

October 2013 - No. 215

FR*ui*TROP

English edition

Close-up PINEAPPLE

<http://passionfruit.cirad.fr>

**Côte d'Ivoire mango
EU mango market
Counter-season tomato
Madagascan litchi**

Content published by the Market News Service of CIRAD - All rights reserved

Offering you the best of nature



From the orchard to the plate, our citrus fruits are the result of a completely integrated production process.

From the production of plant material to customers delivery, LES DOMAINES citrus fruits are subject to a strict controls, at all stages of production, thereby guaranteeing high-quality products.

Content published by the Market News Service of CIRAD - All rights reserved

www.lesdomainesagricoles.com

Nature's greatest gifts

We have learned that the Food and Drug Administration (FDA, USA)

has just banned arsenic based additives... in feed for pigs and chickens for consumption. What bad luck! Dorothy and Martha, the two charming old girls from the Joseph Kesselring play "Arsenic and Old Lace" would now have to stop feeding their victims chicken wings or pork spare ribs to get them to kick the bucket. But no matter! They would no longer have to rely on their old bottle of hemlock. Other miracles of modern agribusiness could serve the nefarious purposes of these lovely old dears. In fact, the SPS Committee of the WTO has never had so many referrals for commercial problems relating to food safety, animal health and plant preservation. There are now 45! We can only hope for the sake of consumers determined to eat if not correctly then at least without taking excessive risks that these 45 cases are indeed non-tariff measures: a way for countries to ban imports into their territory of foods that, officially, pose a risk to human, animal or plant health, but which are actually considered harmful for the sectors of the national economy. So it is hard to untangle the tainted web of reality of the real commercial reason. Will the consumer have to drink the hemlock to the last drop?

Denis Loeillet





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 Duportail

Iconography
Régis Domergue

Website
Unité multimédia (Cirad)

Advertising Manager
Eric Imbert

Subscriptions
odm@cirad.fr

Translators
James Brownlee, 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
© Copyright Cirad

Subscription rate
EUR 220 / 11 issues per year

This document was produced by the Markets News Service of the PERSYST department at CIRAD, for the exclusive use of subscribers. The data presented are from reliable sources, but CIRAD may not be held responsible for any error or omission. Under no circumstances may the published prices be considered to be transaction prices. Their aim is to shed light on the medium and long-term market trends and evolutions. This publication is protected by copyright, and all rights of reproduction and distribution are prohibited.



Contents

Direct from the markets (E. Imbert, D. Loeillet, C. Dawson, P. Gerbaud, T. Paqui, R. Bright)

p. 2 SEPTEMBER 2013

- **Avocado:** Avocado variety of the month: Ettinger — Chilean borders opening up to the Peruvian Hass — Chaotic weather for the start of the avocado seasons in Latin America.
- **Banana:** Banana: rust alert in Peru! — Philippine banana: gradual production increase, but with steep growth in ambitions — The United States and EU consuming more and more bananas.
- **Citrus:** Initial info about the Spanish orange and small citrus season 2013-14 — Pakistani horticultural products prohibited in Russia — Revealing a new health effect of naringin — Moroccan citrus season 2013-14: the effects of the "Maroc Vert" plan are present.
- **Exotics:** Small mango harvest in Australia for 2013-14.
- **Roots and tubers**
- **Other exotics**
- **Sea freight and sector news:** 5th International Banana Congress.

The latest on...

- p. 13 • **Côte d'Ivoire mango** — 2013 season report (*Alexis Moulin*)
- p. 16 • **European mango market** — A transitional period of utmost delicacy: the switchover from Brazil to Peru (*Pierre Gerbaud*)
- p. 22 • **Counter-season tomato** — Positions stabilising? (*Cécilia Céleyrette*)
- p. 26 • **Madagascan litchi 2013-14 season** — Why change a strategy that works? (*Pierre Gerbaud*)

Close-up by Denis Loeillet and Thierry Paqui: PINEAPPLE

- p. 31 • **World pineapple market** — Until when?
- **World processed pineapple market** — A glimmer of hope
- **Producer country file** — Costa Rican pineapple
- **Air-freight pineapple season in 2012-2013** — Stability, except for the quality
- **Victoria pineapple season in 2012-2013** — A quiet season
- **Sea-freight pineapple season in 2012-2013** — Volumes in moderation, for positive results
- **World statistics panorama**
- **Pineapple growing**
- **The main pineapple varieties**
- **Quality defects**

Wholesale market prices in Europe

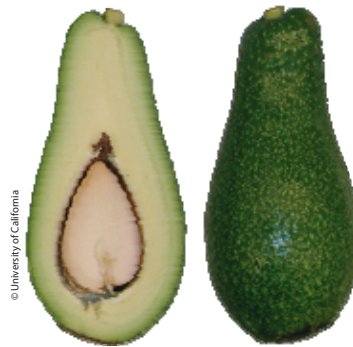
- p. 71 SEPTEMBER 2013

Cover photograph: Denis Loeillet

Avocado

September 2013

Demand, traditionally slow in September, proved lower than in previous years, particularly in week 39. The high prices charged at both the import and retail stages contributed to slowing down sales. Hence the Hass market was quickly under pressure because of very high imports. Despite the summer seasons waning from mid-September, imports from Peru, South Africa and Kenya remained above average, and stocks of flexible quality were available. In this highly competitive context, the Chilean season had difficulties getting started (week 36). Prices were more flexible, particularly for batches from stocks. For the green varieties, the South African Ryan season finished, giving way to the first Israeli Ettingers shipped in week 39.



■ **Avocado variety of the month: Ettinger.** This variety was bred from 'Fuerte' in Kefar Malal in Israel, where it is mainly grown. The tree is very fertile and vigorous with an erect habit. The fruits are similar to those of 'Fuerte'. The skin is susceptible to problems of corky areas and tends to adhere to the pulp. The pulp is buttery and fibreless and has good organoleptic qualities.

Source: CIRAD

■ **Chilean borders opening up to the Peruvian Hass.** The Chilean government has finally upheld the claims of Peruvian exporters for access to the Chilean market without sanitary protocols. This decision was disputed and lamented by the local avocado producers' association (Comité de Palta), which fears that sunblotch virus, present in Peru, could contaminate the Chilean cultivation area. This is a major outlet which is opening up to the Peruvian avocado: the Chileans are big avocado consumers (nearly 5.5 kg/capita in 2012-13), and the counter-season market is at present practically non-existent. The measure will take effect for the 2014 season.

Source: portalfruticola.com

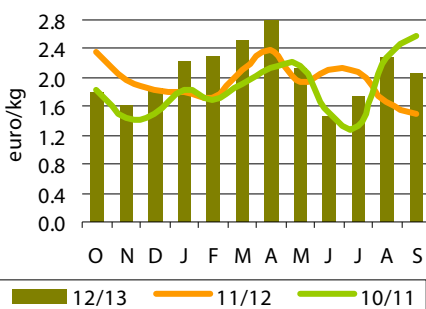
■ **Chaotic weather for the start of the avocado seasons in Latin America.** In Chile, frosts of an intensity not seen since the 1990s struck the country's main fruit-growing zones in mid-September, especially Region VI and the Metropolitan Region. According to Fedefruta, the damage amounted to 1 billion USD, with flower production, stone fruits production and kiwi production decimated. However, the avocado appears to have escaped the disaster, with production maintaining a good level (see **FruiTrop** no.214), and losses estimated at approximately 7 % by this same body. In Mexico, the start of the season was even more gradual than predicted, with the effects of the torrential rains which struck the country in September adding to the lack of "flor loca" and the delayed maturity of the fruits. Nonetheless, there seems to be no significant production loss to report. Furthermore, exports to the United States have returned to a tempo as high as last season since the beginning of October.

Sources: portalfruticola.com, InfoHass.net



© Eric Lambert

Avocado - France - Import price



PRICE	Varieties	Average monthly price euro/box	Comparison with the last 2 years
	Green	7.00 (Northern EU)	- 4 %
Hass	8.31	0 %	

VOLUMES	Varieties	Comparison	
		previous month	average for last 2 years
Green		↘	- 43 %
Hass		↘	+ 34 %

VOLUMES	Varieties	Comparison		Observations	Cumulated total / cumulated average for last 2 years
		previous month	average for last 2 years		
	S. Africa	=↘	+ 49 %	South African season waning. Volumes much higher than in the past two weeks.	+ 17 %
	Peru	↘	+ 5 %	Peruvian season waning, though volumes higher than in previous years.	+ 24 %
	Kenya	=	+ 12 %	Stable imports higher than in other years.	- 11 %
	Mexico	↗	+ 15 %	Beginning of the season.	+ 15 %

Their positive attitude can **achieve** anything



Youth Art and Development Association (Association
"Juventud, Arte y Desarrollo") Bakery "La Casa del Pan"

CAMPOSOL created the "Youth, Art and Development" Association to provide the young people in the community with real opportunities for economic, social and cultural development. Today, some of them have their own businesses

The "**House of Bread**" bakery is an example of a business enterprise conducted by young people from the community with the support of CAMPOSOL. Come visit and try its products!

Address: César Vallejo Avenue No. 251 – Chao – La Libertad – Peru.
Monday through Sunday, from 5:30 am. to 9:00 pm.



Commercial office Europe

Camposol Fresh B.V. Honderdland 94
NL- 2676 LS Maasdijk - The Netherlands
Phone: +31 174 521 016 / Fax: +31 174 523 334
Email: storres@camposol.com.pe

Content published by the Market News Service of CIRAD – All rights reserved



GLOBAL G.A.P.
The Global Partnership for Better Agriculture, Nutrition and Trade



BSCI
Business Social Compliance Initiative



www.camposol.com.pe

Banana

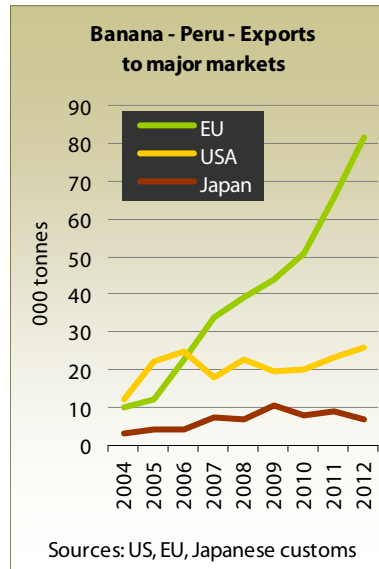
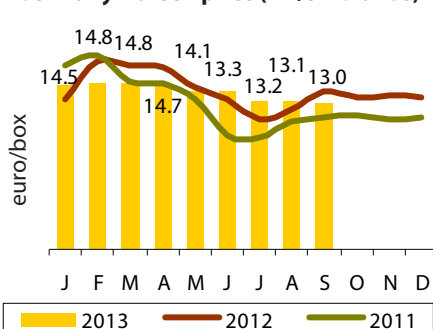
September 2013

European markets weakened during September. After a moderate summer in terms of volumes, imports from all sources started to rise. Ecuador returned to normal volumes for the season, and Colombia began its seasonal increase with imports 6 % higher than in previous years. The West Indies are exhibiting a persistent shortfall due to tropical storm Chantal, but Africa began its seasonal increase with levels 28 % above average. In Northern Europe, where demand was highly dynamic despite retail prices still higher than in previous years, the market maintained a good balance, with green banana prices stable and strong. In Southern Europe, the situation proved more difficult, with demand clearly less dynamic due to the still very mild temperatures for the season and the late presence of summer fruits offered at competitive prices (rapidly changing quality). The French and Italian markets swelled up toward the end of the month, and green banana prices were more flexible. In Spain, after the summer shortfall, shipments from the Canaries returned to a seasonal level and the market also swelled up. Green banana prices registered a dizzying fall, quickly returning to levels 5 % below normal for the season. Finally, re-exports to the East European markets were more difficult, with demand showing its traditional lack of interest in the banana in September, and above all because of intense competition from spot volumes from Russia at competitive prices. Furthermore, the collapse of the Russian market continued, reaching historic levels for a September.

NORTHERN EUROPE — IMPORT PRICE

Sept. 2013 euro/box	Comparison	
	previous month	average for last 2 years
13.00	0 %	+ 1 %

Germany - Green price (2nd/3rd brands)



Banana: rust alert in Peru!

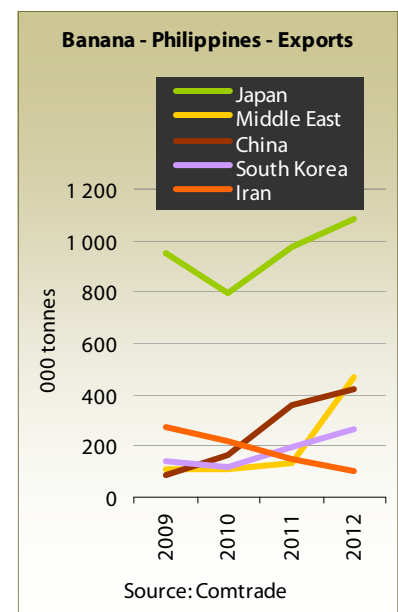
The resurgence of rust thrip attacks is severely affecting organic banana producers in Chira valley, in northern Peru near Piura. *Chaetana-phothrips signipennis*, whose holes cause rust-coloured marks on the skin of the fruits, making them unfit for export, are now reportedly present on 44 % of the 6 500 ha of plantations in the region. Exports have reportedly fallen by 15 to 30 %, depending on the sources, with some producers losing their "organic farming" approval.

Source: agraria.pe

Philippine banana: gradual production increase, but with steep growth in ambitions. Hurricane Pablo, which in late 2012 had destroyed approximately 18 % of the country's banana tree stock, causing financial losses evaluated at 115 million USD, left severe after-

effects in the Davao region. However, the banana industry is gradually picking up and exhibiting its ambitions for the future. At present, nearly half of the 14 600 ha affected have reportedly been restored. Furthermore, the opening up of the United States market has finally been achieved after more than eight years of efforts. The first containers dispatched by Dole Philippines for Dole United States were delivered in mid-September. The volumes should be around 250 000 boxes in 2013. Exporters are also working on boosting shipments to Russia and the neighbouring former Socialist Republics: a necessity now that the Chinese market is more difficult after the sanitary dispute in 2012, and that the big outlet to Iran is less open because of the international sanctions in place against the Teheran regime.

Source: Reefer Trends.



EUROPE — RETAIL PRICE

Country	type	September 2013		
		euro/kg	August 2013	average for last 2 years
France	normal	1.51	- 7 %	+ 7 %
	special offer	1.20	- 24 %	+ 1 %
Germany	normal	1.27	- 2 %	+ 10 %
	discount	1.19	0 %	+ 19 %
UK (£/kg)	packed	1.18	+ 2 %	- 2 %
	loose	0.72	- 1 %	- 2 %
Spain	plátano	2.16	- 10 %	+ 24 %
	banano	1.40	- 1 %	+ 4 %



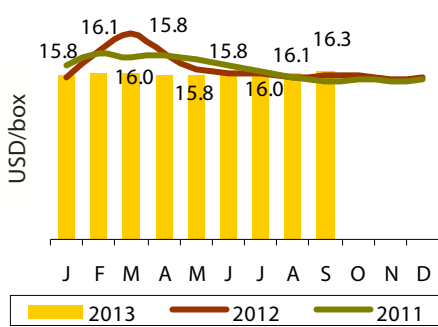
Say Yes
to the Best



Banana

UNITED STATES

USA - Green price (spot)

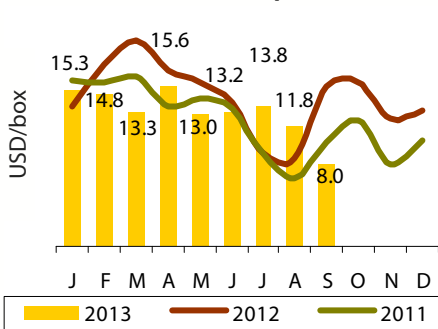


USA — IMPORT PRICE

September 2013 USD/box	Comparison	
	previous month	average for last 2 years
16.30	+ 1 %	+ 4 %

RUSSIA

Russia - Green price

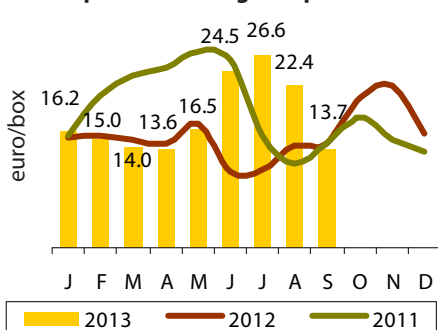


RUSSIA — IMPORT PRICE

September 2013 USD/box	Comparison	
	previous month	average for last 2 years
8.00	- 32 %	- 38 %

CANARIES

Spain - Platano green price*



CANARIES — IMPORT PRICE*

September 2013 euro/box	Comparison	
	previous month	average for last 2 years
13.70	- 39 %	- 5 %

* 18.5 kg box equivalent

■ The United States and EU consuming more and more bananas. Over the first eight months of 2013, the EU imported 4 % more bananas than the 2010-11-12 three-year average. Both dollar and ACP sources were up from 2012, by + 4 % and + 5 % respectively. Among the dollar suppliers, Ecuador is the only underachiever, with a fall of 6 % (- 53 000 t) from 2012, a difference of more than ten points from the general market trend. The other dollar suppliers are on the up, sometimes at very considerable rates: Panama + 37 %, Costa Rica + 10 %, Peru + 6 % and Colombia + 4 %. The movements are more disparate for ACP countries. The Dominican Republic has returned to equilibrium, but the monthly supply tempo is very stop-start. Cameroon and Côte d'Ivoire are leading the way with remarkable growth rates: + 19 % for Cameroon from 2012 and + 12 % for Côte d'Ivoire. If we exclude May 2013, Côte d'Ivoire recorded its tenth month of growth in August, returning to its highest levels. By contrast, Belize, Surinam and Ghana are on a downward trend. With - 19 %, Ghana cuts a sorry figure, but the wound seems to have finally been staunched, with exports taking an up-

turn in June. Overall, the monthly import tempo for all sources taken together, besides in March, showed that growth was present, but it tended to run out of steam as the year went on. As proof, in April it was up 9 % on the three-year average, and just 2 % in August. If we add European production to this import total, consumption is on a positive trend, with a gain of 3 % to 3.6 million tonnes over eight months.

As regards the United States, the shutdown delayed the appearance of the supply statistics. Only the first seven months are available. The developments on the US market, however, are no surprise. Local consumption is up 5 % thanks to an increasing import flow and re-exports to Canada growing less quickly than the trend. Finally, the US market absorbed 115 000 net tonnes more in seven months. Guatemala is strengthening its presence with an annual growth of 10 %. The number two supplier, Costa Rica, is clearly favouring the EU for its volumes, and so cutting them to the United States. Ecuador is up very slightly (+ 1 %). Colombia, Honduras and Mexico are exhibiting very steep increases.

Source: CIRAD

Banana - January to August 2013 (provisional)

tonnes	2011	2012	2013	Variation 2013/2012
EU-27 — Total supply	3 491 276	3 468 881	3 582 607	+ 3 %
Total import, of which	3 114 719	3 054 370	3 187 665	+ 4 %
MFN	2 453 657	2 409 606	2 507 768	+ 4 %
ACP Africa	337 158	311 779	351 235	+ 13 %
ACP others	323 904	332 985	328 663	- 1 %
Total EU, of which	376 557	414 511	394 942	- 5 %
Martinique	117 412	121 450	120 103	- 1 %
Guadeloupe	37 103	40 822	45 043	+ 10 %
Canaries	208 012	238 208	220 449	- 7 %
USA — Imports (Jan. to July)	2 463 375	2 554 004	2 678 938	+ 5 %
Re-exports	325 843	298 065	308 369	+ 3 %
Net supply	2 137 532	2 255 939	2 370 569	+ 5 %

EU sources: CIRAD, EUROSTAT (excl. EU domestic production) / USA source: US customs

EUROPE — IMPORTED VOLUMES — SEPTEMBER 2013

Source	Comparison		
	August 2013	September 2012	cumulated total 2013 compared to 2012
French West Indies	=	- 51 %	- 3 %
Cameroon/Ghana/Côte d'Ivoire	↗	+ 26 %	+ 16 %
Surinam	↗	- 1 %	- 1 %
Canaries	↗	+ 4 %	- 6 %
Dollar:			
Ecuador	↘	0 %	- 18 %
Colombia*	↗	+ 31 %	+ 14 %
Costa Rica	↗	- 32 %	- 15 %

Estimated thanks to professional sources / * total all destinations

Orange

September 2013

Demand, which had proven very lively throughout the summer period, started to dip from week 37. Indeed, the late presence of high volumes of summer fruits (peach, melon) at competitive prices (advanced maturity), as well as the ongoing mild temperatures, contributed to the slowdown in sales. However, the market maintained a good balance thanks to the moderate imports until halfway through the month. The Valencia Late supply from South Africa remained limited due to irregular imports because of increasingly extensive inspections and sorting relating to black spot. Imports returned to a high level toward the end of the month (last weeks of significant imports). Hence the rates remained stable and above those of the last two years. Some batches from Brazil and Uruguay were available.



■ **Initial info about the Spanish orange and small citruses season 2013-14.** The estimates provided by the official services of the Autonomous Communities and professional sources reveal some major trends of the incipient Spanish season. The small citrus harvest is set for a level close to that of 2012-13, i.e. rather average for clementines and hybrids. The small rise expected for early cultivars should be counterbalanced by a slight shrinkage in late varieties, despite the new plantations established over the past few years. However, orange production should rise again to beat a new record. The table orange harvest is set to be very high, for both late Naveline (up from last season) and late Navel (down slightly from last season). Valencia Late production is also reportedly very high. Will the commercial results be as satisfactory as in 2012-13, when the exported volumes beat records and when prices returned to a decent level, thanks in particular to a very good second part of the season? The delayed maturity and poor size range of the small citrus early in the season are something of a handicap. Furthermore, the heavy-

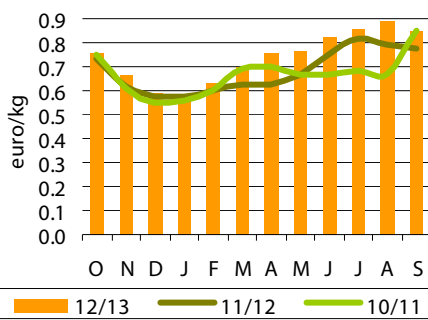
weight market of the fruit section promises to be much more competitive than last season, when the supply weakness of the apple had a very positive influence on citrus and banana sales, especially during the first quarter of 2013.

Source: Official services of the Autonomous Communities

■ **Pakistani horticultural products prohibited in Russia.** The closure of the borders, for an indeterminate period, to Pakistani horticultural products, decided by the Russian Federal Veterinary and Phytosanitary Monitoring Service, is due to the "systematic violations" of the requisitions and to the "destabilisation" of the phytosanitary situation in the country. Every year Pakistani exporters dispatch 150 to 170 million USD of fruits and potatoes to this market. It is a particularly tough blow for citrus exporters, who are losing their main market where they sent between 80 000 and 90 000 t of Kinnow on average between 2010 and 2012.

Source: Reefer Trends

Orange - France - Import price

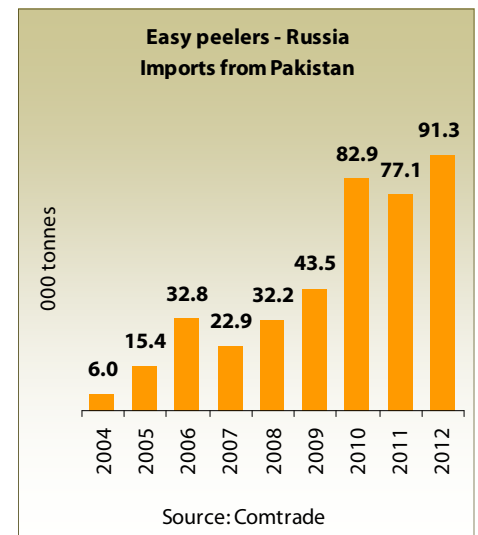


PRICE	Source	Average monthly price euro/box 15 kg	Comparison with average for last 2 years
	South Africa	12.75	+ 8 %

VOLUMES	Source	Comparison	
		previous month	average for last 2 years
South Africa	↗	+ 34 %	

VOLUMES	Varieties by source	Comparison	
		previous month	average for last 2 years
Valencia Late and Navel from S. Africa	↗	+ 34 %	

Observations	Cumulated total / cumulated average for last 2 years
Imports rising throughout the month, and higher than in recent years. Shipments irregular due to frequent inspections in South Africa.	+ 32 %



Source: Comtrade

Grapefruit

September 2013

Despite an improvement in demand seen in early September, grapefruit sales quickly slumped, placing the market under pressure. Indeed, despite the wane of the South African season, imports remained high, and greater than in previous years. In addition, given the weakness of sales, stocks of South African fruits of flexible quality became available at competitive prices. The Mexican season started in week 36, first in Northern Europe and then in France. Prices rapidly dropped because of quality concerns regarding some of the supply. The Israeli season started in week 39 in a difficult context, with very moderate volumes and the fruit maturity on the early side.



