*	81 683	355
Hungary					**0**	7 233		105 246	957
Faroe Isl.					**0**			186	
Ireland					**0**	8 305	*174*	53 593	2 302
Iceland			1		**1**	*9*		*5 550*	
Italy			350		**350**	120 685	*514*	703 897	7 000
Latvia					**0**	527		15 453	2 631
Lithuania					**0**	6 185	*724*	25 429	5 831
Macedonia					**0**	*67*	*79*	16 700	*106*
Madeira	100	1 000	22 000	1 000	**24 100**	18 000			
Malta					**0**			4 941	188
Moldavia					**0**			10 536	*131*
Montenegro								6 561	
Norway					**0**			73 200	*21*
Netherlands					**0**		22 204	159 198	44 321
Poland					**0**	9 093		242 681	5 436
Portugal			3 500		**3 500**	29 841	*79*	167 110	1 041
Czech Rep.					**0**	56 919	*47*	147 396	1 450
Romania					**0**	*361*		117 714	9 362
United Kingdom					**0**	67 595	*1 760*	958 100	38 403
Russia					**0**	*18 215*	*15*	1 068 571	1 800
St Marin					**0**			*120*	
Serbia & Montenegro					**0**			41 876	*20*
Slovakia					**0**	*20 053*	*13*	70 614	2 720
Slovenia					**0**	17 475		60 589	2
Sweden					**0**	30 904		190 344	465
Switzerland					**0**	*4*		82 144	
Ukraine					**0**	*154*		227 316	
Total	**101**	**1 010**	**434 456**	**1 020**	**436 587**	**2 395 299**	**99 461**	**8 768 082**	**239 845**
	0.0%	0.2%	99.5%	0.2%	**100.0%**	27.3%	1.1%		
Total monde	**17 656 550**	**28 163 076**	**57 640 398**	**13 544 325**	**117 004 349**	**17 889 575**	**605 817**	**18 038 704**	**718 478**
	15.1%	24.1%	49.3%	11.6%	**100.0%**	31.0%	3.4%		

Note 1: for EU member countries, imports excluding supplies from European production.

Note 2: differences between import and export totals result from re-exports between non-producer countries (intra-EU trade for example), the taking into account of two years (2009 and 2008) and the experimental nature of this work.

Source: Thierry Lescot of CIRAD, who used bibliographical research, surveys, professional sources, FAO, etc.