■ **Revealing a new health effect of naringin.** British researchers have just demonstrated that naringin contained in citruses helps limit the development of renal cysts, a pathology with more than 600 000 sufferers in the United States. This news about the health assets of this fruit family follows on from that published in 2012, which highlighted the preventive role of citruses on the risk of occurrence of a CVA in women.

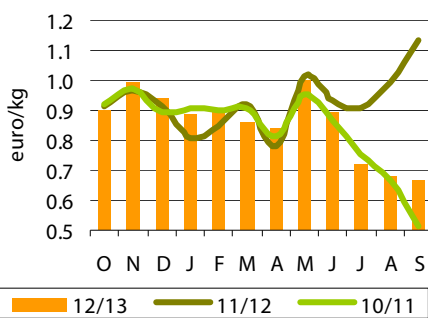
Source: Medical News Today

■ **Moroccan citrus season 2013-14: the effects of the "Maroc Vert" plan are present.** With 2.2 million tonnes expected according to the Ministry of Agriculture, Moroccan citrus production will do more than bounce back after the small harvest of 2012-13. It is exhibiting a historic level, 45 % above average for the last six years. While the weather and alternation effect

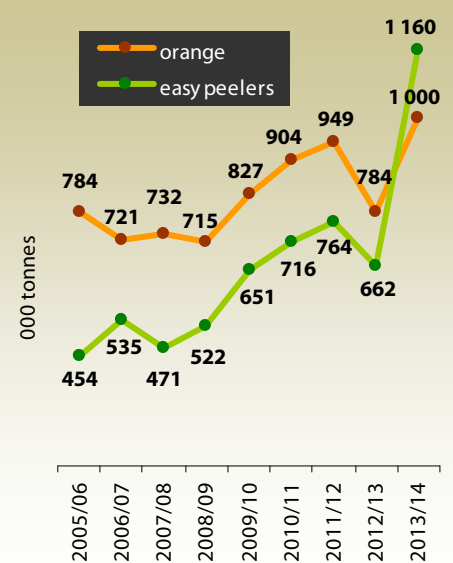
have played a positive role, the main ingredient in this spectacular rise is the entry into production of 4 000 ha of new orchards, out of the 17 000 ha planted since 2010-11, driven by the "Maroc Vert" plan. Predictably, it is production of small citruses which has the most momentum. The harvest is reportedly exhibiting a level of close to 1.2 million tonnes, 84 % above average and up nearly 400 000 t from the previous record dating from 2011-12. A new high point, estimated at 1 million tonnes, is also expected for oranges. While the production dynamic is indeed in place, will the same be true for exports? The question is yet to be answered, but Morocco can count in particular on its competitiveness strengthened by a fitting and expanded varietal range.

Source: Moroccan Ministry of Agriculture

Grapefruit - France - Import price



Citrus - Morocco - Production



Source: Moroccan Ministry of Agriculture

PRICE	Type	Average monthly price euro/box 17 kg box eq.	Comparison with average for last 2 years
	Tropical	11.39	- 19 %

VOLUMES	Type	Comparison	
	Tropical	previous month	average for last 2 years
		↘	+ 104 %

VOLUMES	Source	Comparison		Observations	Cumulated total / cumulated average for last 2 years
	South Africa	previous month	average for last 2 years		
		↘	+ 104 %	South African season waning, though levels much higher than in previous years. Stocks available.	+ 19 %

Pineapple

September 2013

The situation was particularly complicated on the pineapple market in September. The supply, which had been on the rise in anticipation of the operators returning from their break, was met with completely lifeless demand. While early in the month the operators engaged in promotions were still able to manage their stocks, the situation very quickly deteriorated on all the European markets. Despite the launch of ASP (after-sale price) sales, stocks remained substantial, and operators had to settle for conducting clearance sales at rates well below those stated below, yet without managing to bring about any improvement in the market conditions. The established brands, which early in the month had managed to stabilise their prices, also had to readjust them at the end of the month.

During the first half of the month, the situation on the air-freight pineapple market was good. Indeed, the supply was small, and despite some quality concerns due to the rains in the production zones (particularly Cameroon), sales remained fluid. However, the situation became complicated from the start of the second half, with demand greatly shrinking. Volumes, although limited, were struggling to find takers. We then saw a dip in rates. On the Sugarloaf market, the situation remained fairly complicated throughout the month. Operators, overloaded with poor-quality fruits, often had to lower their prices to help move their stocks, to between 1.50 and 2.00 euros/kg depending on the quality and volumes held by the operators throughout the month.

In line with demand, the Victoria supply remained low in September. The good quality level of the fruits on the market enabled the few batches available to achieve a good value.

PINEAPPLE — IMPORT PRICE

Weeks 36 to 39	Min	Max
Smooth Cayenne	1.70	2.00
Victoria	3.00	3.80
By sea (euro/box)		
Sweet	5.00	8.00

Mango

September 2013

September was a month characterised by a particularly acute quantitative shortfall. The abrupt end to the Senegalese and Mexican seasons in late August, and the unusually small shipments from Israel, led to a significant under-supply to the European markets. Keitts from Puerto Rico represented only a partial alternative given the natural market demand. Furthermore, this situation was intensified by the late and moderate starts to the Brazilian and Spanish seasons. This lack of products, at a time when consumption picks up after the summer period, led to a steep price rise for the available sea-freight mangoes. In the middle of the month, the market conditions were becoming more difficult. Indeed, the persistent shortfall, in spite of the increase in the volumes provided by Brazil and Spain, and the absence of the more sought-after Kent, led to lack of purchaser interest, especially from the supermarket sector. The high prices intensified this trend. So at the end of the month we observed a slowdown in sales, accompanied by a slump in prices. Another factor promoting the trend was the still substantial supply of summer fruits, whose season, delayed by the poor

weather conditions, was extended accordingly. These fruits, offered at attractive prices, represented genuine competition for tropical fruits.

The air-freight mango market supply also proved small. Enjoying good market conditions, Senegalese exports continued in the first half of September with limited volumes. Their increasingly random quality brought down the average sales figures. Israel was also providing the market with a limited supply. Brazil for its part was supplying small quantities, in a wide range of varieties. Palmer and Keitt formed the bulk of the shipments, with even some batches of Tommy Atkins occasionally shipped by air. Additional batches from Egypt, marginal but regular, achieved high prices in spite of a frequent lack of coloration.

MANGO — ARRIVALS (estimates) Tonnes

Weeks 2013	36	37	38	39
By air				
Egypt	5	5	5	5
Brazil	10	20	15	20
By sea				
Brazil	640	920	1 500	1 870

MANGO — IMPORT PRICE ON THE FRENCH MARKET — Euro

Weeks 2013	36	37	38	39	Average Sept. 2013	Average Sept. 2012
By air (kg)						
Brazil	Palmer		3.50		3.50-3.80	3.50-3.65
Egypt	Kent	4.00	4.00-4.50	4.00	4.30-4.50	4.05-4.25
Senegal	Kent	3.40-4.50	3.40-4.50			3.40-4.50
Israel	Kent	3.00-4.20	4.00			3.50-4.10
						3.00-3.60
By sea (box)						
Brazil	T. Atkins	7.00-8.00	7.00-8.00	6.00-8.00	5.00-6.50	6.25-7.60
Israel	Kent	7.00-8.00	7.00-8.00	7.00-8.00	7.00-7.50	7.00-7.85
Israel	Keitt			7.00-8.00	7.00-7.50	7.00-7.75
Puerto Rico	Keitt	7.00-8.00	7.00-8.00	7.00-8.00		7.00-8.00
By road (box)						
Spain	Osteen	8.00-10.00	9.00-11.00	8.00-11.00	8.00-11.00	8.25-10.50
						6.25-7.60

PINEAPPLE — IMPORT PRICE IN FRANCE — MAIN SOURCES

Weeks 2013	36	37	38	39	
By air (euro/kg)					
Smooth Cayenne	Benin	1.80-2.00	1.80-2.00	1.80-1.90	1.80-1.90
	Cameroon	1.70-1.90	1.70-1.90	1.70-1.90	1.70-1.90
	Ghana	1.80-2.00	1.80-2.00	1.80-1.90	1.80-1.90
Victoria	Réunion	3.30-3.50	3.50-3.80	3.50-3.80	3.50-3.80
	Mauritius	3.00-3.20	3.10-3.20	3.00-3.20	3.00-3.20
By sea (euro/box)					
Sweet	Côte d'Ivoire	7.00-8.00	7.00-8.00	7.00-8.00	7.00-8.00
	Cameroon	7.00-8.00	7.00-8.00	7.00-8.00	7.00-8.00
	Ghana	7.00-8.00	7.00-8.00	7.00-8.00	7.00-8.00
	Costa Rica	5.00-7.00	5.00-7.00	5.00-7.00	5.00-7.00

Roots & tubers

Q2 and Q3 2013

An inactive market, especially in the summer. The increase in demand for sweet potato or yam, expected for Ramadan (weeks 28 to 32), was not up to the operators' expectations. Prices held up primarily due to the supply shortfall.

Sweet potato (SP)

Red-skinned white-fleshed sweet potatoes comprehensively dominated the French market. Egypt continued its season until the first half of July, with rates stable at 0.70-0.75 euro/kg, except at the end when the overall supply proved smaller. Shipments picked up in the second week of September for the new season, with higher rates, though they quickly returned to the previous average. There was a clear improvement in packaging quality from Egypt, both in terms of presentation and strength. South Africa and Honduras were regularly shipping out good volumes, with rates of around 1.30-1.50 euro/kg until June, which dropped in July and August, losing 0.20-0.30 euro/kg. They rose again in September for Honduras to 1.40 euro/kg because of the fall in shipments. Prices increased from 1.20-1.30 to 1.40-1.50 euro/kg for Brazilian volumes received from June to August.

Honduras and the United States provided a more or less regular supply of red-skinned orange-fleshed SPs, sold at between 1.00 and 1.20 euro/kg, the same as the volumes shipped out by South Africa from mid-June. The Israeli season began in mid-September with prices dipping from 1.40 to 1.30 euro/kg, since several freshly harvested batches retained a high moisture level, leading to mould growth. Limited volumes of white-skinned and white-fleshed or purple-fleshed SPs from the United States sold at between 1.30 and 1.50 euro/kg from late June to late August.

Yam

The volumes, primarily comprising white yams, came mainly from Ghana. Their rates remained high, slightly up from August, when the supply was smaller. However, quality problems (alteration of flesh and mould growth) brought down sales. Rates recovered slightly in September with the arrival of the new Ghanaian harvest. More limited but regular quantities from Colombia were received. Their rates, stable until late July, increased in August when volumes were diminishing, and then dipped considerably in September, given the lack of freshness of the produce. The last

batches were sold high because of the small quantities provided by Ghana at the beginning of the new season.

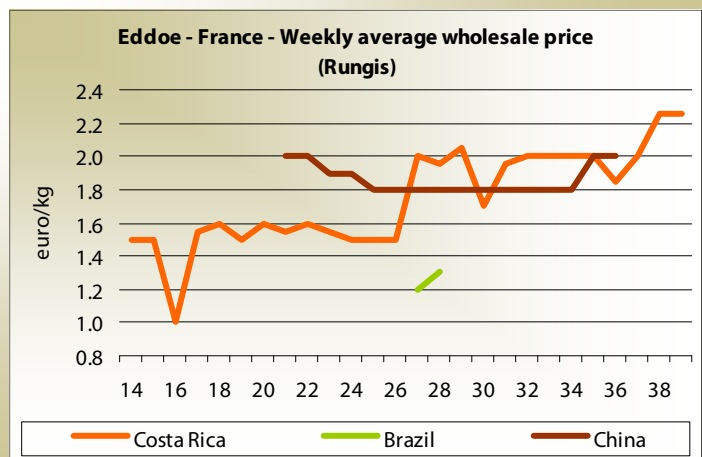
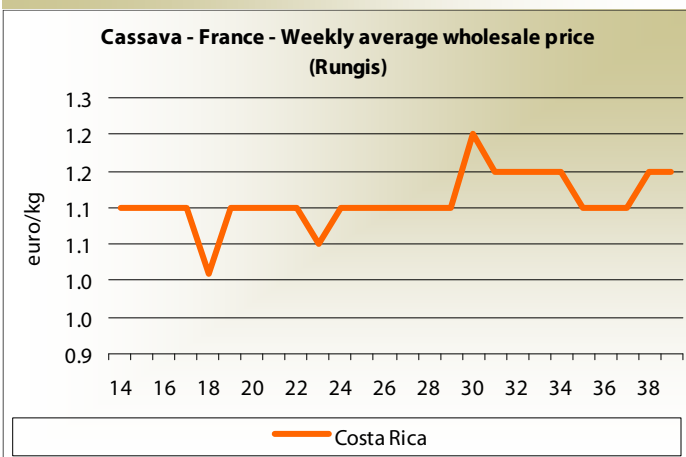
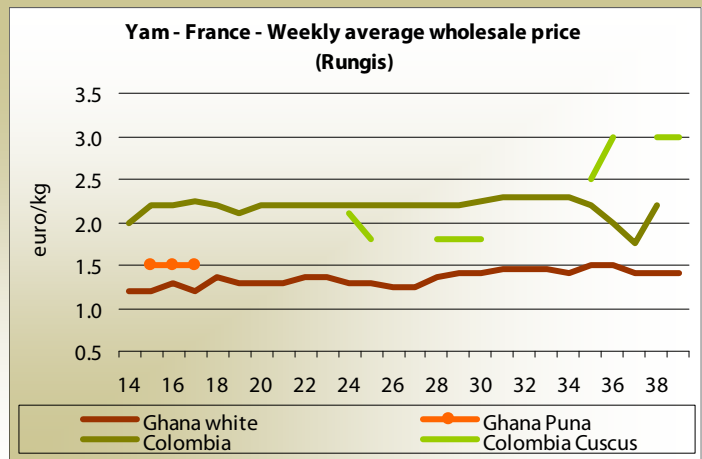
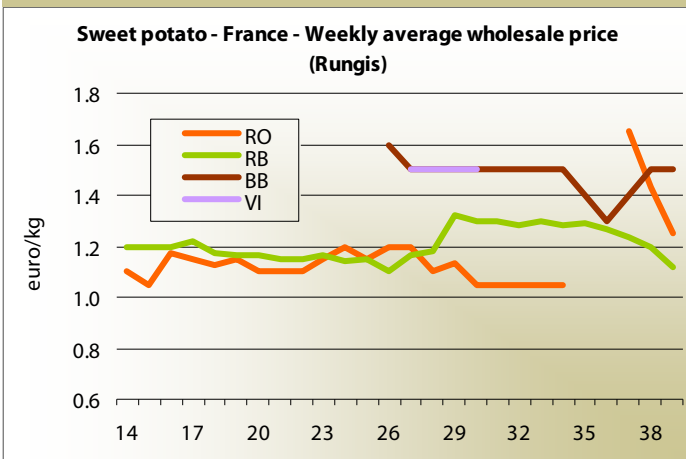
In April, some batches of Puna from Ghana sold at around 1.50 euro/kg. In June-July, Cuscus batches from Colombia were sold at between 1.80 and 2.00 euros/kg.

Cassava

The Costa Rican cassava sold regularly for 1.00-1.10 euro/kg from April to mid-July, rising from 5 to 10 cents/kg until September.

Eddoe

From July, the dwindling supply from Costa Rica, the main supplier, led to a considerable and lasting price increase until September, when the limited volumes caused another increase. The difficulty in charging a high price for this product, which generally has a fairly stable rate, encouraged some operators to suspend their orders or seek another source. Hence, from late May, small volumes from China were sold at high prices, which actually rocketed in September during the traditional Asian holidays.



Sweet potato: RB: red skin, white flesh / RO: red skin, orange flesh / BB: white skin, white flesh / VI: purple / Source: Pierre Gerbaud

Content published by the Market News Service of CIRAD - All rights reserved

Other exotics

Q2 and Q3 2013

Chayote and christophine

Costa Rica has remained the main chayote and christophine supplier during the last six months. The price of chayotes proved fairly stable, while that of christophines fluctuated slightly more, with more variable shipments. The higher perishability of the product also influenced prices. In September the French chayote and christophine season began, with higher prices due to a moderate supply. The arrival of this merchandise barely influenced the rate of Costa Rican products, available in low quantities. In April-May and July-August, small batches of christophine from Martinique, routed by air, were sold on a basis of 2.80 euros/kg.

Dasheen

The last six months have been characterised by small shipments from St Vincent, the traditional market supplier. The small and sporadic production made it difficult to fill up containers bound for Europe, which explains the shipment breaks in June and July. The quantitative shortfall led to price rises, particularly in August. In September, the restoration of a flow more

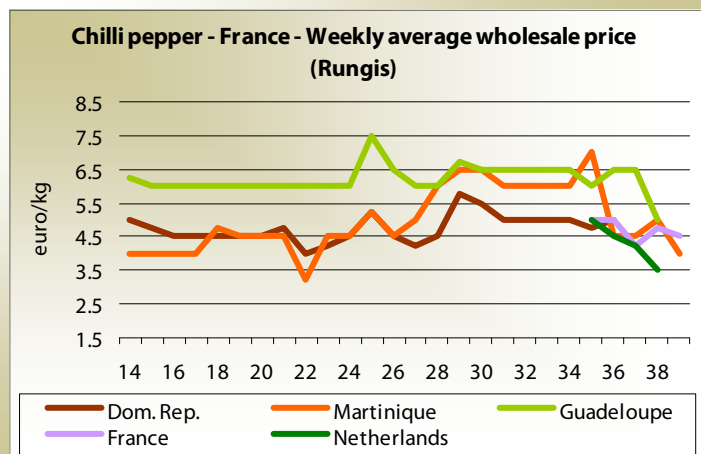
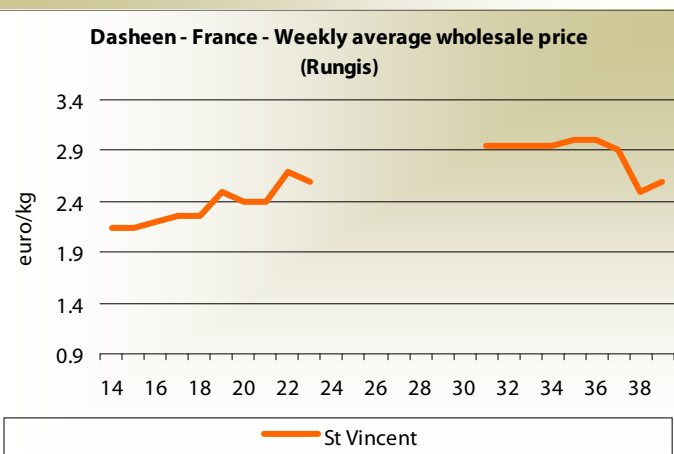
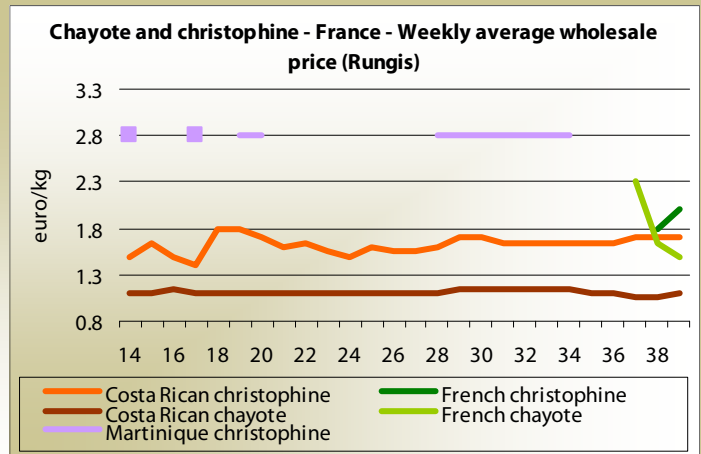
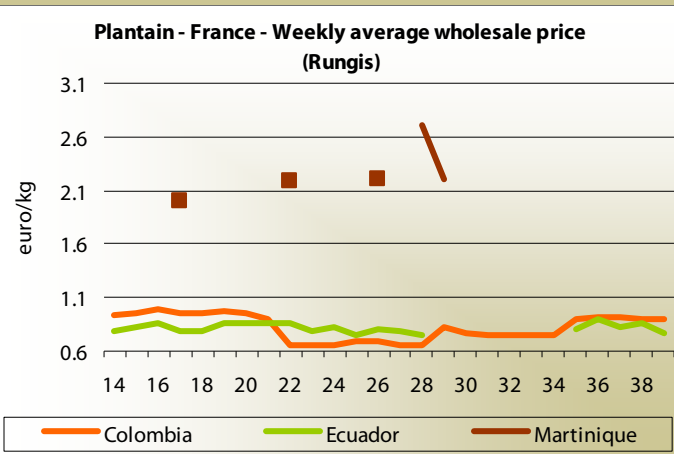
in line with the average led to rates taking a downturn. Martinique shipped small quantities by air, sold at around 3.90 euros/kg.

Plantain banana

The plantain banana market has been affected by a major crisis during the last six months, culminating from late May to late July. The unexpected increase in volumes shipped out by Colombia caused the collapse of rates, storage of merchandise, and consequently its qualitative deterioration which drove prices down. Faced with this development, Ecuadorian products were dragged into the downward spiral with Colombia, the dominant source in the supply to Europe. In August, the situation recovered somewhat, though prices did not return to their initial level, even in September, when the market was becoming a bit more active. This period clearly illustrates the fragility of a market whose demand remains fixed, and so which is poorly equipped to absorb excessive volumes, especially without apparent scheduling. Some sporadic batches from Martinique shipped by air sold for between 2.00 and 2.20 euros/kg.

Chilli pepper

From April to early September, the Dominican Republic remained the main supplier of Chilli peppers to the French market. Prices varied according to the volumes received and their quality. Thus when heavy precipitation affected the production zones in early April, prices were fixed high. In late July, the reduction in the supply also led to a price rise which extended until late August. Guadeloupe regularly supplied limited quantities of Chilli peppers, sold at a stable price, except in September when the supply increase, particularly from within Europe, drove prices downward. Shipments from Martinique proved more irregular, causing fluctuations in the supply available. However, the reduction in Dominican imports from mid-July was clearly beneficial to French Chilli peppers, whose prices increased considerably before falling again in September due to competing European production.



Sea freight

September 2013

After a flurry of fixtures in the first week and a half of the month when charterers fixed more vessels forward than prompt, chartering activity dipped due largely to a shortage of open units. The average TCE return on those vessels that were fixed in the second half of September was similar - supply and demand remained balanced throughout the month and the market therefore remained stable.

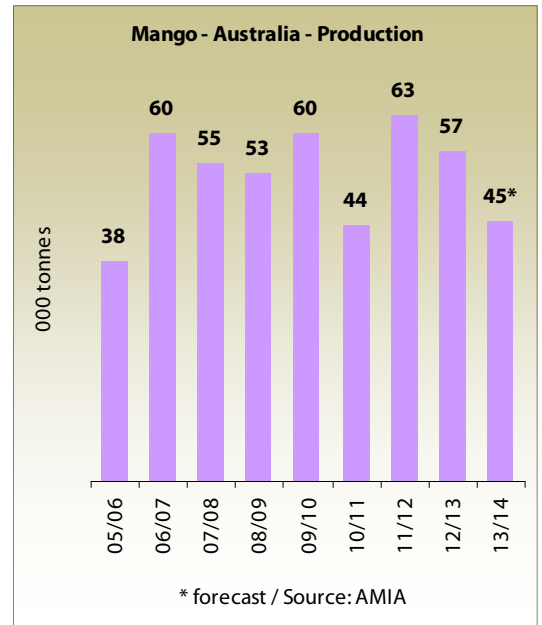
The impact of fixing so many voyages was to overload the eastern Mediterranean and Black Sea banana markets, causing prices to collapse all the way from Algiers to Novorossiysk. With so much fruit surplus to demand in the core EU and US markets likely until mid November the charter market is likely to remain as firm as pricing in the banana markets is weak.

For the first 9 months of 2013 the TCE average for the large segment stands at 54 c/cbft compared to 39 c/cbft in 2012. The 2013 figure is the highest since 2007 and 2008 when the average for the period reached 79/80 c/cbft. At 83 c/cbft for the period the average yield on the small vessels is not far away from the 90 c/cbft figure and may, if demand remains strong for the rest of the year, exceed the 84 c/cbft annual average for both years.

While the focus on newbuilding projects appears to be targeting larger tonnage, the rapid recovery of the smaller segment coupled with the average age of the fleet means there is a significantly more urgent need to rejuvenate this sector. What is interesting is that there are no exceptional circumstances or reasons behind the recovery of the small segment. Indeed the TCE rate has risen despite the competition between the two major operators for business.

■ **Small mango harvest in Australia for 2013-14.** With 6.5 million boxes, the Australian harvest has reportedly registered a fall of approximately 15 % from 2012-13, and a somewhat low level. Production appears similar to last season in Queensland and Western Australia. However, there is a blatant shortfall in Northern Territory because of abnormally high temperatures and a lack of rain. This region is the first to enter into production (Darwin from September and Katherine until November). Australia exports approximately 4 500 to 5 000 t of mangoes every year.

Sources: Reefer Trends, hin.au



■ **5th International Banana Congress.** This event is to be held from 24 to 27 February 2014 in San José (Costa Rica), on the theme "The challenges of the banana market." This congress will bring together a host of international experts in the banana, on the themes of research, production and marketing.

Source: www.congresointernacionaldebanano.com

Web: www.reefer trends.com
 Tel: +44 (0) 1494 875550
 Email: info@reefer trends.com

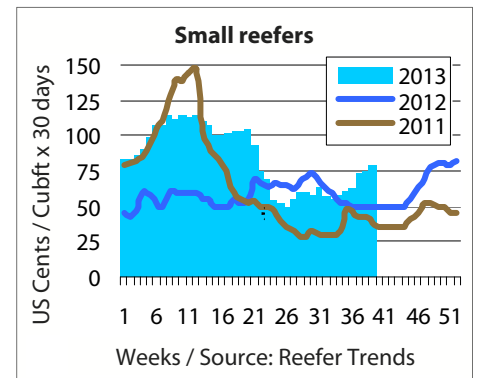
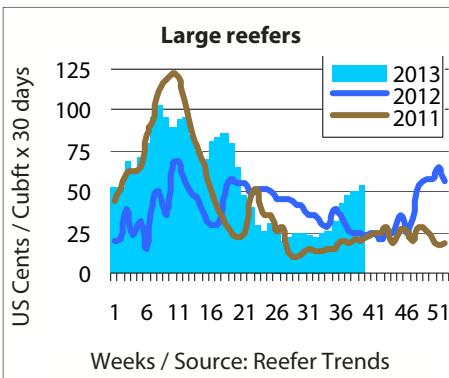
reefer trends

The independent news and information service for the reefer and reefer logistics businesses

MONTHLY SPOT AVERAGE

USD cents/cubic foot x 30 days	Large reefers	Small reefers
September 2013	49	70
September 2012	25	50
September 2011	19	43

REEFER



Côte d'Ivoire mango

2013 season report

The Côte d'Ivoire 2013 season came within a particularly favourable context: low production in West Africa, a fall of more than 30 % in exports from the Brazilian giant to the European market early in the year, and very late European fruit production. It took the combination of all these factors for prices on the European marks to maintain a high level practically throughout the season. In 2013, Ivorian exporters were finally able to rediscover some peace of mind after the average 2012 season and the mediocre 2011 season.

Late and low-volume production

Mango production volume was low in Côte d'Ivoire this year. This phenomenon was also registered in Mali, Burkina Faso and Ghana. The fall in production was caused by the drought which struck the sub-region during January, February and March. These weather conditions did not enable the fruits to survive through fruit-setting, despite the good flowerings observed in early January.

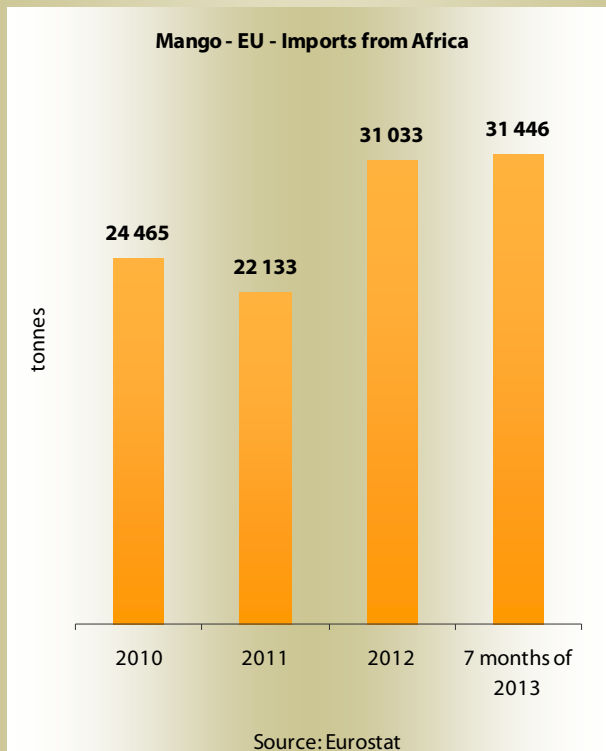
The near-absence of the first flowering period, usually observed in mid-December, caused a delay in

the start of harvesting. It was not until 15 April that the first Kents could be harvested. This production delay correspondingly pushed back the availability of the first fruits exported by sea to the European markets. This stage was reached only at the end of the first week of May, instead of late April during previous seasons.

Early in the season, the volumes shipped remained small, and grew only with the entry into production of the second Kent flowering period. To compensate for volume losses due to the late start of the season, some operators continued their shipments after mid-May.



© Régis Domergue



This proved to be a risky calculation, given the recurrent end-of-season qualitative problems, concurrent with the precipitation on the production zones and traditionally causing the development of fungal attacks.

Regarding the other mango varieties produced in Côte d'Ivoire, some Amélie shipments were observed early in the season in the first half of April, but these remained moderate. Production of this variety is now marginal in Côte d'Ivoire, the majority of the orchards having bit by bit been top-grafted with Kent. The Keitt shipment for its part remained limited to the last week of the season.

With the delay to the start of harvesting, the Kent air exporters took advantage of good sales conditions, in a low-competition context for nearly three weeks. The purchase price of fruits from the producers held up throughout the season because of the high rates on the European market.

However, it does not seem to have compensated for the production loss. For some producers, the return of their sales could not cover the costs incurred for the upkeep of their plantations. Hence they are claiming a direct field-side payment, a trend which could spread in the forthcoming seasons, given the intensification of competition between collectors.

Exports stabilising, and new configurations

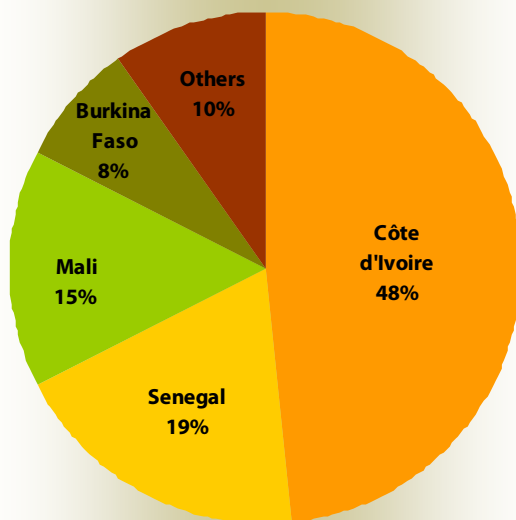
Côte d'Ivoire exported 15 157 tonnes of mangoes to the European markets this year, as opposed to 15 222 tonnes in 2012. Hence despite the delay and the production fall, exports held up with slightly bigger volumes for June.

Since 2012, with the reunification of the country, many exporters have appeared and other older ones have consolidated their business. At present, there are more than twenty mango factories in the region of Korhogo, Ferkessédougou and Sinématiali.

The operators established for years have set up more packing stations in order to be able to handle larger volumes over the first four weeks of the season, and thereby limit the risks of fungal growth on the fruits, which increase considerably from mid-May with the arrival of precipitation to the production zones. In doing so, they maintain the quality



Mango - EU - Imports from Africa in 2013



Source: Eurostat

and their market shares in Europe. Newcomers have reopened factories that had been closed or were not operating properly. They most often work as service providers.

The new trend appears to be to set an export limit date in order to prevent losses and obtain better value from the product. This idea is spreading through all the mango producer countries in West Africa.

The mango was classed as a priority industry within the Common Agricultural Policy of the Economic Community of West African States (ECOWAS), and regional programmes should be in place in the coming years, primarily aimed at fruit quality: product labelling, fruit fly management, etc.

In terms of business certifications, GlobalGap is still broadly adopted by Ivorian exporters.

Logistical changes

In terms of logistics, we are seeing a concentration of shipping companies offering refrigerated container services bound for Europe. MAERSK LINE ended its stopovers at the port of Abidjan in 2013.

So exporters have mainly been able to load their shipments with DELMAS and on the AEL line, reaching the port of Antwerp in 12 days.

The services offered by Bolloré Africa Logistics with MOL HAPAG have not lived up to expectations: delayed ships, overbooking, etc.

To move the containers between the port of Abidjan and the production zone in the north of the country, road transport is now the preferred route. Rail transport via the Ferkessédougou container platform is reserved for a limited number of operators.

The 2013 season will certainly be ranked among the best ever in Côte d'Ivoire. But will this trend continue? Nothing is less certain.

The desire expressed by certain exporters to expand their quantities in 2014, if it is put into practice, risks destabilising the industry and the European markets, with the consequence of a drastic fall in sale prices and substantial financial losses: a very familiar situation to the profession ■

Alexis Moulin

European mango market

A transitional period of utmost delicacy: the switchover from Brazil to Peru

The mango is a seasonal product. For it to retain a year-round presence on the European markets, operators must procure from multiple sources, balancing the production from various parts of the intertropical zone. However, the switchover from one dominant source to another generally causes the most intense crises of the year, especially when it comes to switching from Brazil to Peru. These are actually the two biggest mango suppliers to the European market, representing on their own 64 % of imports. In addition, this transition comes at the end of the year, a time when demand is invigorated.

Brazil, a historical supplier

Brazil has supported mango development in Europe from the outset. In 1984, it was this market which swung the domination of the supply to the European market from Africa to Latin America. It retains great importance in terms of the quest for a continuous mango supply, which it manages to provide in spite of volume fluctuations.

Using cropping tricks such as floral induction, it manages to

supply Tommy Atkins all year round. This variety, sometimes criticised for its lack of flavour and the presence of fibres in its flesh, nonetheless remains the foundation of its exports (more than 80 % of Brazilian production). Good coloration and transport resistance are its major assets. Brazilian exporters have nonetheless adapted to the demands of the European markets by applying varietal diversification of their orchards, and developing exports of Keitt, Palmer and Kent for more than a decade.

Hence the profile of Brazilian exports to Europe has been modi-





Société Internationale d'IMportation



The
specialist of
ripened fruit



It's ripe,
enjoy it !

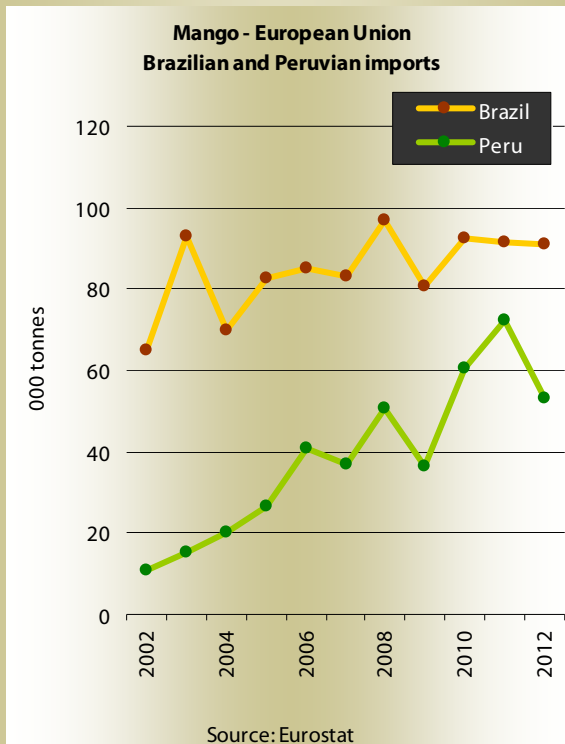
The expertise of the producer associated
with the know-how of the ripener to
guarantee a carefully matured and
selected mango.

www.siim.net

Producer - Importer - Ripener - Distributor



Headquarters - Ripening Platform – MIN Rungis – Bât. C3 – D2 – E2, 2-16 rue de Perpignan, Fruileg CP 70432,
94642 Rungis Cedex, France - Tél. : +33 1 45 12 29 60 - Fax : +33 1 45 60 01 29- E-mail : dibra@siim.net



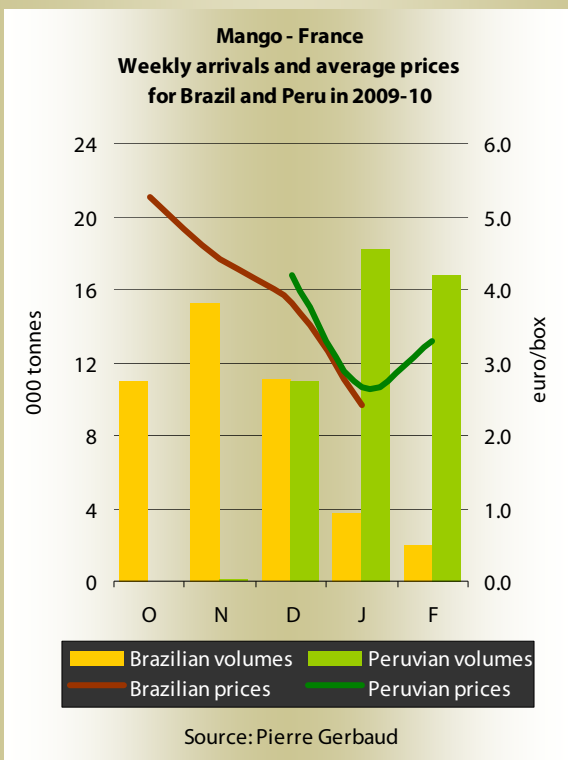
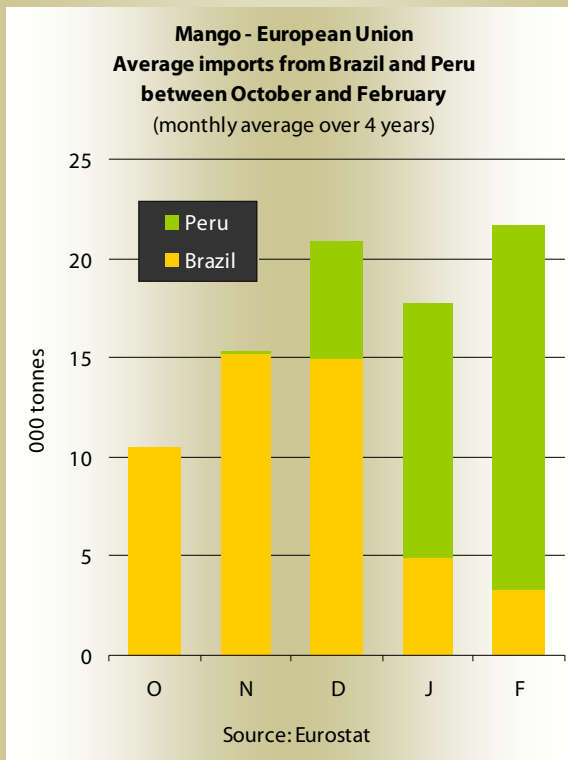
fied. True, the source maintains a year-round presence of Tommy Atkins, but the adoption of Kent in particular, more sought after in Europe, has led to the emergence of a new export period from mid-October to late January. Over the past few years it has been earlier, starting in September and finishing in mid-January. A short-term development or a deeper-rooted one? We do not yet have the perspective to tell.

In parallel with varietal diversification, Brazilian operators seem to have better adapted their flows to the European markets, with the disappearance of catastrophic seasons where the quantities shipped were drowning the market and causing alarming price drops (less than 2.00 euros/box) over long periods. Volume regulation has been applied by means of limiting the number of export companies, the growth of the internal market and directing part of the production toward processing. Hence the Brazilian mango sector appears to have reached some degree of maturity.

Peru, a recent supplier

The development of the Peruvian industry is more recent. It dates from the early 2000s, when Peru was just an emerging source supplementing a market still lacking a perfect supply. The real boom in Peruvian exports in the mid-2000s reconfigured much of the European market. Sweeping aside established sources such as South Africa, Peru has established a long-term presence, going as far as to become the number two supplier to Europe. Yet it did not manage this without hiccups, and successive crises due to the often chaotic growth of export volumes.

The Peruvian export calendar to Europe runs from January to April. Yet out of the desire to establish themselves on this market, operators have been encouraged to extend this period by starting their shipments earlier (November-December), and attempting to keep them going until May. Still in the expansion process, Peru has seen lower-volume seasons in the past two years. Is this reduction due to weather conditions less favourable for production, or is it the result of deeper-rooted development of the sector? In this case too, our lack of perspective means that no particular hypothesis can be favoured. Nonetheless, unlike Brazil, Peru does not seem to have an internal market able to absorb large quantities of mangoes, or processing facilities on a scale to match its production. The sector instead opted to win over new markets. Peru has established itself in parallel on the US market, where it quickly climbed to second place among the supplier countries, behind an essential Mexico, but outstripping Brazil. Besides its competitiveness, one of Peru's main assets without doubt is its enduring ability to produce primarily Kents. However, sea-freight shipping times are considerably longer than for Brazil.



The December-January impact

Having set the scene, it is easy to understand that the switchover from Brazilian to Peruvian mangoes can cause great disruption on a European market suffering irregular progress. If Brazil extends its export season or Peru starts its export season early, then the conditions are all there to plunge the market into the doldrums. Hence the supply calendar and intensity of volumes from each source are of prime importance in determining whether sale prices hold up.

The graph opposite shows, based on the average volumes delivered by Brazil and Peru (over the last four seasons), the transitional December-January period. The particularly early starts from Peru in November appear very limited and unlikely to cause commercial disruption. However, they tend to chip away at the brand image of the source for sending green and immature fruits.

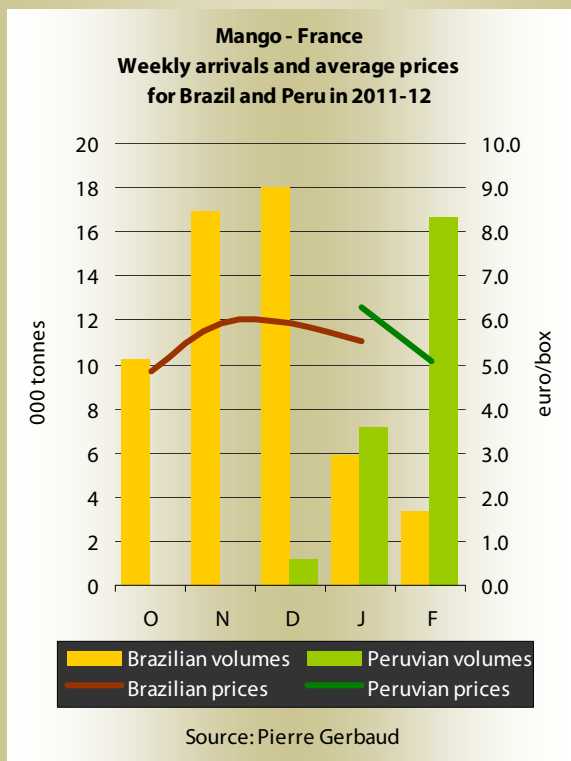
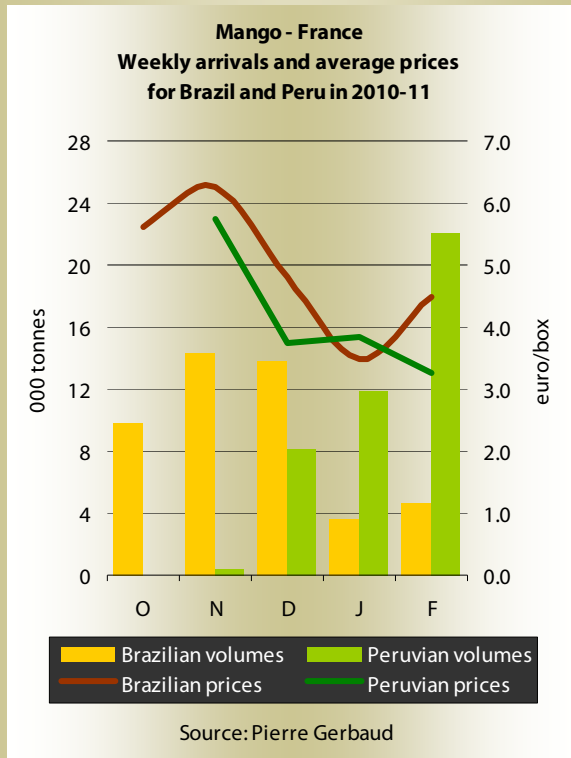
While the graph does show the intersection of the seasons, representation by average tonnages tends to suppress great variations from season to season. Looking back over the past four seasons, the perception of a troubled transition is much more apparent.

2009-10 transition

This is the most characteristic season, with the two sources overlapping in December. The large quantities from Brazil were supplemented by abnormally high levels from Peru, where production proved to be higher and earlier. The immediate result for the two sources was a drop in prices, to under the 4.00 euros/box mark in December. The market saturation continued in January with the explosion of Peruvian imports, pushing down prices to between 2.00 and 3.00 euros/box. The Brazilian season, which ran on into January and February, had a difficult end with low prices. Prices for Peru recovered slowly in February, after a recovery phase accompanied by clearance sales. The large quantities received in February also held back price rises.



© Régis Domergue



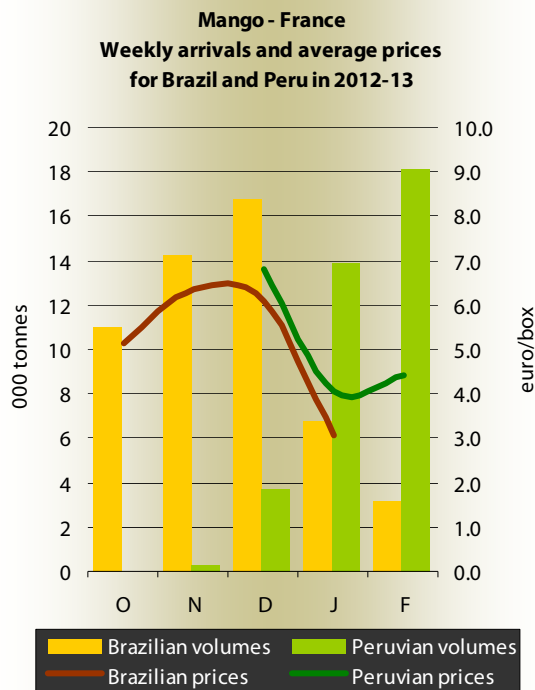
2010-11 transition

The 2010-11 season went like the previous one, but the crisis was less pronounced. Over this period, both sources exported practically the same volumes (from 88 000 to 89 000 tonnes), but distributed slightly differently. The intersection was less great. Brazil was very dominant until December, while Peru, which was later than in 2009-10, exported smaller quantities in December. However, the total imports still generated severe disruption which resulted in a fall in rates, stabilising at around 3.50 euros/box. On the other hand, the tidal wave of Peruvian volumes in February kept prices on a downward trend. So this movement was attributable to Peruvian exports alone, rather than to the intersection of the two sources.