Wholesale market prices in Europe

April 2011

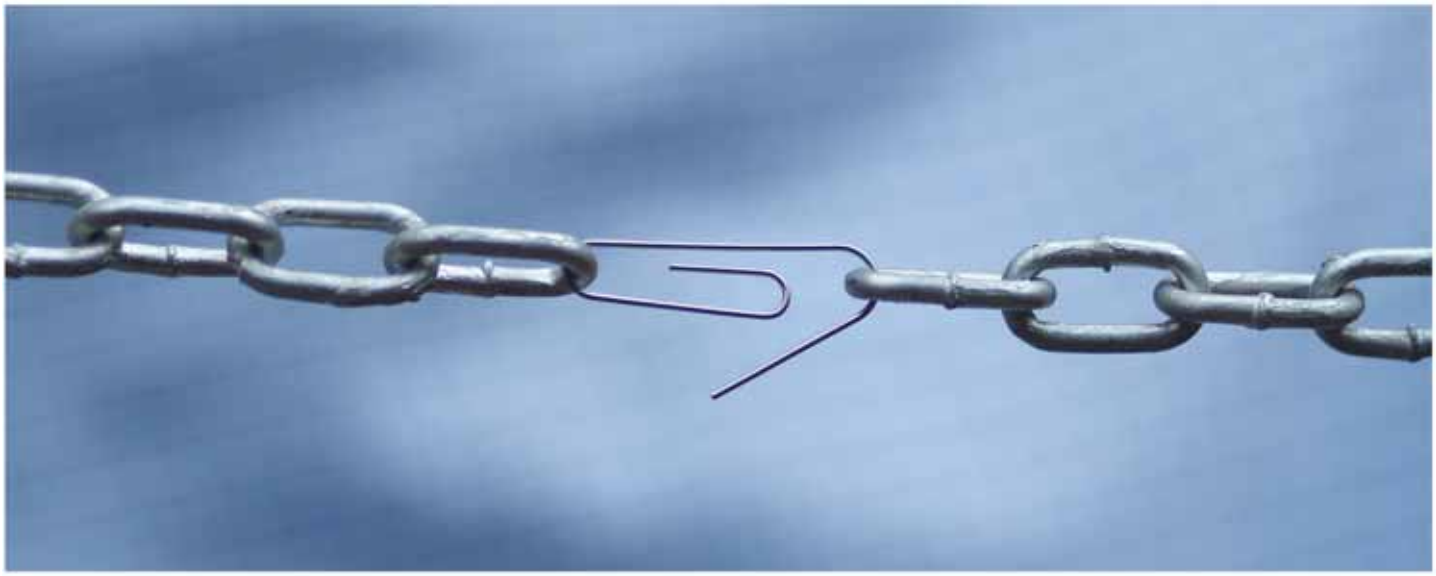
					EUROPEAN UNION — EURO				
					Germany	Belgium	France	Holland	UK
AVOCADO	Air	TROPICAL	BRAZIL	Box			13.2	14.5	
	Sea	FUERTE	KENYA	Box	6.5		4.3		6.3
			PERU	Box	6.8	7.5	5.9	8.5	7.4
			SOUTH AFRICA	Box		7.5	7.3		9.4
		HASS	ISRAEL	Box	10.0		10.0		
			KENYA	Box			8.1		
			PERU	Box			9.5	10.5	
		PINKERTON	SOUTH AFRICA	Box	9.0			9.3	
	Truck	HASS	SPAIN	Box	10.0	9.4	9.6		7.1
		REED	SPAIN	Box		6.5			
BANANA	Air	RED	ECUADOR	kg				4.9	
		SMALL	COLOMBIA	kg		6.3	6.5		
			ECUADOR	kg				5.2	
CARAMBOLA	Air		MALAYSIA	kg			5.4	4.3	4.5
	Sea		MALAYSIA	kg				3.0	
CHAYOTE	Air		COSTA RICA	kg		1.5		1.5	
COCONUT	Sea		COTE D'IVOIRE	Bag			7.1	10.6	
DATE	Sea	MEDJOOL	ISRAEL	kg	7.2	8.3		7.5	
			MEXICO	kg				8.8	
		NOT DETERMINED	TUNISIA	kg				1.8	
EDDOE	Sea		BRAZIL	kg				1.5	
			COSTA RICA	kg		2.1	1.7		
GINGER	Sea		CHINA	kg	1.4		1.8	2.3	
			THAILAND	kg	1.9		2.3	2.3	
GUAVA	Air		BRAZIL	kg				5.8	
			THAILAND	kg		6.8			
KUMQUAT	Air		ISRAEL	kg					4.3
LIME	Sea		BRAZIL	kg	1.1	1.2	1.2	1.4	1.8
			MEXICO	kg	1.6				2.0
LITCHI	Air		THAILAND	kg				10.3	
MANGO	Air	AMELIE	BURKINA FASO	kg			2.5		
			MALI	kg			2.5	3.4	
		KENT	BURKINA FASO	kg			3.7		
			COTE D'IVOIRE	kg			5.0		
			MALI	kg			3.5		
		NAM DOK MAI	THAILAND	kg				6.0	
		PALMER	BRAZIL	kg	3.0				
		VALENCIA	MALI	kg			2.8		
	Sea	ATKINS	BRAZIL	kg	1.3			1.7	
			COSTA RICA	kg					1.4
			PORTO RICO	kg					1.4
		KEITT	PERU	kg		1.6			
		KENT	COTE D'IVOIRE	kg				4.5	
			NICARAGUA	kg		1.6			
			PERU	kg		1.6	1.6		