2011-12 transition

The 2011-12 season appears to be the antithesis of the 2009-10 season, and therefore has the best season profile from recent years. First of all, the overall market load was nearly 10 000 tonnes lighter over the period in question for the two sources. The Brazil/Peru intersection proved practically non-existent. The low Peruvian production and its late first shipments left the field open to Brazil. Brazilian operators also partially compensated for the Peruvian shortfall by increasing their shipments in November, and above all in December, by nearly 8 000 tonnes. The average prices curve, concave in previous years, became convex, with prices not falling below the 5.00 euros/box mark, i.e. lucrative for all stages of the industry. The Peruvian rates in January took over where the Brazilian rates left off. They dipped only in February under the effect of a big increase in shipments from Peru, at a time when Brazil was only still involved in a very minor capacity.





2012-13 transition

This was an average season, between the previous two. The return to overall quantities of 88 000 tonnes was already a factor undermining the conditions for the season. However the division of volumes was fairly similar for Brazil from October to December, with high rates which held up in December in spite of a considerable contribution from Peru. Yet the maintenance of large tonnages from Brazil in January, while Peruvian exports were rising steeply, drove sales to rates of 3.00-4.00 euros/box. The large overall shipments from December that were not sold off in turn swelled the quantities available in January, when consumption traditionally wanes.

Two factors to monitor: volumes and quality

Ultimately, the fluidity of the switchover from Brazil to Peru depends firstly on the overall market load. Over the period in question, while tonnages in excess of 80 000 tonnes seem to drive prices down considerably, a load 10 000 tonnes lighter enables rates to remain fundamentally lucrative. Secondly, the limitation of total volumes during the transitional period is the crucial factor in maintaining prices: this may seem obvious, but it is less so if we are concerned with the quality of the fruits. Kents, with which the Brazilian season ends, are often more fragile and prone to developing fungal attacks which considerably reduce the sales figures. Similarly, the early exports from Peru often comprise fruits whose physiological development proves insufficient, generating sales at low prices. Hence the volume factor alone, though important, is not the only reason for the price variations often recorded in December-January.

Furthermore, the switchover from one dominant supplier to another encompasses other commercial phenomena, sometimes contradictory to the natural workings of production. The supermarket sector, for example, appreciates a supply over the longest possible period, to enable negotiations and stable seasonal prices to be set. The delisting of a product or source and its replacement always represent a weakness for the market. They occur if the volumes prove insufficient or the quality of the fruits deteriorates. In the middle of the end-of-year holiday period, it is easy to imagine the dilemma represented by the switchover from Brazil to Peru. The description of how the last few seasons have gone and the emerging scenarios are all points of analysis which can help achieve a more rational adjustment of the flows between the operators in the sector ■

Pierre Gerbaud, consultant
pierregerbaud@hotmail.com

Counter-season tomato

Positions stabilising?

After spending the past few years oscillating between opportunism and saturation, the European tomato market now seems to be reasonably balanced. Nonetheless, the sources and operators still in place must be highly specialised in segments where they have recognition, or in services which differentiate them from their competitors. Other sources are abandoning this excessively competitive market, to turn their sights on the high-demand Eastern markets.

European market settling down

The trend which has taken shape in recent years on the European market, against a backdrop of economic crisis, seems to have driven what is practically a natural selection of the sources. In particular, it has driven countries such as Turkey or Israel to attack other markets than the Old Continent. These flows have shifted mainly to East European countries, primarily Russia, with their economically buoyant and logistically viable markets.

Hence the European market, without yet completely finding its balance, has eased considerably in the last two seasons. Extra-Community imports shrunk again by 2 % (403 000 t) from October to May, while Spanish exports, at the same time, were down by 10 % (702 000 t). So this fall can be explained in part by the Turkish downturn, whose shipments to the European Community fell last year to 24 000 t (- 36 %), after peaking at 106 000 t in 2010-11. Similarly, Israeli volumes have focused their sights on nearby markets such as Russia or the Middle East, with the dismantling of Agrexco and the logistical development of the country. Community imports from this source were no more than 24 000 t in 2012-13, as opposed to 26 000 t in 2009-10. However Morocco, by virtue of its geographic positioning, its history and its logistical organisation, retains a strong presence in Western Europe. Its exports to Europe are stable at around 340 000 t,

80 % of which passing via the French market. However, this source is also targeting the big Eastern markets to relieve the European market, especially in the early season. Similarly, Tunisia is still on course in spite of the difficulties which have kept arising over the past few years, whether upstream (political crisis) or downstream, with most of the volumes unloaded at the port of Marseille. However, shipments returned to their former level last season (10 000 t), with 77 % passing through France. Similarly, tonnages of cherry tomato from Senegal remain stable (9 500 t), though they are better divided between Benelux (50 %), United Kingdom (26 %) and France (23 %).





start of the Season 2014



www.idyl.com

idyl

Contact us

+ 33 (0)4 90 24 20 00

Content published by the Market News Service of CIRAD - All rights reserved

contact@idyl.fr

13160 Châteaurenard

The Professionals' Partner & Producer

Morocco duty-free quota EU-27 fresh tomato imports				
Tonnes	2012-13	2013-14	2014-15	2015-16
October	13 350	13 800	14 250	14 700
November	34 900	36 100	37 300	38 500
December	39 450	40 800	42 150	43 500
January	39 450	40 800	42 150	43 500
February	39 450	40 800	42 150	43 500
March	39 450	40 800	42 150	43 500
April	20 700	21 400	22 100	22 800
May	6 250	6 500	6 750	7 000
Total	233 000	241 000	249 000	257 000
Additional quota	28 000	28 000	28 000	28 000
Total	261 000	269 000	277 000	285 000



No increase in Moroccan market shares in Europe

Although the Association Agreement between the EU-27 and Morocco took effect at the beginning of the 2013 season, Moroccan tomato shipments have at best held up (- 1 % according to the European customs figures and - 10 % according to EACCE figures). However, total tomato exports from this country apparently reached 408 000 t, confirming the interest of exporters in destinations outside of the Community, such as Russia to where shipments exceeded 60 000 t.

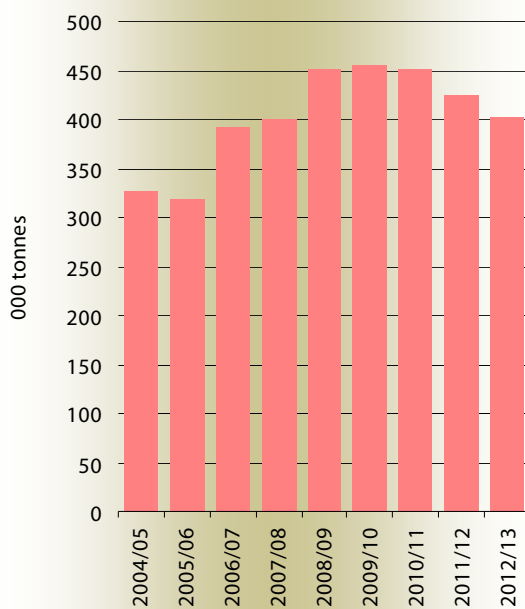
The 2012-13 season was characterised by a late start, the summer heat having severely affected the first trusses, and then by a shift of volumes to November because of Eid El-Kebir, to a time of year when demand decreases in Europe. Duties levied then encouraged operators to favour Russia, quickly saturating it with short-lived merchandise. The market however settled down with the run-up to the end-of-year holidays, especially in the small-size segment. The beginning of 2013 remained a struggle, with high levels of sorting rejects but most of all weak demand on the French market, while Italy or Russia were absorbing decent volumes. Rates strengthened in the run-up to Easter, with the switch to less affected trusses. The poor spring weather conditions were not favourable for tomato consumption. The season finished early, in late May-early June for most operators. However, note that this source is also continuing its drive toward Northern Europe (United Kingdom, Netherlands, Germany), in order to deflate the French market. It also managed a good performance on the Italian market, because of lower Sicilian production in 2012-13.

Spain finally reaping the fruits of its diversification

The Spanish season was slightly late in 2012-13 due to the deliberate shift of planting (by around 2 weeks) in order to limit overlap with the end of the season of the other European sources. The potential reached a very good level, because of the increased surface areas, especially in Almeria, since they are still dwindling in Murcia or the Canaries, but also some very good yields (up + 8 to + 10 % from 2011-12), in spite of extensive sorting at the end of winter. Yet the main development in Spain is still diversification of the varietal range, for the purpose of differentiating itself from the other Mediterranean sources. Hence production again grew considerably in elongated tomato, Rebellion or Raf, and to a lesser extent in the small-size segment.



Tomato - EU-27 - Extra-Community imports
(October to May)



Source: European customs

The season got off to a gradual but difficult start, until the end-of-year holidays, given average demand, logistical difficulties and Moroccan competition. The fall in volumes at the beginning of the year, the early Easter holidays, the production shortfall from Italy and the delayed season in the other European sources however enabled this source to come through, thanks to its varietal spread. Exports fell overall by 5 % (840 000 t) in volume. Sales were high to Germany (172 000 t, + 4 % on 2011-12) and France (121 000 t, + 8 %), though they were slightly down to the United Kingdom (125 000 t, - 6 %). Growth was especially marked in the East, with shipments rising to Poland (63 000 t, + 43 %), thanks to the establishment over the last few seasons of a logistics route, though direct sales to Russia dipped (29 800 t).

2013-14 crop to be fairly well balanced


The 2013-14 season is off to a quiet start. Besides the annual programmes, exports restarted in early September with round tomato production from the Murcia area. They are now intensifying with the arrival of the first volumes from Morocco, which should not really take off before late October and the seasonal launch of the big facilities into the export market, especially since Eid El-Kebir (15 October 2013) should put back the seasons slightly. The Almeria area however could come in slightly earlier, with some big facilities having opted this year to plant around ten days earlier. However, other operators have kept to a conventional planting schedule (second half of August), which should lead to the product reaching the market in late October-early November.

On the potential side, surface areas are reportedly stable overall in Andalusia (10 700 ha) and Morocco (5 500 ha). The small-size segment should go down slightly in both Spain and Morocco, after last year's problems, but overall should maintain a good level, the fall primarily occurring among medium-sized operators. It represented 30 % of Moroccan shipments last season. The duty-free quota should increase again this year for round tomatoes, as per the terms of the Association Agreement, to reach 241 000 tonnes (+ 3 % on 2012-13), which could be increased by an additional 28 000 t. Diversification in Spain should continue, primarily in truss tomatoes, elongated tomatoes, Raf and Rebellion. The market balance by the end of 2013 will nonetheless depend on the consumption level, and on the no doubt later presence of European seasonal production, which could run on a bit later this year ■

Cécilia Céleyrette, consultant
c.celeyrette@infofruit.fr

Madagascan litchi 2013-14 season

Why change a strategy that works?



The 2013-14 Madagascan litchi export season is set to be promising. Thanks to the substantial and early production, the European markets will have access to a satisfactory supply. Furthermore, the new organisation, on the strength of two seasons' experience, means that the Madagascan industry can contemplate its future with greater peace of mind. However this strategy, focused on the sanitary quality of the product, remains fragile and further consolidation is called for.

© Régis Domergue

© Guy Behnier



From words to action

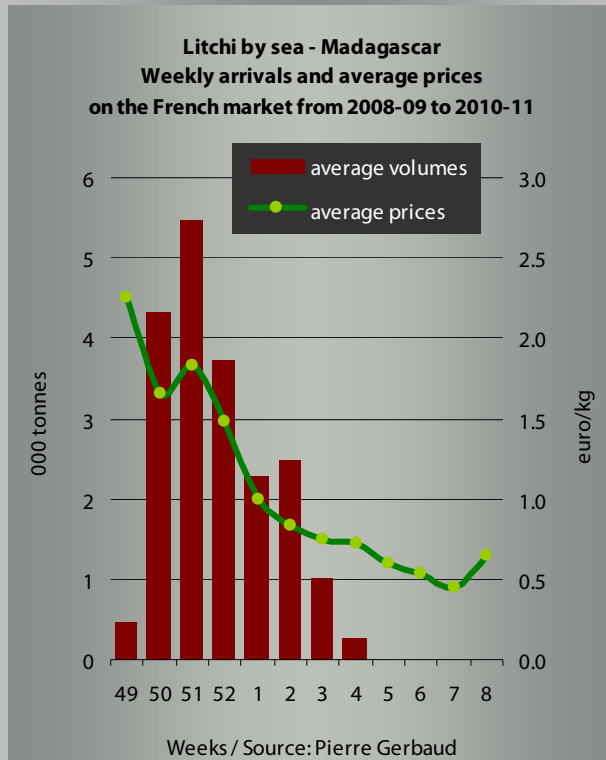
Three years ago, the Madagascan litchi season (2010-11) flirted with catastrophe. A late season, excessive volumes, strong competition between operators and unreliable sanitary quality with regard to the European regulatory provisions caused a major crisis in the industry. The main German distributors suspended the litchi trade in mid-season, an instant and painful penalty for this business sector so important for the Madagascan economy. The volumes rose and the excessively slow pace of professionalization of Madagascan exporters were leading the industry into a dead end. However, this torment had the positive effect of leading to a discussion about the adaptations to make in order to improve and secure the future of litchi exports to Europe.

The first actions consisted in drastically cutting back the export volumes and in implementing a large-scale approach to guarantee the safety of the products for consumers. The validation of the sulphuring processes and the implementation of close monitoring for sulphur residues, both at the source and on arrival of the fruits in Europe, represented a firewall for the European distributors. The mobilisation of substantial resources in terms of expertise and funding made it possible to contemplate the future with greater peace of mind. In addition to these measures, a new deal was put on the table for marketing, severely cutting back equally the number of operators and the volumes for export. Nonetheless, everyone was rightly eager for the implementation of this new strategy.

Litchi, tamarind, cashew apple, jackfruit, sapotilla — European Union imports (estimates)

Tonnes	2008-09	2009-10	2010-11	2011-12	2012-13
Total	31 041	26 753	22 852	19 807	23 682
Total extra-EU, of which	29 625	26 580	22 162	17 866	21 121
Madagascar	24 286	18 877	16 039	12 800	13 709
South Africa	1 516	3 490	2 871	2 554	4 416
Mauritius	173	168	225	89	286
Thailand	2 050	2 130	1 550	1 185	1 430
Bangladesh	290	239	398	351	358
India	83	141	11	13	44
Pakistan	14	404	10	4	18
Israel	1 066	903	755	730	732
China	148	228	305	139	127
EU production	1 416	173	690	1 941	2 561
Spain					

Source: Eurostat - code 08109020 (litchi, tamarind, cashew apple, jackfruit, sapotilla) then code 08109020 (litchi, tamarins, cashew apple, jackfruit, sapotilla, carambola, passion fruit, pitahaya)



It began to take shape and helped achieve good economic results in the 2011-12 season, with the distributors regaining confidence. The smooth progress of the 2012-13 season confirmed that this strategy was well founded. New improvements such as increasing the number of GlobalGap certified companies, the investment by exporters in sulphuring infrastructures, and better planned logistics, showed the desire of the operators to uphold the industry's progress for the long term.

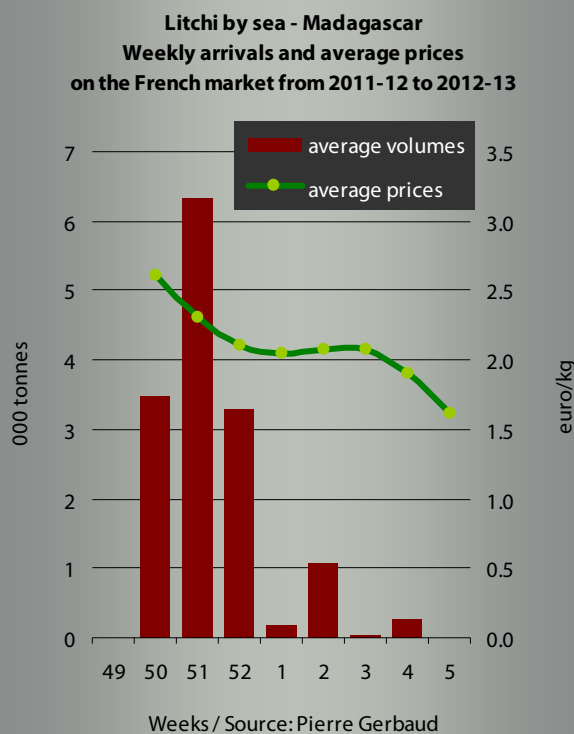
Commercially, the comparison of the price curves before and after the 2010-11 crisis speaks volumes. The two graphs proposed clearly represent the effects of the strategic modification adopted. In order to minimise volume peaks, early or late appearance of the seasons, etc., they were constructed based on averages.

While comparison of the two curves accentuates the reduction in volumes exported (going from 20 000 tonnes to 15 000 tonnes on average), and the concentration of the marketing season, it also reveals a clearly higher sale price profile for the last two seasons. True, the decrease in tonnages on the market represents a major factor in the rise in average prices. But was there another option for picking the industry up after the 2010-11 season? Does the reduction in volumes not also guarantee a better fruit sanitary quality, by means of slowing down the merchandise treatment and loading processes? In any case, the withdrawal of 5 000 tonnes between the two periods seems to have been richly rewarded by the economic results achieved.

2013-14 season: early and substantial production

Why change a strategy that works, and which has several times been hailed by the European authorities for the close relationship between exporters and importers, and the economic results achieved? The organisation in place for the past two years was indeed renewed with the unanimous approval of the operators concerned following on from last season.

The Tamatave Horticultural Technical Centre (CTHT), which monitors changes in litchi production in the various zones around Tamatave, confirmed this year the good distribution of precipitation over the last few months, and the rise in temperatures favourable for fruit-



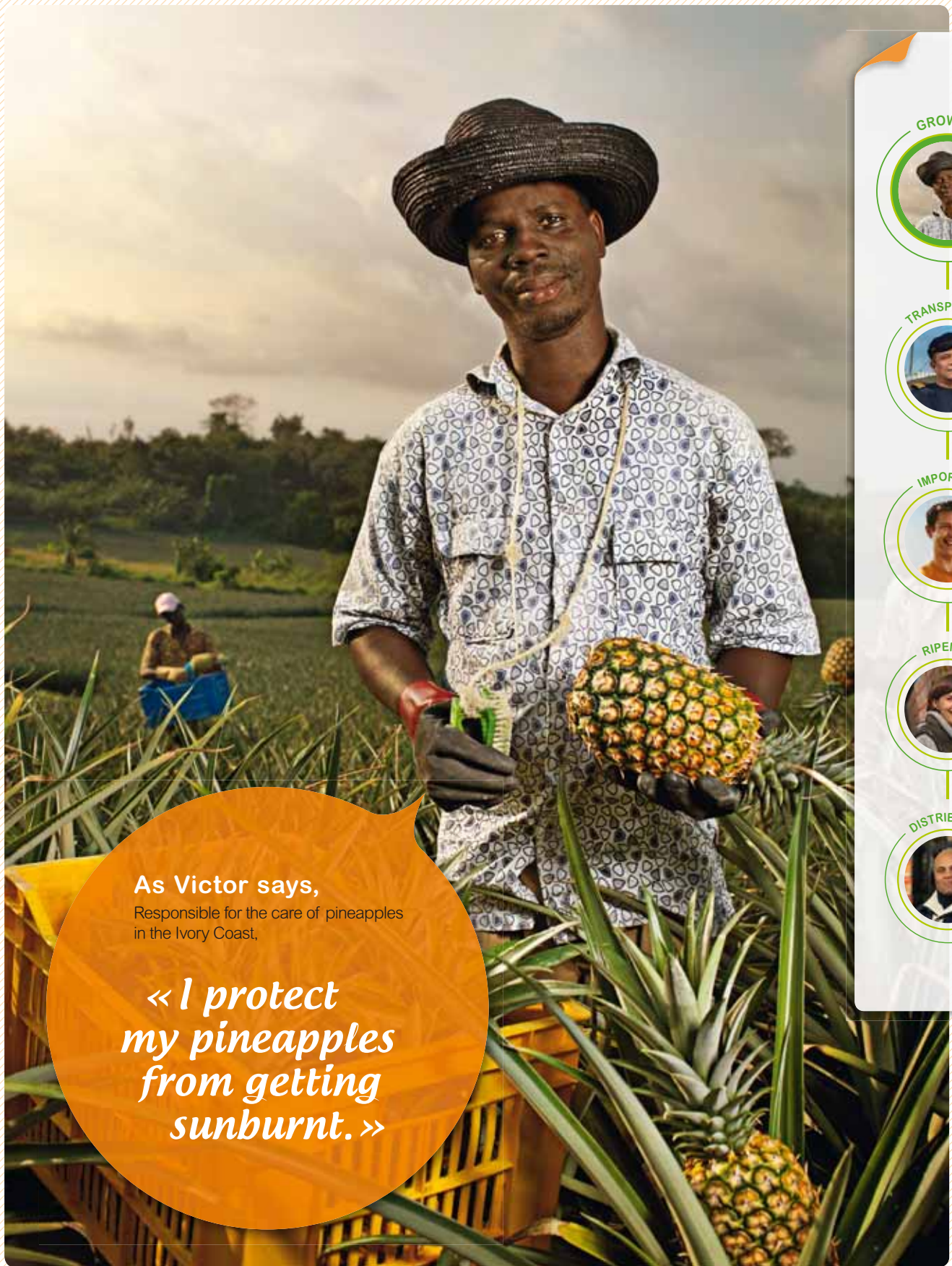
bearing. Consequently, the 2013-14 season should be as early as the previous one, a phenomenon fairly rarely observed. The fruit yield should be high, facilitating the availability of fruits for export. Based on this information, the industry operators have confirmed that the organisation will be similar to that of 2012-13. The air-freight season should start in week 45, to finish just before the first sea-freight shipments. Volumes should be more or less the same level as last year, namely around 500 tonnes. They could be slightly greater, given the lower production from Mauritius expected this year.

Regarding the sea-freight season, the scenario from last year is apparently to repeat itself, with two conventional shiploads each of 7 000 tonnes; they are set to arrive in Europe at the end of week 49 and beginning of week 51. These forecasts are still theoretical at present, since they depend on the official opening of the season by the Madagascan authorities. The predicted volumes will be able to supply the European markets for the end-of-year holidays. The container season would logically take over in January, with quantities of around one hundred containers (40").

In parallel with this organisation, operators have decided to step up the actions aimed at guaranteeing the safety of the fruits by means of monitoring for sulphur residues. Beyond this vigilance, assistance to the export companies should again be in place to provide technical support in the ongoing quest to improve litchi quality. Many companies that have already obtained GlobalGap certification are extending their procedures in order to qualify for Grasp certification (GlobalGap Risk Assessment on Social Practice), which aims to take into consideration the social environment of the litchi industry employees.

It is not uncommon for outside events to disrupt the Madagascan litchi marketing season. The history of the Madagascan industry is strewn with unanticipated factors (unfavourable weather conditions in Madagascar or Europe, transporters' strike, etc.) disrupting the planned organisation, but which are always overcome. The presidential elections in Madagascar, put back several times, will be held during this season (first round on 25 October and second round on 20 December). Here's hoping that they will not interfere with litchi exports made between the two ballots ■

Pierre Gerbaud, consultant
 pierregerbaud@hotmail.com



As Victor says,
Responsible for the care of pineapples
in the Ivory Coast,

*« I protect
my pineapples
from getting
sunburnt. »*



Victor, like all Compagnie Fruitière partners, takes great care of his pineapples because he knows how delicate they are. Just before harvest, he covers them with straw for several days to protect them from the African sun. Thanks to this he guarantees better maturity and optimum taste. We grow 50,000 tonnes of pineapples with the greatest care every year in the Ivory Coast, Cameroon and Ghana.

Compagnie Fruitière has more than 16,000 people working at various stages everyday to bring you the best fruit.

Like Victor, we love fruit.



**COMPAGNIE
FRUITIERE**

Content published by the Market News Service of CIRAD - All rights reserved

A report by
Denis Loeillet
and Thierry Paqui

Pineapple

Contents

- p. 32 **World pineapple market — Until when?**
- p. 41 **World processed pineapple market — A glimmer of hope**
- p. 45 **Producer country file — Costa Rican pineapple**
- p. 49 **Air-freight pineapple season in 2012-2013 — Stability, except for the quality**
- p. 53 **Victoria pineapple season in 2012-2013 — A quiet season**
- p. 56 **Sea-freight pineapple season in 2012-2013 — Volumes in moderation, for positive results**
- p. 60 **Size correspondence for shipments**
- p. 62 **World statistics panorama**
- p. 64 **Pineapple growing**
- p. 67 **The main pineapple varieties**
- p. 68 **Quality defects**

The pineapple market is mirroring the world economic outlook: very average. In this strange climate, where one frail and featherless swallow can a summer make, let's make an effort to find reasons to be cheerful. In his report below, Thierry Paqui shows us the way, with his somewhat reassuring analysis of import stage prices. He points to the improvements in the market situation in Europe over recent months. Yet he is not very optimistic either. In summary, it is more the absence of a major crisis than a long-term brighter period that we highlight in this report.



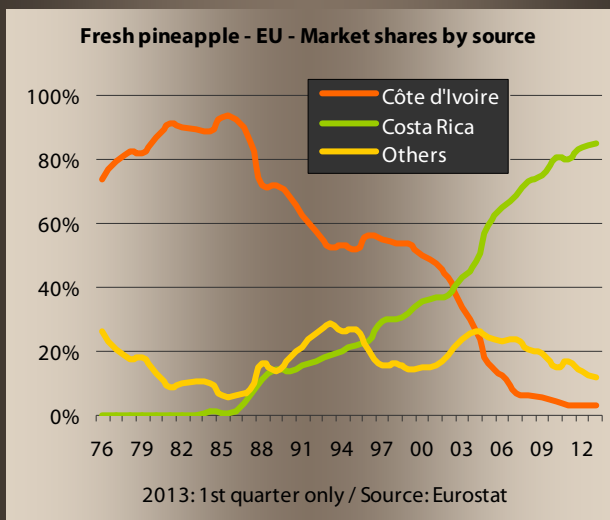
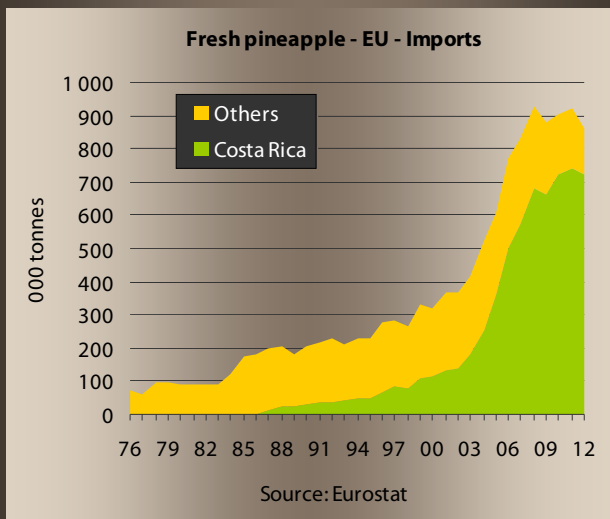
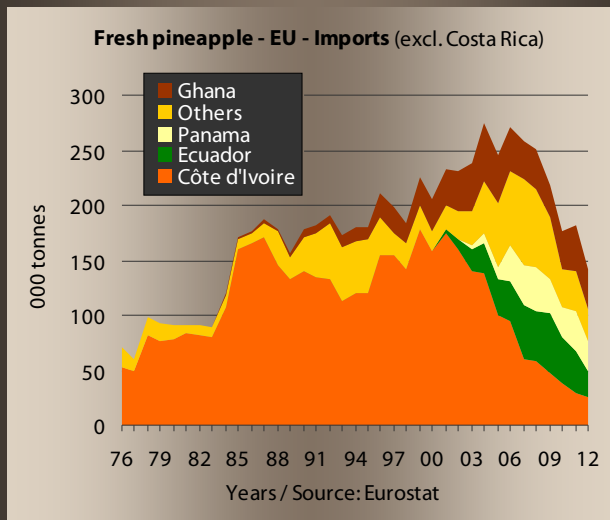


World pineapple market

Until when?



Let's not put a damper on our moment of pleasure. The pineapple market, particularly in Europe, is going better... slightly. Import prices have stopped falling, and the extreme volatility and nervousness of the markets have eased. Yet our satisfaction should be restrained, since this highly fragile and fortunate lull on the European pineapple market seems to be merely the result of a short-term fall in volumes on the market.



There should be no doubt that the pineapple market is still at the gates of hell, again. The original sin is unfortunately always the same: a structurally excessive worldwide supply. The equation is simple to resolve, yet it seems that only the vagaries of the weather or agronomic problems have the key to doing so. The strict parallel with the banana is also a useful one to draw, with the same causes always producing the same effects. More generally, both these products pose the problem of managing agricultural markets. The absence of market coordination or regulation is, for agricultural products, a major handicap to the smooth development of a market and to accurate and fair valuation of a product: a heretical thought in a world where deregulation, as the source of all progress, is a religion.

What do the world statistics tell us? Unfortunately, for the moment we need to make do with the 2011 data. They show a steep increase in world production: + 8 % from 2010 and + 11 % on the 2009-10-11 three-year average. Production is approaching 22 million tonnes, twice the figure in 1987. World fresh pineapple imports are precisely following the upward trend observed in production. The 3-million tonne mark was touched in 2011, the figure doubling in just eight years! The world processed pineapple trade (juice and tinned) is also contributing to the globalisation of this fruit. Four out of every ten pineapples produced find their way onto the world market, of which 68 % in the fresh sector (see inset). However, the reference to 2011 is not the best in our current market context. Indeed, it was another year of import growth. Yet this is no longer the case in Europe, unlike in the United States (see inset), a bottomless pit for the pineapple. So we should see the appearance in the FAO's forthcoming figures of a break in the trend, both for world production and for exports.

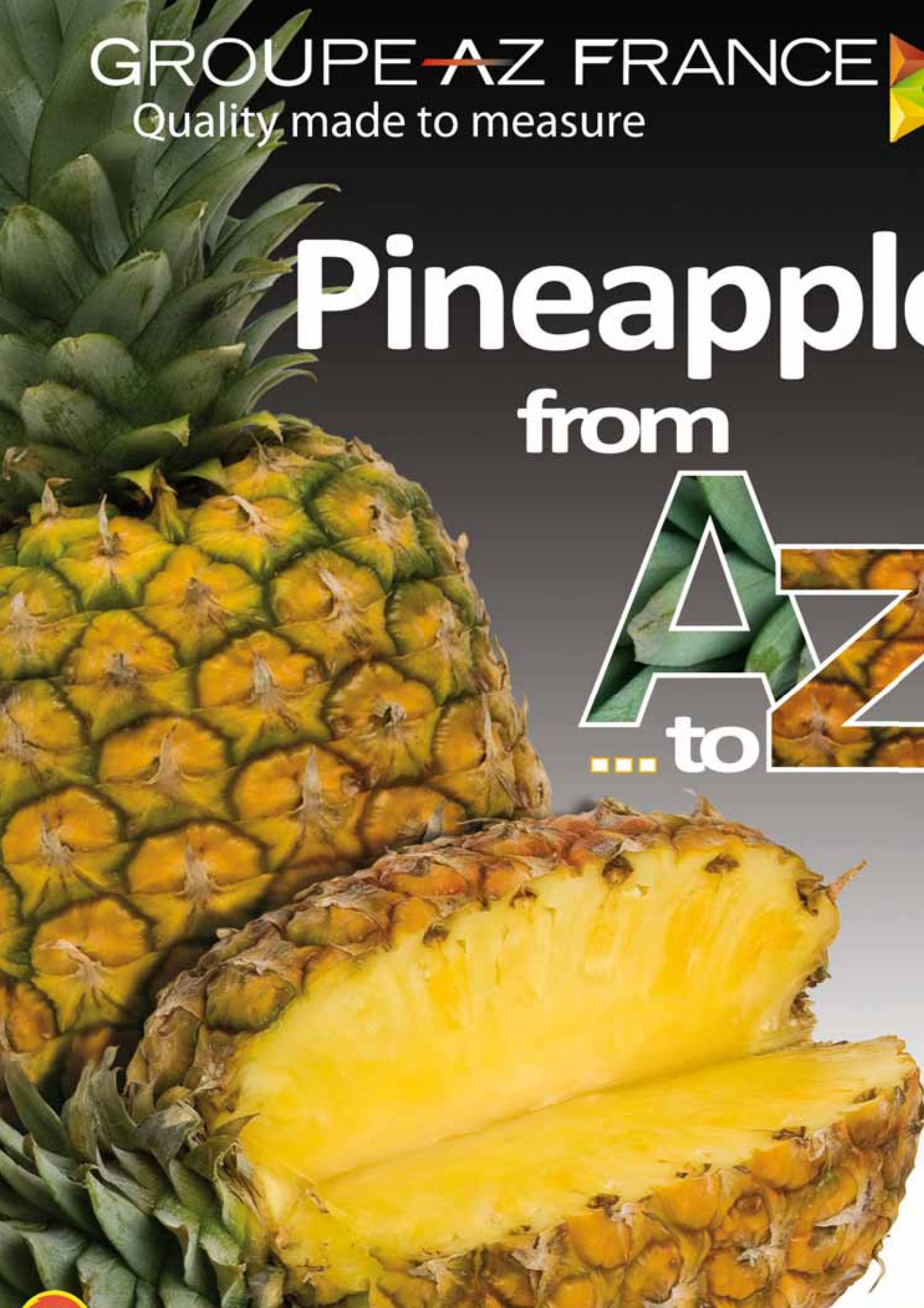


GROUPE ~~AZ~~ FRANCE

Quality made to measure



Pineapple from



AZ GRAND EST

AZ FRANCE - RUNGIS

AZ TOURAINE

AZ MED - CAVAILLON



Content published by the Market News Service of CIRAD - All rights reserved

Tel : 01 41 80 33 33

Tel : 02 47 49 30 30

Tel : 04 90 06 66 00

Fax : 03 87 57 56 51

Fax : 01 46 86 23 16

Fax : 02 47 29 01 84

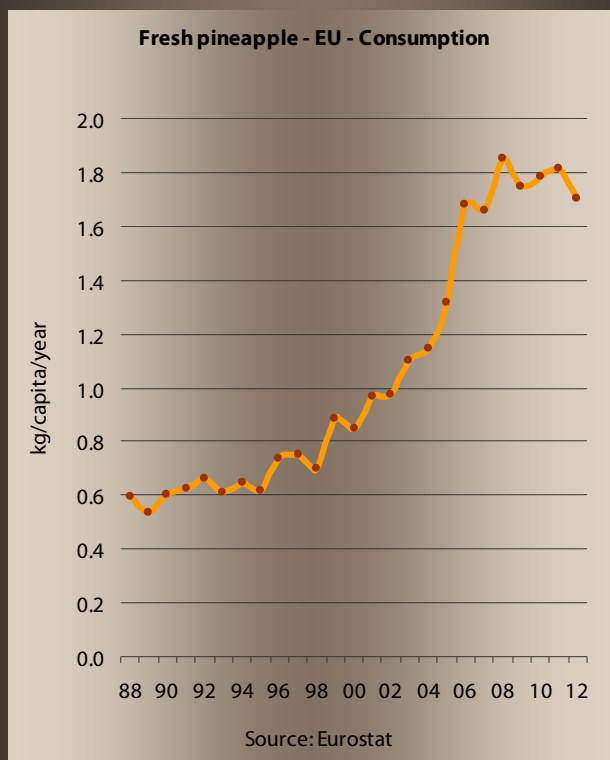
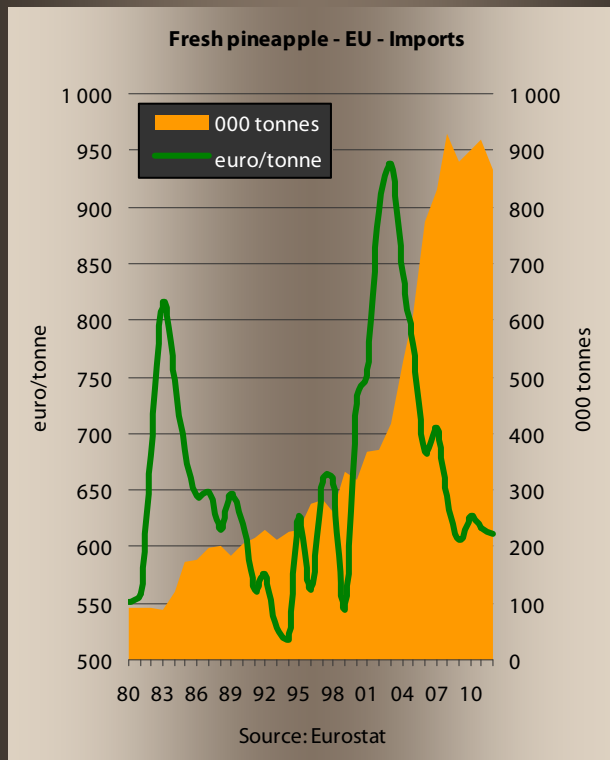
Fax : 04 90 96 66 16

E-mail : azgrandest@azgroupe.com E-mail : commercial@azfrance.fr E-mail : p.raguin@aztouraine.fr E-mail : azmed@azmed.fr

The flip side of the coin

True, the 2011 figures should be put in perspective, but we can only rejoice that a product has had such success, and in record time. The flip side of the coin is that as it has spread, this fruit has gone from the status of exotic fruit, with highly festive associations, to a commodity that forms a basic part of the shelves of many European supermarkets. Yet how could we imagine another outcome when the pineapple market already, for Europe alone, represents one fifth of the banana market, the undisputed number one import! The niche market has long since become a mass market, with all the attributes: low and highly fluctuating prices, a very wide (or excessively wide) quality range, highly disruptive spot supplies, deseasonalisation (excessive year-round presence), etc. This market languor is reinforced by what had originally got it going: the MD-2 variety. Del Monte's flagship pineapple from the mid-90s, and for more than a decade, it now forms the core of the range, often not very good, often not very presentable and too often unappealing. The sad and textbook story of a successful segmentation, so successful that the outsider has killed off the champion, the historic smooth Cayenne, to become the sole reference on the market.

It was a perfect crime until the uncontrolled distribution of the variety. Rather than distribution, we could talk about proliferation, or even swarming. As imitation is far more commonplace in the world than innovation, producers of all sorts (both very big and very small) hurled themselves onto the goose with the golden eggs. Except that, although MD-2 is not very complex to produce, Del Monte had long years of agronomic experience, and above all a packing, transport and distribution chain that left nothing to chance. Without even minimal technical control, the variety has slumped in terms of quality. The inflation of volumes mentioned above has of course accelerated this suicidal drift.





Costa Rica: in complete denial about overproduction

This explosion led to market volumes doubling in less than a decade in Europe, and in seven years for the United States. What was gained in terms of diversity of commercial players over this period was lost in terms of diversity of sources. The Costa Rican giant completely annihilated the competition. In 2012, it represented 85 % of the supply, on both the EU-27 market and the US market; making for complete hegemony from a source which, as we remarked, conceals an extremely heterogeneous set of situations within Costa Rica itself (see inset). The sector is highly varied. The national professional organisation, Canapep, comprises more than 1 300 producers, of which just 10 % are large to medium-sized. The majority of the planted surface area (65 %) is in the hands of independent producers who do not manage the export activity themselves.

Other sources have attempted to gain a foothold on the world market. We have lost count of the development plans, the big national schemes, and the ambitious projects. The end result: *veni, vidi but not vici*. Ecuador, which had very big ambitions, announced in March 2013 that the surface area dedicated to the pineapple had fallen by three quarters (source: Reefer Trends). There apparently remains just 1 500 ha of the 5 500 that Ecuador had at its disposal in 2003. Without exception, all the sources that used to supplement the Costa Rican supply have cut back their volumes to the EU. The situation is slightly different in the United States. Mexico, the number two

supplier with just a 6 % market share in 2012, has achieved its best year: as has Honduras (market share 4 %), continuing its slow progress. Ecuador is collapsing in the United States as it is in the EU. Panama, Guatemala and all the others have at best maintained their exports. As regards African sources to the European market, the situation is no better. As expected, Cameroon (no. 6 supplier) plummeted in 2012 and the trend was confirmed in the 1st half of 2013. Côte d'Ivoire seems to have halted its freefall. It maintained its place as the number 4 supplier, and made an upward leap in the 1st half of 2013. Ghana, the number two supplier ahead of Panama, found the path to growth again in the 1st half of 2013, after a lacklustre 2012. Among the more restricted sources, Benin (under 2 500 tonnes/year) is in the process of winning over the air-freight Sugarloaf pineapple market. At the bottom of the ranking is Togo, which on average is maintaining an export performance of 1 000 tonnes to the EU per year.

What goes up must come down

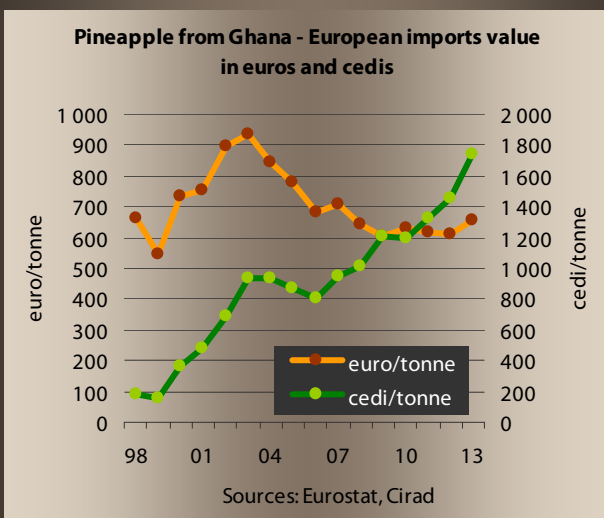
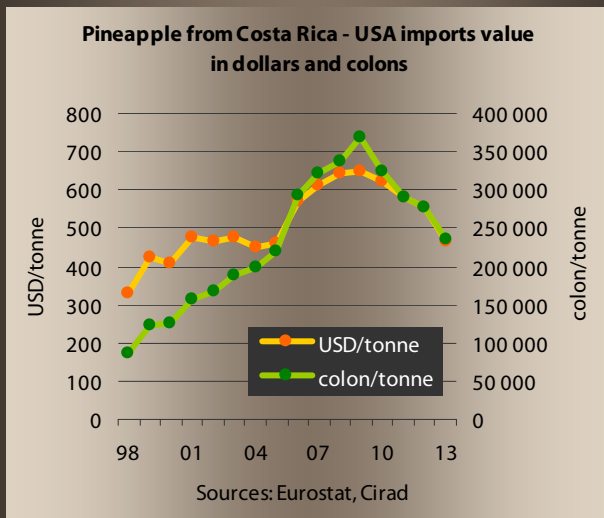
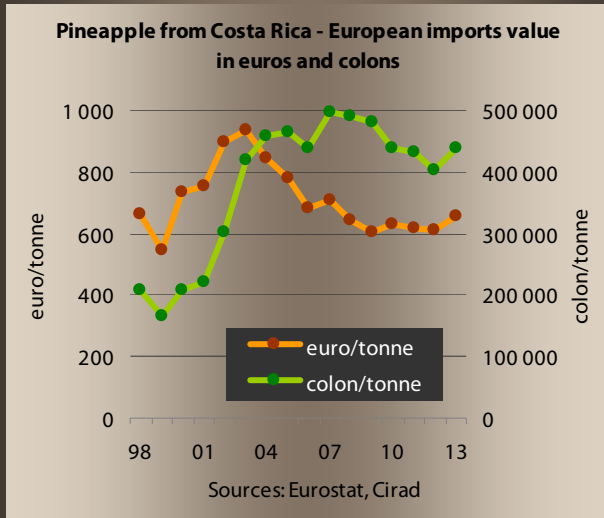
In more general terms, 2012 provided proof that what goes up must come down... except perhaps in the United States. Indeed, whereas the EU market shrank in 2012 by 55 000 tonnes (- 6 % on 2011), the US market continued to expand and not in a small way: it gained a staggering 13 % in volume! At the current rate of consumption, of around 925 000 tonnes, the million-tonne mark will be reached well before the end of 2013. Given the supply structure, it is Costa Rica which sets the tone. The supply went up by more than 16 % between 2011 and 2012. So as regards the EU, the situation is completely different. After reaching 919 000 tonnes in 2011 in a deteriorated market situation, we seem to be coming to our senses, back to a supply level of 850 000 tonnes, which seems better suited to the market absorption potential. Since 2008 the 900 000-tonne mark has been crossed three times; three times too many for the profitability of this industry.

The European consumption level is 1.7 kg per capita per year, down 100 g between 2011 and 2012. We should remember that it tripled in fewer than fifteen years, but the trend since 2008 has been for stabilisation. This average conceals a very great diversity between the Member States. In the previous pineapple report in **Fruitrop** (no.204, October 2012, page 41), we showed that we could not expect miracles from the new East European Member States. True, their consumption is growing, but they are starting from a long way down and their progress is very slow. Most of these countries consume just 300 to 400 g per year (at best), barely one third of a pineapple per capita per year.

High pressure on the margins

Further on in the report, Thierry Paqui reviews how the season has gone, and shows how the fall in the supply affected pineapple valuation in Europe. Overall, in terms of annual average, there is an apparent murmur at the import stage. The average price per box held up at 7 euros in 2012, and even gained 0.50 euro over the first nine months of 2013. Yet the novelty lies in the narrowing of the price range. The only price movements since 2012 have been within a band of 6 to 8 euros/box. As the German price movements graph shows, we are a long way from the range of 5 to nearly 11 euros/box of the *annus horribilis* 2011. The market volatility seems to be taking something of an upturn in 2013, though starting from a high average price (7.5 euros/box).

Nonetheless we cannot start celebrating: the scar has not yet healed. We can clearly see that the situation is fragile and is due to a welcome yet unplanned decrease in the supply, especially from Costa Rica, and to a US market which is driving or even carrying the global trend. We might also wonder whether things have gone too far there as well. The customs value in the United States dipped for the third consecutive year, while it stabilised in Europe. Since 2009, pineapples arriving at the US border have lost more than 100 USD/tonne in value, i.e. a fall of 16%! And the exchange rate effect has not given exporters a breather, because since 2009, in local currency, the revenue of the operators has fallen by one quarter. Yet the

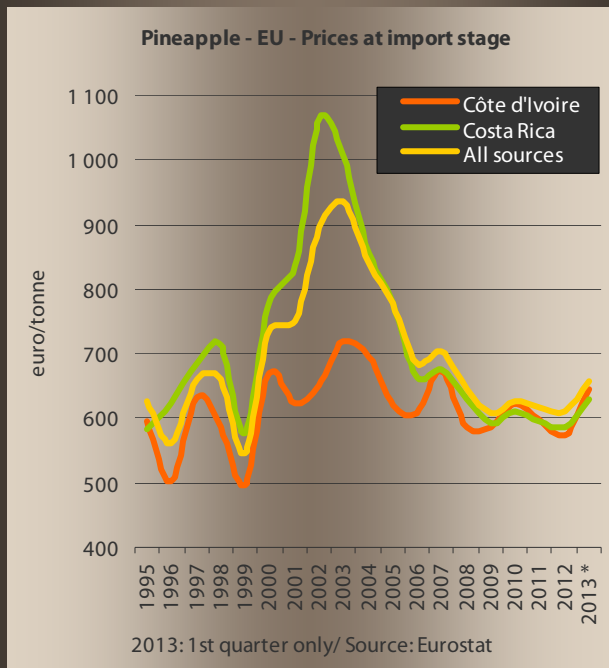




© Guy Bréhiner

price of the production factors has not fallen; quite the opposite! For example, fertilisers went up from an index of 204 in 2009 (index 100 in 2005) to 259 in 2012, i.e. inflation of 26 %, equivalent to the deflation on pineapple import prices into the United States. The scissors effect between cost and sale price is worrying. The same goes for energy, which over that period went from an index of 114 to 187 (source: World Bank). The spiralling production costs in Panama perfectly illustrate the pressure on the margins. Between 2011 and 2012, the production cost per hectare of pineapple increased by nearly 30 %, from 22 000 to 28 000 USD/hectare (source: La Prensa). It is virtually only the Dominican Republic that is still providing grounds for optimism. It has just announced development plans and planted millions of plants, more exactly 10 million, which equates to between 200 and 250 hectares (source: Reefer Trends).