					EUROPEAN UNION — EURO				
					Germany	Belgium	France	Holland	UK
MANGOSTEEN	Air		INDONESIA	kg				6.9	
			THAILAND	kg		7.7			
MANIOC	Sea		COSTA RICA	kg		1.3	1.1	1.2	
MELON	Air	CHARENTAIS	MOROCCO	kg			3.0		
	Sea	CANTALOUP	BRAZIL	kg					1.9
			COSTA RICA	kg				1.8	
			HONDURAS	kg					2.3
		GALIA	BRAZIL	kg					1.6
			COSTA RICA	kg					1.7
			HONDURAS	kg					1.8
			MOROCCO	kg					1.5
			PANAMA	kg					1.5
			SPAIN	kg					1.8
		HONEY DEW	COSTA RICA	kg				0.9	0.9
			HONDURAS	kg					0.8
			PANAMA	kg			0.9		
		SEEDLESS WATER	COSTA RICA	kg				1.3	
		WATERMELON	COSTA RICA	kg					1.1
PAPAYA	Air	FORMOSA	BRAZIL	kg	3.1	3.0		3.2	
		NOT DETERMINED	BRAZIL	kg		3.9	3.6		
			THAILAND	kg				4.7	
	Sea		ECUADOR	kg		1.8			
			MALAYSIA	kg					2.5
PASSION FRUIT	Air	NOT DETERMINED	COLOMBIA	kg				6.8	
		PURPLE	KENYA	kg	5.3		4.7	4.6	
			SOUTH AFRICA	kg	6.0	5.3	5.8		
			ZIMBABWE	kg				5.3	
		YELLOW	COLOMBIA	kg		8.5		8.1	
PERSIMMON	Sea		BRAZIL	kg		4.9		4.8	
PHYSALIS	Air		COLOMBIA	kg				7.7	
	Sea		COLOMBIA	kg	4.6	5.7		5.0	
PINEAPPLE	Air	SMOOTH CAYENNE	GHANA	kg			2.1		
		VICTORIA	MAURITIUS	Box		12.3		14.5	
			MAURITIUS	kg			3.8		
			SOUTH AFRICA	Box	11.0			12.5	
	Sea	MD-2	COSTA RICA	Box	9.1	7.8	7.9	11.5	11.5
PITAHAYA	Air	RED	THAILAND	kg	6.0				
			VIET NAM	kg		5.7		6.5	
		YELLOW	ECUADOR	kg				7.6	
PLANTAIN	Sea		COLOMBIA	kg			1.3	1.0	
			ECUADOR	kg			1.1		
RAMBUTAN	Air		MADAGASCAR	kg				6.3	
			VIET NAM	kg		6.9			
SWEET POTATO	Sea		BRAZIL	kg				1.3	
			EGYPT	kg			1.2		
			SOUTH AFRICA	kg					1.3
TAMARILLO	Air		COLOMBIA	kg		6.5		6.4	
YAM	Sea		GHANA	kg			1.2	1.2	

Note: according to grade

These prices are based on monthly information from the Market News Service, International Trade Centre UNCTAD/WTO (ITC), Geneva.
MNS - International Trade Centre, UNCTAD/WTO (ITC), Palais des Nations, 1211 Geneva 10, Switzerland
T. 41 (22) 730 01 11 / F. 41 (22) 730 09 06

Information... your weak link?



Reefer Trends is an independent news and information provider, financed exclusively by revenue from subscriptions.

First published in 2003, it provides a number of services for users along the reefer logistics chain: the Reefer Trends weekly charter market brief is *the* benchmark publication for the specialist reefer business – it tracks the charter market for reefer vessels, as well as fruit and banana production and market trends that influence charter market movement.

The weekly publication has close to 200 paying subscriber companies from 34 countries worldwide. The list of subscribers includes all the major reefer shipping companies and reefer box operators, the major charterers, reefer brokers, banana multi-nationals, the major banana exporters in Ecuador, Costa Rica, Panama and Colombia, terminal operators in the US and Europe, the world's leading shipping banks and broking houses as well as trade associations, cargo interests and fruit importers on all continents. It is also circulated within the European Commission and the World Trade Organisation.

As well as the weekly Reefer Trends report it provides a separate online daily news service, covering developments in the global fruit, banana and logistics industries. The daily news is e-mailed direct to the desktops of several thousand subscribers worldwide.

Reefer Trends' consultancy clients include shipbuilding yards, banana majors, banks, brokers and equities analysts. Reefer Trends provides sector reports and forecasts for brokers and charterers. It has also acted as an expert witness in a chartering dispute.

For more information on subscriptions, please contact:
info@reefertrends.com or visit www.reefertrends.com

reefertrends

UNIVEG
KATOPÉ FRANCE

Cycle of Freshness

Growing and delivering fresh produce

Katopé's diversified production base allows to produce and to ship a huge variety of fresh produce throughout the year, including tropical fruits like lychees, mangoes, pineapples and bananas.

All Katopé growers and supply partners are committed to advanced safety, ethical and environmental standards.

katopé

The personal touch

UNIVEG KATOPÉ FRANCE | T +33 1 49 78 20 00 | katopeintl@katope.fr
15, boulevard du Delta | Zone Euro Delta - DE1 | 94658 RUNGIS CEDEX | FRANCE