And the Costa Rican producers will not find their redemption from Europe. True, prices in the national currency (colon) have stopped falling, even taking a slight upturn in 2013, but the situation remains highly precarious. In a memorandum released in 2012, analysts of the Costa Rican bank BCR drew a parallel between the appreciation of the colon against the dollar and the loss of profitability and competitiveness of the pineapple sector. The study even mentioned a probable relationship between the big fall in the number of exporters and this appreciation of the colon. Indeed, their number went from 144 in 2007 to 116 in 2011. In June 2013, a report by the Ministry of Agriculture drove home the point. According to the site Reefer Trends, of the



© Denis Szeftlik

350 companies inspected by the authorities, 150 are in big difficulties paying their debts.

The situation of Ghana is also a good example of the influence of the exchange rate on the valuation of export products; in this scenario we can note the beneficial effect of depreciation of the national currency against the euro. Since the early 2000s, the New Ghanaian Cedi has consistently lost ground against the euro. Between 2010 and 2013, it lost 28 % of its value. In turn, the Cedi equivalents of the EU import prices denominated in euro have soared by 46 %. This is clearly one of the reasons keeping this source in second position in Europe.

Furthermore, we cannot talk about pineapples without mentioning the problem of its environmental impacts, particularly those relating to the use of pesticides. We can mention for example the decision of two municipalities on the Caribbean coast (May 2012) to prohibit extension of pineapple surface areas on their territory, or also the accusations raised by residents around the plantations (near Limon) about water pollution and the increase in fish mortality (July 2013). The poor working conditions of the labourers are also regularly pointed out by the NGOs, e.g. in 2010 by Consumers International. The sector is under close scrutiny, and must give its customers, whether distributors or consumers, guarantees of the high social and environ-

mental quality of export products. This is an obvious point in terms of the consumption markets, but it is far from shared by all the production zones. So we should watch out for the devastating effects of some unenlightened individuals who are gravely endangering a sector driving economic and social development.

Hasta la muerte without passing "Go"

Overall, the outlook is rather gloomy. The market has lost its rudder, and is moving in response to the supply pressure, i.e. the climate and agronomic vagaries, and to the comparative profitability of the operators, in which the exchange rate plays a considerable role. It seems that the European market is set up to absorb 800 000 to 850 000 tonnes per year. The US market seems to have also reached a limit of around 900 000 tonnes. At least in theory. In practice, there is nobody keeping count, and above all to close off the valves in case of flood. They can only resign themselves, and ride out the storm for the long haul, or at least until the weakest have been commercially sunk! ■

Denis Loeillet, CIRAD
denis.loeillet@cirad.fr

UNIVEG, YOUR DIRECT CONNECTION TO THE FIELD



UNIVEG Katopé France is a major actor of production, packaging, export, storage, ripening and distribution of fresh fruit and vegetables. Each of these services was established to preserve the quality and taste of its products. Specializing in exotic fruit, UNIVEG Katopé France offers all over the year pineapples of excellence.



UNIVEG Katopé France S.A.
15, boulevard du Delta | Zone Euro Delta | DE1 - 94658 | RUNGIS CEDEX | France
T +33 1 49 78 20 00 | F +33 1 46 87 16 45 | katopeintl@univeg.fr | www.univeg.fr

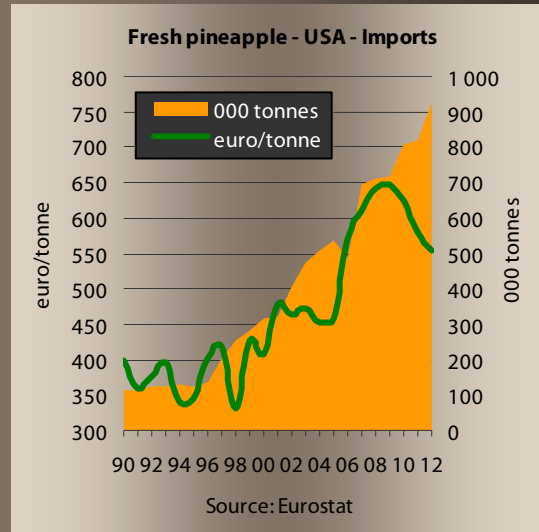
UNIVEG
KATOPÉ FRANCE

UNIVEG KATOPÉ FRANCE IS A MEMBER OF THE UNIVEG GROUP | www.univeg.com

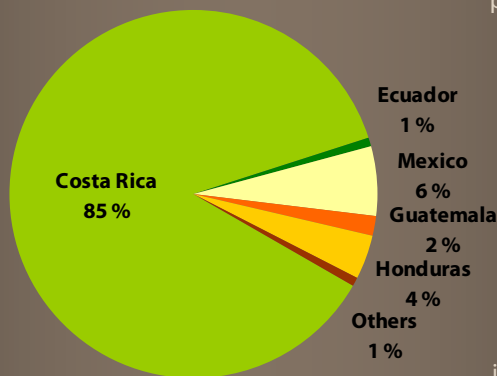
The pineapple in the United States: nothing to report... or just about!

The US pineapple market is in an immutable phase of normality, or even banality. Imports have once more increased in astonishing proportions: + 13 % between 2011 and 2012. This was the 6th consecutive increase, or even the 17th if we exclude the sole drop in 2006! The USA imported 925 000 tonnes of pineapple in 2012 and, if the average growth rate remains the same, we might even imagine that the million-tonne mark will be well-beaten in 2013.

So there is nothing new to describe on this market, which seems to be a bottomless pit. Its structure is still the same, Costa Rica confirming its hold with an 85 % market share. This does not leave much room for competitors, who in every case have left or are leaving the market, like Ecuador. Mexico is one of the few still showing some appetite, taking advantage of its proximity to the United States. Honduras is also trying to put up a fight. By the way, Thailand, the world number one in processed pineapple (juice and tinned), is now in 7th position

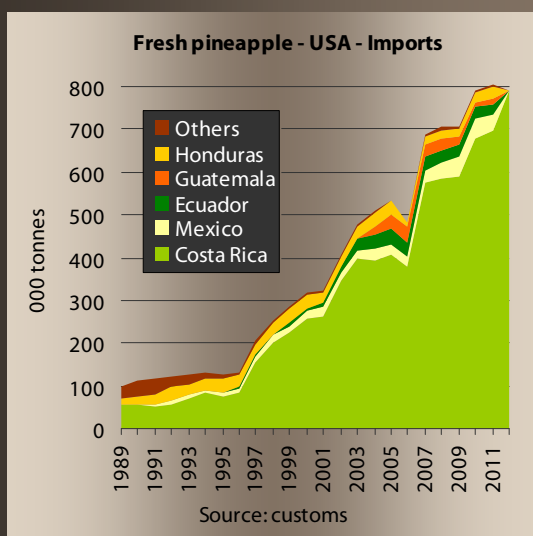


Fresh pineapple - USA 2012 imports



on the list of suppliers, shipping just 4 500 tonnes of pineapple to the USA per year.

This leaves us looking for the flaw in this seemingly well-oiled machine. The analysis of the import price movements could perhaps make us reconsider things from a less optimistic perspective. Indeed, the customs value fell once more in 2012 to 555 USD/tonne, i.e. - 4 %. This is a worrying fall from the high point in 2009: nearly 100 USD/tonne in three years, down 14 %.



Could the party be over? Nothing is less certain if we look at the regular increase in Costa Rican exports. By contrast, some producers are also encountering difficulties. What direction will Costa Rica take? One of two ways: either the producers still have some margin left for competitiveness and productivity, or we can expect a brutal purge in the years to come.

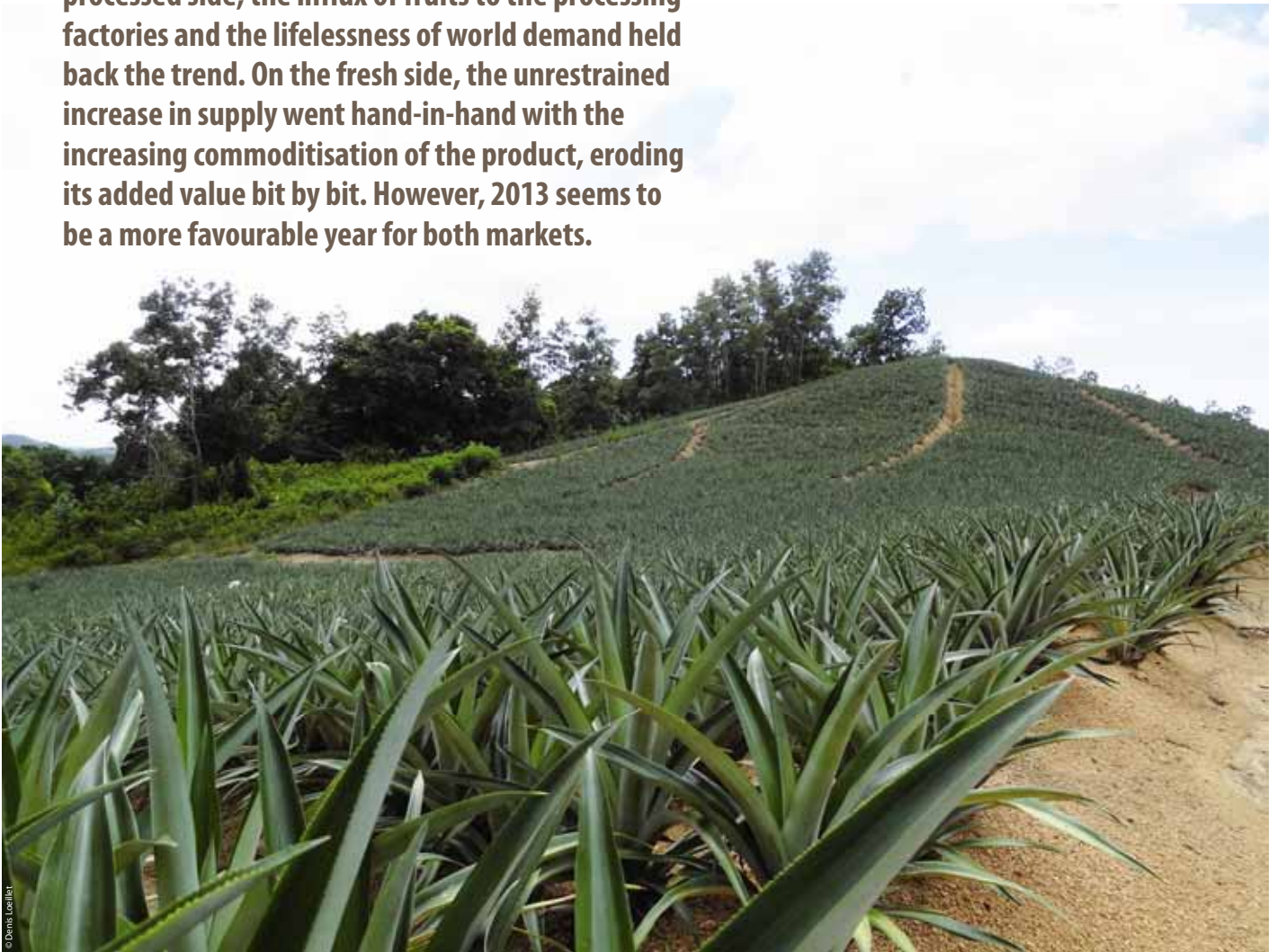




World processed pineapple market

A glimmer of hope

While the fresh and processed pineapple markets do not normally have much in common, in 2012 they went through the same adverse conditions. On the processed side, the influx of fruits to the processing factories and the lifelessness of world demand held back the trend. On the fresh side, the unrestrained increase in supply went hand-in-hand with the increasing commoditisation of the product, eroding its added value bit by bit. However, 2013 seems to be a more favourable year for both markets.



© Denis Loeffler



© Guy Bréhiner

World pineapple production is around 22 million tonnes, and has doubled in less than thirty years, with approximately 9 million tonnes of pineapple (fresh fruit equivalent) traded. There are actually two coexisting markets. Two thirds of trade volumes involve processed pineapple (tinned and juice), and the other third fresh pineapple. These two markets do not share many features. The industries are highly specialised, adapting to the type of product and to the geographic zones which feed world demand. In terms of processed pineapple, it is Asia which rules the sector, as it has done for decades. Thailand is the historical and central source. It dominates the tinned pineapple market, and consequently the concentrated pineapple juice market. The Philippines, Indonesia and China round off the world supply. Outside of Asia, we should point out the modest tinned pineapple production in Kenya, and the juice production in Costa Rica.

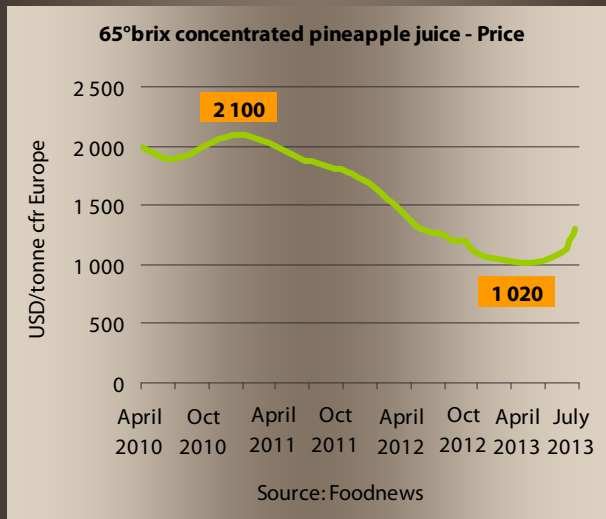
Speculation deciding the areas planted

The processed pineapple market is highly speculative. It is ultra-sensitive to the prevailing climate conditions in the Asian production zones; but not only to that. The supply, especially from Thailand, is highly dependent on the surface areas that producers allocate to pineapples. And these vary greatly from one season to another depending on the price at which the factories purchased the fruits the previous year. Indeed, the purchase price rockets when the

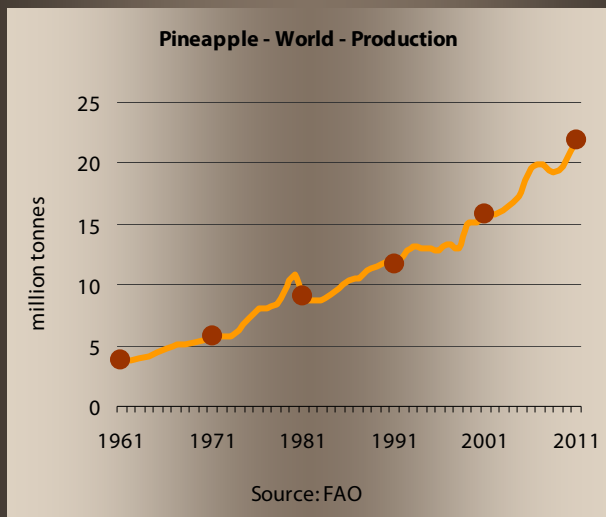
Pineapple — World production and imports

Tonnes	World production	Imports (fresh fruit equivalent)				
		Concentrate	Single juice	Fresh pineapple	Tinned	Total imports
Average 1969-71	5 462 915	2	145 681	160 356	738 502	1 044 540
Average 1979-81	9 775 626	3 042	342 317	365 493	982 024	1 692 877
Average 1989-91	11 689 890	2 339 951	285 578	586 423	1 477 140	4 689 092
2004	16 797 344	3 343 733	446 632	1 708 440	1 887 802	7 386 607
2005	17 669 013	3 172 337	491 517	1 962 746	2 043 130	7 669 731
2006	19 640 457	3 475 653	528 528	2 291 837	2 220 693	8 516 711
2007	19 896 781	3 382 326	565 334	2 523 201	2 144 925	8 615 786
2008	19 485 024	3 709 206	660 873	2 634 601	2 257 449	9 262 130
2009	19 488 256	3 679 461	663 814	2 557 583	1 790 225	8 691 084
2010	20 334 422	3 407 460	615 571	2 714 371	1 790 263	8 527 666
2011	21 865 383	3 588 030	630 292	2 918 151	2 104 146	9 240 620

Sources: FAO, Cirad

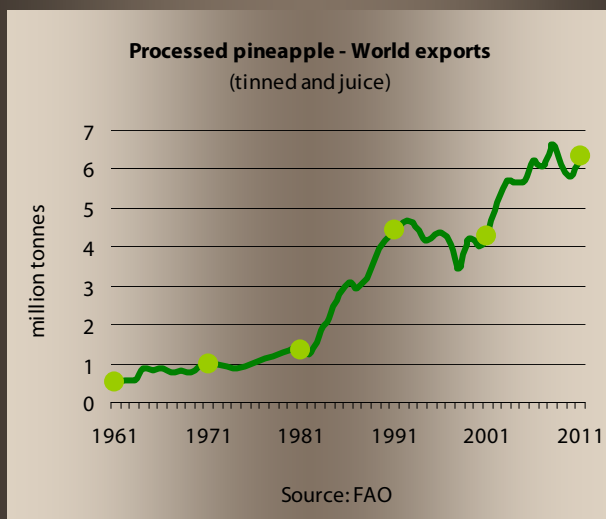


supply is limited, which naturally drives producers to expand their cropping areas: and the vicious circle begins. Finally, the market is greatly influenced on the demand side by the world economic outlook, and on the production cost side by the energy and metal prices for the tins. Furthermore, the market is also highly dependent on movements in exchange rates.



Thailand in trouble

At present we can say that the sector is in a delicate phase. The 2012 season was very bad. The harvest between April and June was particularly abundant. In Thailand, the government was forced to set up an emergency fund to assist thousands of producers affected by the fall in purchase price (4 THB/kg up to 8 tonnes per planter). This is a long way from 5 to 6 THB, the level reached in 2010 and 2011. This dramatic situation coincided with a lifeless international market and falling Thai exports. According to Foodnews, 2013 is confirming a return to normal, with purchase prices for Thai producers going back above 5 THB/kg thanks to a supply down to 1.7 million tonnes, as opposed to 2.2 million tonnes in 2012. Analysts are even more pessimistic for 2014, announcing a production of just 1.5 million tonnes. Prices on the international market have finally taken an upturn. One box of 24 x 20 oz tins is quoted at 10.5 USD FOB Bangkok. We are still a long way from the 14 to 15 USD/box of late 2011. The international rate for 65° brix concentrated juice is also looking better, peaking in July 2013 at 1 300 USD/tonne CFR Europe. Here too, we are a long way from the 2 000 USD reached in early 2011 ■



Denis Loeillet, CIRAD
denis.loeillet@cirad.fr



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
Unequaled 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 Tréviérs
FRANCE
www.vitropic.fr

Content published by the Market News Service of CIRAD – All rights reserved





Producer country file

Costa Rican pineapple

Sources: Canapep, Eurostat, Procomer



2 million tonnes exported per year! This iconic mark is within Costa Rica's grasp. If we extrapolate from the current trend, it will be reached by December 2013. It has been years since we exhausted the list of superlatives to describe the growth of the Costa Rican pineapple sector. By way of comparison, with these 2 million tonnes, the pineapple would reach the level of the banana export sector (2.1 million tonnes in 2012), in terms of both volume and value: approximately 800 million USD per year for both these sectors.

Pineapple from Costa Rica

Location

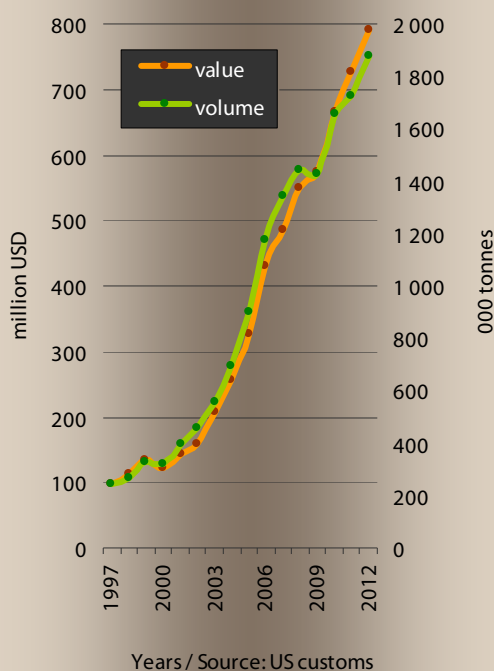
The plantations, which cover approximately 42 000 ha as opposed to 11 000 ha in the early 2000s, are primarily concentrated in three big production zones, divided between 16 regions:

- Northern zone: 21 575 ha, i.e. 51 % of the total;
- Atlantic zone: 11 675 ha, i.e. 28 % of the total;
- Pacific zone: 8 750 ha, i.e. 21 % of the total.

The Atlantic zone is the historical area of the crop's development, situated in the south of Puntarenas province. This was where Del Monte developed cultivation of the MD-2 on its vast industrial plantation Pindeco, situated near the city of Buenos Aires. The pineapple sector employs more than 25 000 people directly, and nearly 100 000 people in total.



Pineapple - Costa Rica - Exports



Production

The emergence of the Costa Rican pineapple industry is relatively recent, and closely linked to the name Del Monte. The first stage of its development was the establishment in 1978 of Pindeco, a cutting-edge industrial plantation dedicated to exporting the Champaka variety. Production reached 450 000 t by the end of the 1980s, and then levelled off since this variety, whose skin remains green when mature, did not manage to penetrate some major markets. The introduction on this same plantation of the MD-2 or Sweet pineapple, with its low acidity and suitability for sea freight, allied with the power of a multinational in terms of production and marketing structure, marked the start of an exemplary success story which has radically changed the world market. Production began to grow rapidly from 1996, to meet the brilliant commercial success encountered both in the United States and in Europe, approaching one million tonnes in the early 2000s. The official entry of this variety into the public domain in 2003 caused a boom in cultivated surface areas and exporters, both in Costa Rica (1 220 producers in 2008) and other countries in Latin America, Africa or Asia. There are now some 1 300 producers. Canapep consists of approximately 35 big producers, and one hundred medium-sized producers, with the rest comprising small producers. Of the total producers, 65 % are independent of the export facilities and 35 % are owned by exporters. The independent producers are organised in the form of cooperatives and associations.

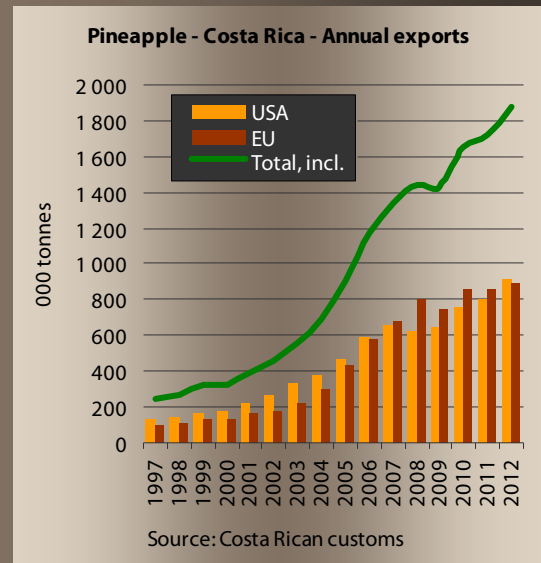
Pineapple from Costa Rica

Exports

Export volumes, which had grown gradually to 550 000 t in 2003, exploded to reach 1.4 million tonnes in 2008 and 1.9 million tonnes in 2012. Besides the slight drop in 2009, exports have done nothing but rise, beating an absolute record every year. At this rate, the two million-tonne mark will definitely be reached by the end of 2013.

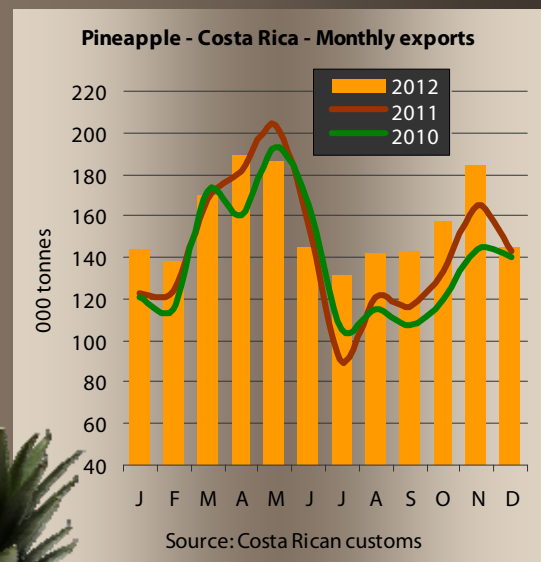
The export unit value was 420 USD/tonne in 2012, the same figure as in 2011. The counterpart in local currency (colon) fell between 2009 and 2012, down from 240 000 to 210 000 colons, whereas over the same period the customs value went from 402 to 422 USD/tonne. The end result: a 5 % increase in USD and an 11 % drop in colon!

Over the very long term, the division between flows to the United States and to Europe is stable. The United States absorbed 51 % of volumes (over the past twelve years), 48 % went to the EU and 1 % to the rest of the world. We should note that this latter category, which includes Russia, Canada and Turkey, has been on a significant upward trend over the past few years. Over the twelve months from September 2012 to August 2013, it absorbed 4 % of Costa Rican exports. There are 170 pineapple exporters and 72 big packing facilities.



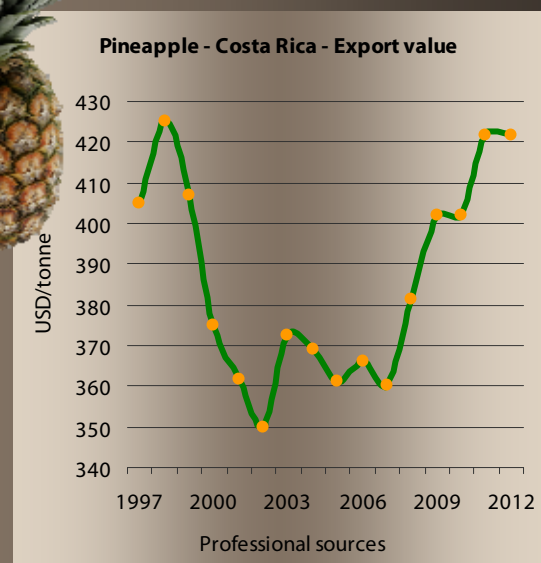
Pineapple — Costa Rica — Fairtrade prices				
USD/kg	EXW (Ex Works)		FOB (Free on board)	
	Conventional	Organic	Conventional	Organic
Minimum price	0.60	0.77	0.66	0.83
Premium price	0.05	0.05	0.05	0.05

Source: FLO October 2013



Logistics

The fruits are mostly (92 % in 2012) routed by land to the port of Limon (Caribbean coast), from where they are exported by special ships or containers to two main markets, the United States and the European Union (approximately 10 to 14 days to the EU for dedicated logistics). The port of Caldera (in the west on the Pacific coast) saw 8 % of the total exports pass through it in 2012. Very modest quantities pass via the ports of Paso Canoas (border between Costa Rica and Panama in the south-east of the country) and Peñas Blancas (border between Costa Rica and Nicaragua in the north-west of the country), as well as via Santamaria (airport of the capital San José).



Outlets

The vast majority of exports comprises fresh pineapples (99.9 %). Pineapple in tinned, dried or another form amounted to barely 1 000 tonnes in 2012, i.e. 0.1 % of the total.



Agropolis International is an association created in 1986 by French research and higher education institutions in Montpellier and Languedoc-Roussillon region that are totally or partly focused on **agriculture, food, biodiversity** and **environmental** issues.

Agropolis International—in addition to its role as an international scientific platform oriented towards Mediterranean and developing countries—is a forum for interactions between numerous stakeholders and open to all partners involved in rural and economic development.

Agropolis International is an original pivotal point for collective exchange and partnership building. Agropolis—4 key features:

A portal providing easy access to

- expertise and skills of the regional scientific community
- documentary resources

A place for building national and international partnerships

- hosting external laboratories of foreign organizations
- setting up programmes for visiting delegations and supporting international conferences and colloquia

A go-between and support for collective projects

- implementation, coordination and management of inter-institutional projects with national and international scope
- interfacing with agricultural and economic development stakeholders
- promotion of the regional scientific community

A service management tool

- assistance for guest researchers and professors (Euraxess Centre - Languedoc-Roussillon)
- organization of meetings, *in situ* and *ex situ* scientific events

together. With 47 associated members, including 28 scientific institutions, 5 local authorities and numerous rural and economic development stakeholders, **Agropolis International** is an original pivotal point for collective exchange and partnership building.





Air-freight pineapple season in 2012-2013

Stability, except for the quality

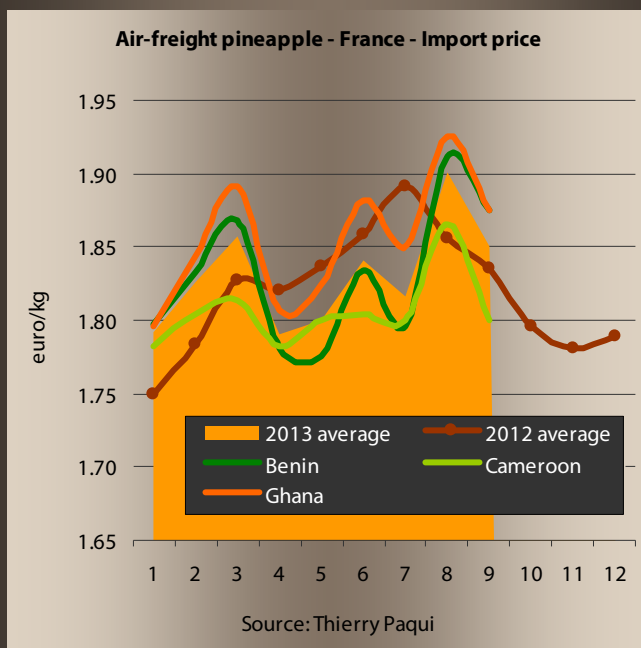


© Régis Domergue

The air-freight pineapple market owes its ongoing status as a rather lucrative niche market mainly thanks to the strict requirements in terms of quality and coloration from operators and purchasers. However, during last season, the quality was not always in place.



© Guy Bréhiner



The air-freight pineapple season investigated below is primarily about the changes in the smooth Cayenne supply from Benin, Cameroon and Ghana.

Once more, the fruits from Benin and Cameroon are those most often found wanting in terms of quality. This goes some way to explaining the sometimes wide price range observed for the same source at a given point in the season, with potentially great heterogeneity in fruit quality from one operator to another.

This last season was not marked by any particular incidents. It was rather quiet with fairly stable rates. Outside of these periods of stability, rises or falls in volumes contributed to fluctuations in rates. Nonetheless, fruits from Benin, when they achieved homogeneous quality, remained the most sought-after.

Weeks 40 to 50 (2012)

At the beginning of the season, the relative weakness of the pineapple supply helped rates maintain a good level. Demand, without being excessively high, managed to absorb the volumes on the market without difficulty. However, the balance remained fragile. Indeed, the temporary increase in the supply from Cameroon, with fruits of fairly average quality, quickly led to demand subsiding.

The dip in demand, beginning in week 45, continued until week 50, i.e. two weeks before Christmas. Although it was not large over this period, the supply remained highly heterogeneous from both Benin and Cameroon. The range of prices charged was very wide, varying from one exporter to another depending on the quality of the fruits offered. While in November (weeks 45 to 48) sales were lukewarm, with poor fruit condition, in the run-up to the end-of-year holidays a slight improvement was observed in demand and quality.

Weeks 51 (2012) to 14 (2013)

Week 51 was marked by a pick-up in sales and stronger rates, which held up until the end of the first week of April 2013. Closer to the end-of-year holidays, the quality of the fruits received was improving, and in parallel the supply was not as large. Some occasional concerns were still found with the coloration and durability of fruits from Benin and Cameroon. However, the shortage of the overall supply, which was not

sufficient to fully cover demand, contributed to strengthening prices.

At the beginning of the year, the supply, usually smaller after the holidays, kept shrinking until late March. Despite quality still slightly wavering, rates remained strong, since the supply available could not satisfy all the purchasers. Hence it was more the supply shortage rather than demand being in really good shape which contributed to the price levels holding up in the first quarter of 2013.

Weeks 15 to 22

The operators hoping to achieve good sales over Easter got nothing for their pains. The supply increase in anticipation of the holidays failed to generate good sales. The bad weather (cold and snow) did not favour trips to the supermarkets or specialised shops. After Easter, operators were left with rapidly growing volumes of fruits which nobody wanted. So we saw demand subside and prices dip between weeks 15 and 23. In order to get their stocks moving, operators did not hesitate to cut several batches to ASP (after-sale price), or even charge clearance prices, all in order to patch up the market situation. It has to be said that the quality problems due to the rains in the production zones did nothing to facilitate marketing batches whose coloration and durability left something to be desired.

Weeks 23 to 26

In June, several factors contributed to making the air-freight market buoyant. Firstly there was the



fall in pineapple shipments in anticipation of the beginning of the seasonal fruits season, and then came the late start of the stone fruits season, whose prices, at least initially, were fairly high. This revitalised sales and rates, despite the quality problems which continued to affect shipments from Cameroon and Benin.

Weeks 27 to 35

In July and August, the availability of seasonal fruits at more affordable prices forced operators to adapt their air-freight pineapple volumes. The supply was especially straightforward to sell as the imports placed on the market were restricted and of relatively good quality.

Weeks 36 to 39

The last month of the season (September) coincided with the imports picking up, yet without demand really switching to the pineapple. The quality of fruits on the market was decent, but no more than that. The rain in certain production zones was affecting the fruits, which sometimes lacked coloration. Several operators had to reduce their imports. At the end of the season, the air-freight pineapple market was suffering, like most markets, from the ailing demand ■

Thierry Paqui, consultant
paqui@club-internet.fr

What future for the Sugarloaf?

The recent setbacks, dropping rates and lack of interest from the operators, for a fruit hitherto selling well, are striking for their duration and their impact on the product image.

The air-freight pineapple market remains dominated by smooth Cayenne exports, which represent more than 80 % of trade volumes. However, for some years Sugarloaf exports have been growing. The Sugarloaf pineapple is recognisable for its highly specific conical shape. Depending on the sources and production centres, the fruit has the particularity of remaining green even when mature. Highly prized by some consumers for its organoleptic qualities, it can most often be found from specialised exotic fruit dealers. Importers have managed to position the Sugarloaf in a little niche of the air-freight pineapple market, enabling them to get good value for it. Yet since late June, a clear deterioration has been seen in its market conditions.

Nearly all the sources supplying the air-freight market have tried with more or less success to export Sugarloaf. Among these we can mention Benin, Cameroon, Ghana, Guinea and Togo. With the exception of shipments from Benin, which have seen a regular rise, those from other sources have remained fairly restricted. The growth of volumes from Benin can be explained by a more consistent quality, and above all by the fact that its fruits are coloured, unlike those from Ghana, which also exports regularly. This makes a difference on a market as selective as the air-freight pineapple market, where consumers expect to find fruits that are coloured and ready to eat. However, a niche market by definition remains a fairly narrow market with a limited margin for growth.

Until now, the moderate supply of Sugarloaf from Benin made for better value than with the smooth Cayenne. The steep increase in this supply at the beginning of summer 2013, when demand usually focused on small exotics was switching to seasonal fruits, caused a great deal of harm to the fruit's image. Despite falling demand, the operators did not manage to stop the substantial shipments of Sugarloaf. So the market was flooded with fruits whose quality kept deteriorating. Hence the operators had to resort to very significant price cuts, or even selling at ASP (after-sale prices) in the hope of getting their stocks moving. The fruit, which usually sells on a basis of between 1.85 and 2.00 euro/kg, was being offered at prices as low as 1.60 or even 1.50 euro/kg.

Many consumers, disappointed by the quality of the fruits offered, abandoned the Sugarloaf, while demand was hesitantly picking up on the air-freight market. The lack of interest continued until the end of the season, as not only did the supply remain too large for demand, but the quality was no longer homogenous. Good fruit quality (no internal defects, good shelf life), their fresh appearance and the right match between supply and demand remain prerequisites for developing a niche market and maintaining a good level of revenue. We must simply hope that the operators realise this in time to save a hitherto buoyant niche.



photos © Guy Bréhiniér



Victoria pineapple season in 2012-2013

A quiet season



The Victoria pineapple 2012-13 season was relatively quiet. It is still considered a primarily festive fruit by operators and purchasers, hence it sold best during the end-of-year holidays. It is a relatively limited market, which struggles to reach 3 000 tonnes.

© Guy Bréhinier

During last season, demand for Victoria did not see any real periods of frenzy. It remained in line with the supply, maintaining some degree of fluidity in its sales and rates. However, several operators lamented the delays or difficulties encountered in promoting Victoria for the festive periods. These problems were reportedly due to demand, which since the 2008 crisis, has seemed to indicate consumers waiting for the last minute to make their holiday purchases.

Hence the supply, which did not see any periods of very large-scale procurement or shortfall, contributed to maintaining some degree of price stability throughout the season.

Mauritius and Reunion were the main sources which supplied the markets. The prices paid at the import stage for these two sources remained good, though last season confirmed that the Reunion supply had some degree of superiority. Although smaller in volume, it is often rated to be better quality than the Mauritius supply, with its relatively small volume also enabling it to get better value on the market.

The wholesale markets and specialised traders remained the main outlets of the Victoria. Demand continued to favour sizes 6, 7 and 8, which were less available and more valuable. Over the whole season, average rates at the import stage fluctuated between 2.85 and 3.50 euros/kg for Mauritian fruits, and between 3.30 and 3.85 euros/kg for Reunion fruits.



Weeks 40 to 48 (2012)

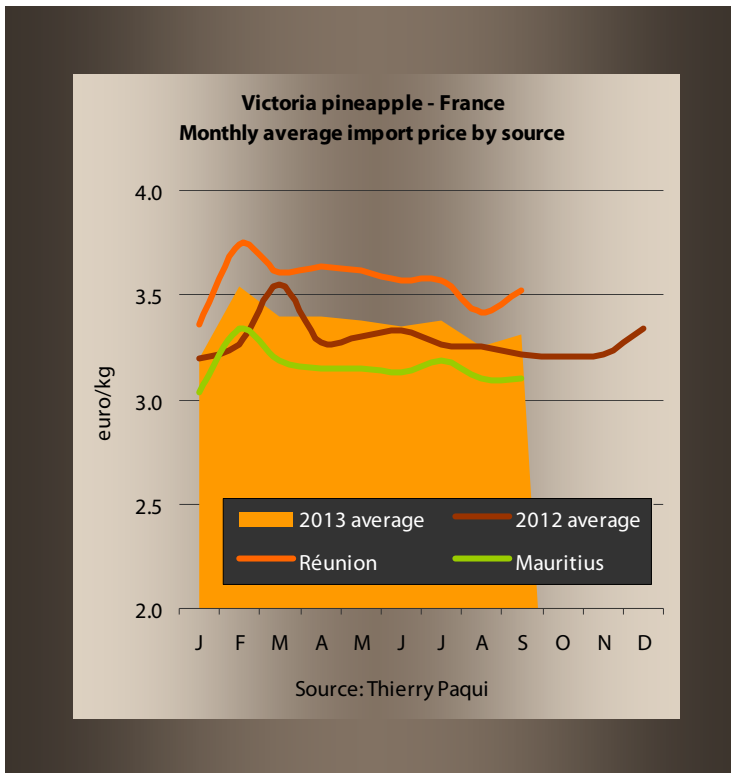
Weeks 40 to 48 marked the beginning of the season. Although this period coincides with the end of the stone fruit season, demand was still late in switching to small exotic fruits. The supply, which had hitherto been limited, was increasingly substantial, especially from Reunion. Sizes 6 and 7 were in short supply, and were particularly sought after. Nonetheless, despite the relative weakness of sales, rates remained stable.

Weeks 49 to 52

In December, demand was still slow in getting going. The operators were showing some concern, since they were struggling to clear all of their stock from one week to the next, while rates remained stable. Sales were proceeding as per usual, with no real desire to promote the fruit for the end-of-year holidays. The operators feared that the volumes expected in anticipation of the festivities could end up being sold off at low prices to avoid market saturation. Fortunately this was not the case. Indeed, after the first half of December, there was a revival in the market and demand, previously lifeless, picked up again. Rates rose to peak in the last week of the year.

Weeks 1 to 12 (2013)

From the beginning of the year, demand and supply subsided. As is often the case after the holidays, the operators abandoned the Victoria. Nonetheless, the rates did not drop, and remained stable since the supply was in line with the weak demand.



The winter holidays period, which generally brings about a slight downturn in demand, was marked by a fall in supply which continued from week 6 to week 12, with some operators even struggling to re-stock. Nonetheless, demand was not very high, and just barely managed to absorb all of the small volumes on the market week after week.

Weeks 13 to 22

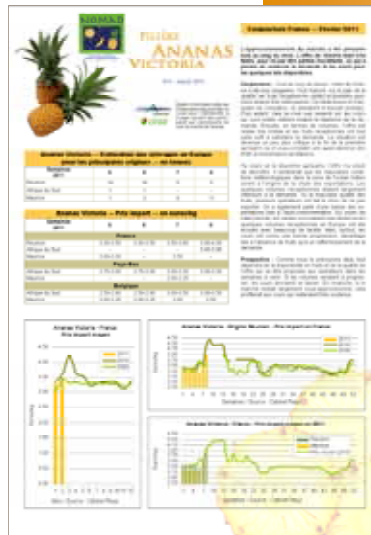
The Easter sales were not very dynamic. The operators noted the lack of interest in the fruit from purchasers. However, prices maintained a fairly good level during weeks 13 and 14.

During the period that followed Easter, prices were very high and demand fell considerably. We can also point to the quality concerns (internal brown stains) which affected Reunion fruits, forcing operators to reduce their supply pending better-quality shipments. This reduction in imports, which could no longer manage to satisfy demand, partly explains the high prices charged in April. It was Victoria pineapples from Reunion, more sought after but less available, which made the best of the situation to obtain the best market prices.

The fall in the supply continued in May. Indeed, in anticipation of the start of the summer fruits season, operators began to further cut their imports. However, because of the lifeless demand, they had difficulties clearing their stocks from one week to



Nouvel Observatoire des Marchés Agricoles D'outremer



NOMAD Ananas Victoria (‘Victoria’ pineapple)

A market information bulletin (in French) is available on the ODEADOM website:

http://www.odeadom.fr/?page_id=741

This bulletin was prepared by CIRAD for ODEADOM



the next. Despite the lifelessness of demand, rates did not fall, due to the overall supply shortage.

Weeks 23 to 39

The lateness of the seasonal fruits had no effect on demand, which remained fairly low throughout the summer. During weeks 23 to 35, the Victoria supply kept shrinking. Several specialist Reunion operators began their melon season from the same source. In July, despite the weakness of demand, prices were very strong, above all for Reunion produce, though these sales involved only a limited number of fruits.

At the end of the season (weeks 36 to 39), despite the operators returning from their break, demand remained limited without the prices being affected. Indeed, they even saw a slight rise at the very end of the season, more due to the shortage of the overall supply than to demand being in good shape ■

Thierry Paqui, consultant
paqui@club-internet.fr



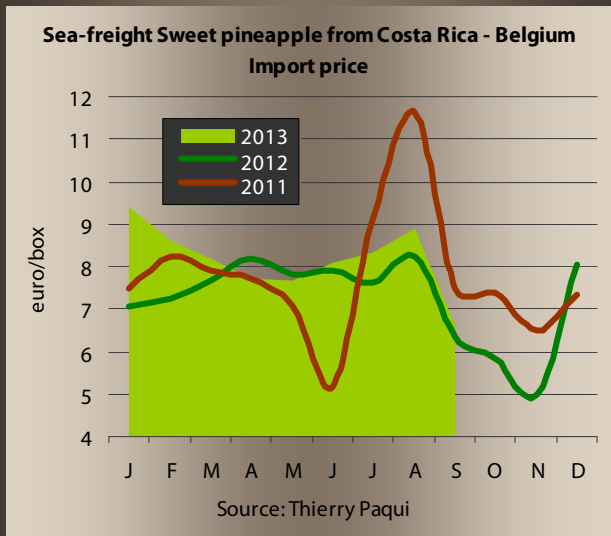
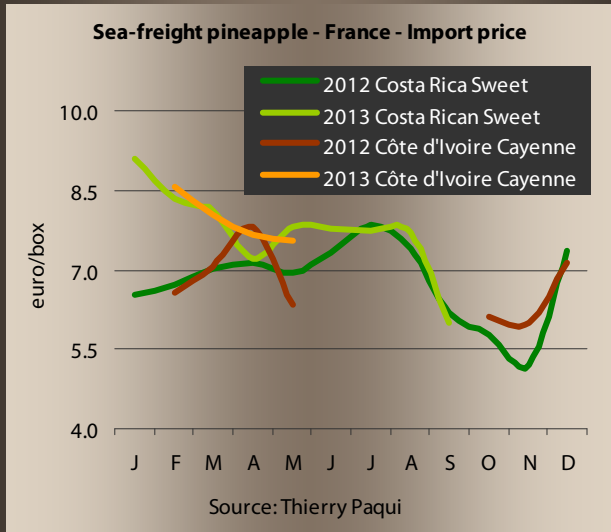
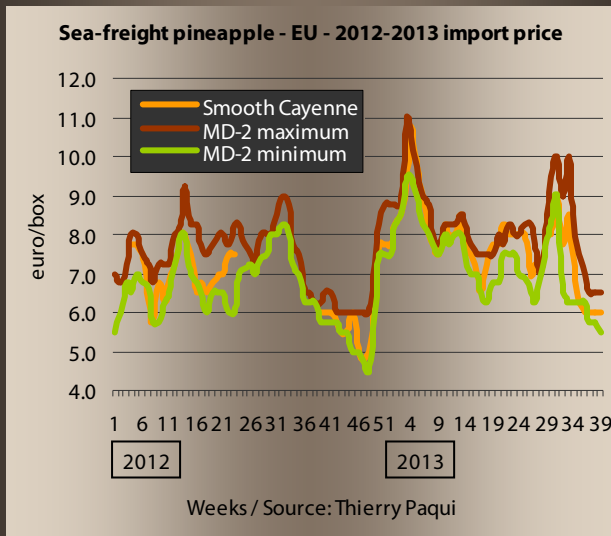


Sea-freight pineapple season in 2012-2013

Volumes in moderation, for positive results



Despite a very difficult start, the sea-freight pineapple season for the past twelve months (October 2012 to September 2013) provided rather positive results. The price fluctuations were not as great as in previous seasons. Last season confirmed an opinion widely shared by operators: the European pineapple market is not infinitely extendible. Hence when volumes on the market are not excessive, the operators still manage to maintain some degree of rate stability.



Once more, it was the Sweet imports from Latin America which set the tempo for the sea-freight pineapple season on the various European markets. Periods when the supply was too great, if not excessive, gave rise to steep price drops, as during previous seasons.

Big distributors for big volumes

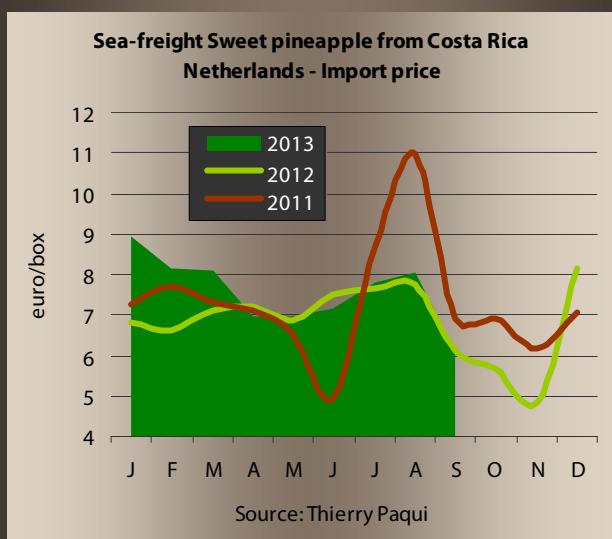
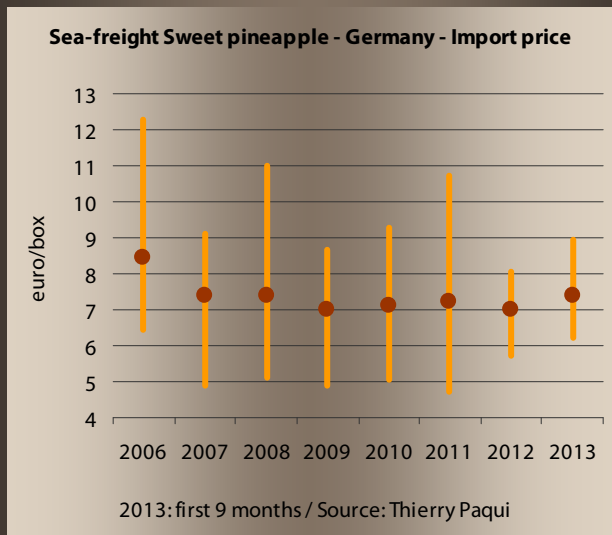
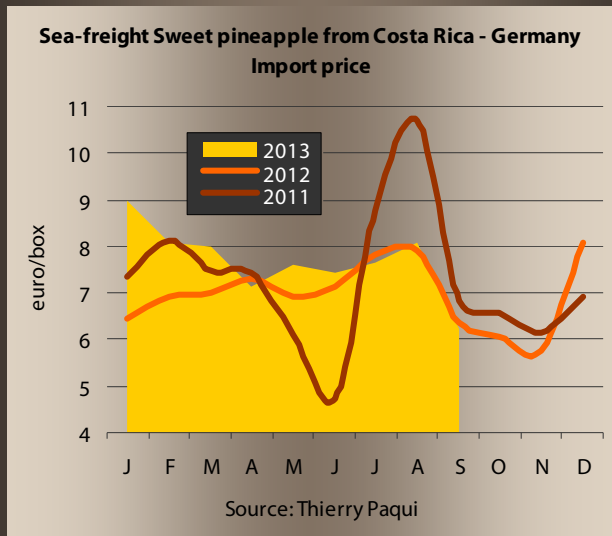
Last season also confirmed, many times over, the ever less important role played by the wholesale markets in the sale of Sweet. For several years, it has been the supermarkets and discount supermarkets which have sold off increasingly substantial volumes on the market in Europe. Without the assistance of the network of distributors of these big names, even for the most highly regarded brands, it becomes massively complicated to market big volumes, as we could observe several times over in late 2012.

The promotions organised by the supermarket sector help manage and absorb the very large Sweet supply, particularly of Costa Rican origin. Participating in these promotions forces operators to optimise their management of the volumes to market at certain points in the season, in the knowledge that outside of these promotions the margin for manoeuvre to sell off the volumes is not all that great. Indeed when demand shrinks, as was the case during last season, operators whose suppliers keep to the planned volumes, within pre-set programmes, are those with the least trouble in clearing their stocks. This is even truer for those selling small brands, since when the market conditions are more difficult, they are very quickly forced to loosen up their prices, as they still lack networks for clearing their excess fruit.

Natural flowering governing the market

While the 2012-13 season was relatively good overall, it was mostly thanks to the Sweet supply from Latin America being smaller overall than predicted for several consecutive weeks. Indeed, the natural flowering in Costa Rica, which had been very big in the last quarter of 2012, led to a clear decrease in the supply to the European markets in the first half of 2013. The harvest of fruits from natural flowering cannot be scheduled, as is the case with forcing, in which uniform and immediate flowering of the plants is artificially induced using products such as ethylene or ethrel. However, once the plant has borne its fruit (natural or induced flowering), we need to wait for the next cycle before we can harvest again; which explains the production falls fol-





lowing major natural flowering periods. We also need to consider the good shape of the North American market, which absorbed more fruits than predicted. So Latin American exporters did not have to take their usual measure of diverting to European markets excessive volumes out of step with demand.

The convergence of these various factors meant that the supply was more in line with demand than in previous seasons. Hence average prices of MD-2 at the import stage remained stable, at between 6.30 and 8.00 euros/box. True, there was a very difficult period with lower prices, but also relatively long periods where the average rates held up at between 8.00 and 9.00 euros/box, with peaks above 9.00 euros.

What place for Africa?

The supply from Africa also saw some adjustments. The leading African Sweet export group halted its exports from Cameroon during the season. Indeed, despite its efforts, it failed to overcome the agro-pedological problems preventing it from achieving the quality level of its produce from Côte d'Ivoire and Ghana. Thus the Cameroonian Sweet supply will fall, along with the African supply as a whole, since exports from Cameroon will in future mainly comprise smooth Cayenne routed by air-freight.

The sea-freight Cayenne supply from Côte d'Ivoire remained highly restricted. Furthermore, it was because these exports are aimed at a very small niche market that they were able to continue throughout the season. The reduction in the Cayenne supply also helped ensure uniform quality of the batches.

Weeks 40 to 48 (2012)

In early October 2012, various promotions helped ensure some degree of sales fluidity. Unfortunately, from week 42 the steep increase in the supply led to demand subsiding and rates following a downward spiral. Indeed, demand was at a standstill in the United States, occupied by the Presidential elections and then hit by Hurricane Sandy, until the end of November. So it was quite natural for the Latin American operators to focus on the European markets. The influx of such large volumes, well above the pre-set programmes, was detrimental to all the operators, who could no longer manage to sell off the fruits in their possession. Despite a clear drop in rates, stocks remained large and sales at ASPs (after-sale prices) proliferated. During this critical period (weeks 42 to 48), the big brand



© Régis Domergue

batches were in the same boat as small brand batches, which therefore were subjected to even greater pressure. Prices fluctuated from 4.00 to 7.00 euros/box. The Cayenne supply, for its part, still restricted, managed to stabilise at between 5.00 and 7.00 euros/box.

Weeks 49 to 7 (2013)

The considerable fall in supply between weeks 49 and 52 helped heal the market and also stabilise prices. Above all it was the steep fall in supply rather than better demand which enabled rates to pick up for Christmas (from 6.50 to 9.00 euros/box).

At the beginning of 2013 (weeks 1 to 7), the fall in volumes continued. From late February, operators knew that they would not have enough fruits to adhere to the promotion commitments for the Easter holidays. The supply was not only limited, but also unbalanced, with few large sizes. Demand, without being exceptional, was however greater than supply, enabling operators to raise their prices significantly, to between 7.00 and 12.00 euros/box depending on the size! The few Cayenne batches on the market also enjoyed the rise in rates, selling at between 8.00 and 10.00 euros/box. The Cayenne supply was so restricted that it was available for only three weeks at the very most.

Weeks 8 to 28

Around the end of February, confirmation was received that the Sweet supply would be small during the following months. This period (weeks 8 to 28) was marked by relative price stability on the European markets. Fewer fruits than predicted were received for Easter, without it affecting demand. Consumers, hindered by the adverse weather (cold and snow) that battered Europe, did not make many trips to the supermarkets. The supply was temporarily bigger after the Easter holidays because of the poor weather which had delayed the ships. Thanks to the promotions, the situation did not deteriorate. The operators without promotion programmes had to cut their prices slightly to avoid having to manage large volumes. The confirmation by Latin American producers of practically zero natural-flowering fruits ended up stabilising the rates and demand. The lateness of the seasonal fruits and their high prices enabled promotions to continue boosting pineapple sales in the supermarkets.

The Sweet batches sold at between 6.00 and 9.00 euros/box, depending on their sizes and availability, whereas Cayenne batches, still very limited, traded at between 5.00 and 9.00 euros/box.

Weeks 29 to 39

From late June, the Sweet supply was unbalanced by the abundant presence of small-size fruits, while demand was focused on large-size. Volumes fell further during the summer to adapt to the usual weakness of demand during this period. With a good many operators starting their break, demand shrank further. While that had no real consequences on the market and prices between weeks 29 and 35, this was not so from week 30 to week 39. The supply, still unbalanced, started to rise in anticipation of the new school year. Unfortunately, demand did not follow suit, and the markets had trouble absorbing these volume influxes, despite the launch of some promotions. At the end of the season, the markets were saturated with fruits that nobody wanted. The quality problems (batches developing badly) intensified the sales slump. We should also report the absence of Cayenne at the end of the season. The operators seem to have opted to halt their imports, pending better market conditions.

At the end of the season, incoming batches of Sweet sold at between 4.50 and 7.00 euros/box; this did not prevent the proliferation of ASP sales, as well as a good many clearance sales, at prices of less than 4.50 euros/box ■

Thierry Paqui, consultant
paqui@club-internet.fr

Size correspondence for sea-freight shipments

Sea-freight Sweet pineapple Sizes and packing		
Sizes	Weight correspondence (g)	Number of fruits per box
A5	2 101 - 2 500	5
A6	1 776 - 2 100	6
A7	1 576 - 1 775	7
A8	1 351 - 1 575	8
B9	1 151 - 1 350	9
B10	1 001 - 1 150	10
C12	860 - 1 000	12

Sea-freight Smooth Cayenne pineapple Sizes and packing		
Sizes	Weight correspondence (g)	Number of fruits per box
A6	1 801 - 2 100	6
A8	1 501 - 1 800	8
B9	1 301 - 1 500	9
B10	1 101 - 1 300	10
C12	900 - 1 100	12



Sweet — A7



Sweet — B9



Cayenne — A8



Sweet — B10



Cayenne — B10



Cayenne — C12

Size correspondence for air-freight shipments

**Air-freight Smooth Cayenne pineapple
Sizes and packing**

Sizes	Weight correspondence (g)	Number of fruits per box
A1	1 801 - 2 000	6 (Benin, Ghana, Cameroon)
A2	1 501 - 1 800	6 (Benin, Ghana, Cameroon)
B3	1 301 - 1 500	6 (Benin, Ghana) 12 (Cameroon)
B4	1 100 - 1 300	6 (Benin, Ghana) 12 (Cameroon)



Smooth Cayenne



Sugarloaf



No specific sizing for Sugarloaf,
we talk about big or small fruits based on 6 fruits per box.

**Air-freight Victoria pineapple
Estimated sizes and packing**

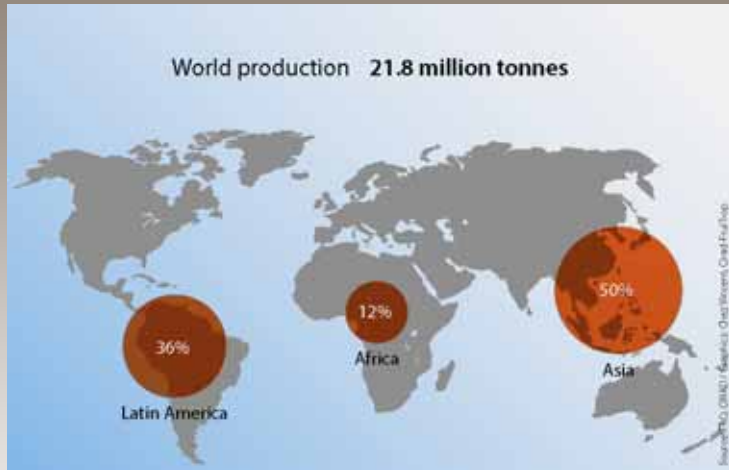
Sizes	Estimated fruit weight (varying depending on the box weight)	Number of fruits per box
6	580 - 916	6
7	500 - 786	7
8	435 - 688	8
9	390 - 611	9
10	350 - 550	10
12	290 - 460	12



Victoria — 8

No pre-established weight-size relationship for Victoria.
The weight of the fruits depends on the number of fruits per box (3.5 kg, 4 kg or 5.5 kg)

PINEAPPLE — Production (2011)



Pineapple — The 10 leading producer countries	
Tonnes	2011
Thailand	2 593 000
Brazil	2 365 000
Costa Rica	2 269 000
Philippines	2 247 000
Indonesia	1 541 000
India	1 415 000
Nigeria	1 400 000
China	1 351 000
Mexico	743 000
Vietnam	533 000

Source: FAO

PINEAPPLE — Imports (2012)



Pineapple — The 6 leading importing countries	
tonnes	2012
United States	924 526
Netherlands	259 090
Belgium	179 000
Japan	174 025
United Kingdom	133 000
Canada	121 314

Source: national customs

PINEAPPLE — Exports (2012)



Pineapple — The 6 leading exporting countries	
Tonnes	2012
Costa Rica	1 876 000
Philippines	397 349
Ecuador	61 987
Mexico	56 405
Honduras	47 009
Panama	44 885

Professional sources and national customs

USA — Imports — Main supplier countries						
tonnes	2007	2008	2009	2010	2011	2012
Total	696 803	713 574	720 122	808 684	817 131	924 526
Costa Rica	574 954	583 894	589 146	677 451	697 648	788 463
Mexico	29 018	38 726	46 051	50 000	36 440	55 222
Honduras	20 160	22 620	22 067	21 858	27 241	37 288
Panama	7 754	9 254	11 557	16 203	14 113	14 676
Guatemala	27 457	25 790	18 067	12 650	14 664	14 105
Ecuador	33 411	28 331	28 558	24 695	21 557	7 875
Thailand	3 264	4 096	3 898	4 367	3 964	4 516
Others	785	863	779	1 460	1 504	2 381

Source: USDA

Canada — Imports — Main supplier countries						
tonnes	2007	2008	2009	2010	2011	2012
Total	70 355	104 363	104 862	105 783	96 521	103 301
Costa Rica	54 194	85 444	92 639	92 045	85 019	92 618
Honduras	10 218	12 748	6 172	7 752	6 423	4 347
USA	1 096	719	507	1 416	1 174	1 590
Ecuador	1 709	3 260	2 788	2 478	1 783	2 126
Others	3 138	2 193	2 756	2 091	2 121	2 621

Sources: COMTRADE and national customs

Central and South America — Major markets						
tonnes	2007	2008	2009	2010	2011	2012
Total	47 866	47 601	45 786	48 705	63 726	46 214
Chile	21 716	22 509	23 342	27 677	37 328	20 146
Argentina	12 397	10 569	12 067	9 683	12 095	10 394
El Salvador	10 899	12 655	8 764	9 586	10 000	10 151
Peru	50	389	167	109	2 271	3 133
Mexico	192	172	167	368	685	1 018
Uruguay	613	721	758	750	715	779
Paraguay	666	463	415	217	331	537
Colombia	1 332	123	107	314	301	56

Source: COMTRADE

EU-27 — Imports — Main supplier countries

tonnes	2007	2008	2009	2010	2011	2012
Extra-EU, incl.	830 041	930 506	881 610	901 645	919 309	864 198
Costa Rica	570 969	680 161	663 472	725 406	738 259	723 050
Ghana	35 463	35 632	28 723	34 497	40 920	35 359
Panama	37 624	39 686	30 082	26 485	36 097	27 506
Côte d'Ivoire	59 253	58 902	47 488	38 184	28 304	24 968
Ecuador	49 260	45 011	54 865	42 714	39 100	24 516
Cameroon	9 295	9 924	12 530	13 119	12 556	9 781
Honduras	26 336	23 127	21 514	11 307	10 901	6 842
Brazil	16 400	24 688	15 389	663	3	4
Others	25 441	13 376	7 548	9 272	13 171	12 173

Source: EUROSTAT

Other West European countries — Major markets

tonnes	2007	2008	2009	2010	2011	2012
Total	24 995	27 655	28 423	29 620	28 958	27 671
Switzerland	16 986	19 170	21 420	22 716	21 980	20 617
Norway	7 355	7 862	6 544	6 392	6 520	6 585
Iceland	655	623	458	511	459	469

Source: COMTRADE

Russia — Imports — Main supplier countries

tonnes	2007	2008	2009	2010	2011	2012
Total, incl.	33 431	36 829	34 622	48 334	45 622	49 377
Costa Rica	12 270	17 340	15 526	27 698	32 567	35 068
Ecuador	2 747	3 558	5 126	8 747	4 638	4 720
Panama	1 197	1 472	1 860	1 843	1 803	2 703
Côte d'Ivoire	11 325	8 485	5 764	5 137	2 675	1 790
China	1 488	1 303	1 868	1 998	1 635	1 728
Ghana	1 265	1 090	1 364	1 066	892	1 348
Cameroon	208	377	751	383	121	62
Brazil	1 764	1 606	1 131	107	17	30
Others	1 168	1 597	1 232	1 355	1 274	1 928

Source: COMTRADE

Other East European countries — Major markets

tonnes	2007	2008	2009	2010	2011	2012
Total	10 785	11 256	9 271	11 171	12 521	15 040
Ukraine	7 134	7 297	5 293	6 184	7 565	8 862
Croatia	1 633	1 857	1 948	2 137	2 188	2 510
Belarus	1 249	1 137	1 215	1 765	1 502	1 899
Georgia	124	294	247	358	526	1 021
Serbia	645	671	568	727	739	748
Bosnia	486	508	526	610	539	528

Source: COMTRADE

Japan — Imports — Main supplier countries

tonnes	2007	2008	2009	2010	2011	2012
Total	165 794	144 408	143 982	142 582	155 752	174 025
Philippines	165 118	143 745	143 120	141 561	154 294	172 627
Taiwan	459	660	824	971	949	713
USA	16	0	-	33	466	629
China	167	0	-	-	-	-
Others	34	3	38	17	43	56

Source: national customs

Other Asian countries — Major markets

tonnes	2007	2008	2009	2010	2011	2012
Total	113 593	104 637	93 699	110 878	149 317	141 674
South Korea	77 275	67 032	54 526	60 565	73 010	73 131
China	17 865	19 211	21 120	32 857	58 163	47 762
Singapore	18 099	16 595	16 144	15 430	16 163	17 995
Kazakhstan	355	1 799	1 908	2 026	1 981	2 786
Malaysia	942	1 252	840	1 388	1 994	2 455
Azerbaijan	129	233	1 322	2 602	2 394	1 447

Source: COMTRADE

Oceania — Major markets

tonnes	2007	2008	2009	2010	2011	2012
Total	12 216	11 061	8 406	8 478	9 391	9 880
New Zealand	9 488	8 567	6 119	6 004	6 778	7 195
Maldives	1 967	2 072	1 909	2 138	2 165	2 318
Australia	761	422	378	336	448	367

Source: COMTRADE

Persian Gulf — Major markets

tonnes	2007	2008	2009	2010	2011	2012
Total	24 326	23 629	30 867	42 104	51 366	68 328
Qatar	1 249	1 823	1 800	1 842	1 800	16 625
Saudi Arab	4 351	2 613	3 505	11 072	14 921	15 000
United Arab Em.	8 500	6 500	11 000	12 800	14 000	14 000
Iran	3 500	5 500	7 000	8 890	9 409	10 000
Yemen	163	758	1 772	1 311	2 835	4 849
Kuwait	4 021	3 815	4 000	4 000	4 000	4 000
Oman	2 153	2 205	1 240	1 695	3 047	2 354
Bahrain	390	415	550	493	1 354	1 500

Source: COMTRADE

Near East — Major markets

tonnes	2007	2008	2009	2010	2011	2012
Total	3 395	5 311	6 371	10 042	18 781	16 578
Turkey	2 408	4 461	5 153	7 769	15 366	13 103
Lebanon	311	296	670	1 443	2 155	1 975
Jordan	676	554	548	830	1 260	1 500
Israel	74	360	214	461	686	302

Source: COMTRADE



© Régis Domergue



Pineapple growing

This article is drawn from three main sources:

- 'Crop management sequence - Pineapple', PIP, 52 pages. www.coleacp.org
- 'L'ananas', Alain Guyot, ISTOM lectures
- 'L'ananas, sa culture, ses produits', Claude Py & Claude Teisson, 568 pages, Maisonneuve et Larose

The pineapple, *Ananas comosus*, a member of the Bromeliaceae family, originated in South America. The cultivated pineapple still has several traits of this parentage:

- its root system is extremely fragile and the plant prefers light, well-tilled soil;
- it tolerates very dry spells by strongly reducing growth but still surviving;
- the base of the leaves is the most efficient zone for uptake of nutrients and it responds well to foliar fertilisation;
- flowering is induced by low temperatures and short days and is erratic under natural conditions. This gives rise to the most remarkable feature of cultivation—flowering induced artificially by a cropping operation.

Growers can thus—almost at their wish—control harvest date and yield, as fruit weight depends on the size of the plant at the moment at which flowering is induced artificially. Fruit quality is determined essentially by sugar content and acidity, and varies considerably according to weather conditions and the fertilisation applied. In simple terms, nitrogen nutrition determines weight and potassium nutrition determines quality. It is an extremely heterogeneous compound fruit whose base is always at a later stage of development than the upper part. Pineapple is not climacteric and after harvesting the main change in the fruit is a gradual loss of its qualities. This deterioration must therefore be limited in the fresh fruit packing and transport chain—fast transport and sales with no breaks in the cold chain. When the fruit is processed, this must be performed as quickly as possible.



Cycle of the plant

The pineapple exhibits three main phases:

- **the vegetative phase** from planting to the differentiation of the inflorescence (flowering);
- **the fruiting phase** running from differentiation to harvesting of the fruits;
- **the sucker growth phase:** from fruit harvesting to the destruction of the plant.

The parts of an adult pineapple plant are as follows:

- **stalk:** a short club-shaped stem that contains starch reserves and has a fibrous structure that makes mechanical destruction difficult;
- **leaves:** with a maximum of 70 to 80, these can be more than 1 m long and 7 cm broad. Their appearance indicates the state of health of the plant and growth vigour;
- **fruit:** a compound fruit that is the equivalent of a fused, compressed bunch. Its weight depends on plant size at floral induction and the nutritional state of the plant at that stage. It is determined first of all by the number of eyes;
- **crown:** a leafy part topping the fruit;
- **roots:** underground and above-ground. The underground roots are fragile and the slightest discontinuity of the soil profile strongly disturbs growth. The roots are put out in the first month after planting. They then just lengthen and no new root emission takes place before the fourth or fifth month;
- **shoots:** these are of two types—slips that grow on the stalk beneath the fruit, and true shoots that grow at the leaf insertion point on the stalk.

Ethephon

Ethephon is widely used around the world on flower, grain and fruit crops. France alone has no less than 24 registered uses in fruit growth, flowering and maturation processes.

Ethephon is registered for two specific uses in pineapple growing: for triggering the flowering process (floral induction treatment) and the regulation of fruit ripening (degreening). In both cases, the ethylene released by the product acts on physiological mechanisms.

Pineapple possesses the feature of being able to flower on demand, and floral induction is generally performed using gaseous ethylene dissolved in water. As application is a big operation, the process is generally used only on mechanised plantations. Another method used on non-mechanised small-holdings is calcium carbide. However, this is somewhat dangerous as the acetylene gas released is inflammable and even explosive if it comes into contact with copper.

The product that is easiest to use is Ethephon, even though it is less effective on varieties such as 'Smooth Cayenne' and MD-2, more popularly known as 'Sweet'.



© Agnès Delefortrie

Cultivation

- **Soil:** alluvial or volcanic at an elevation of less than 600 metres. Deep soil. Good drainage. Gentle slopes (less than 4%). As 'Sweet' is susceptible to *Phytophthora* (a fungal disease), the ideal soil pH range is 5.0 to 6.5.
- **Plants:** 50 000 to 70 000 plants per hectare. The quality of planting stock is of fundamental importance: genetically pure 'Sweet' stock with no defects (spines, diseases, etc.), of uniform size (calibrated in 100 g categories), propagules must be as heavy as possible to shorten the cultivation period (but not too heavy as natural flowering should be avoided) and treated with registered pesticides to prevent the spread of pests and diseases.
- **Post-harvest:** 'Sweet' is susceptible to bruising.
- **Nutrition:** fertiliser is applied by spraying every two weeks. The fertilisation programme starts after the harvest.
- **Weeds:** these can reduce yields and harbour pests and diseases that attack planted fields if they are not eradicated in time.



© Thierry Lescot

Controlling flowering

When the plant reaches the appropriate stage of development it becomes sensitive to climatic factors and meteorological factors (day-length, decrease of minimum temperature and cloud cover) that determine the differentiation of the inflorescence. Natural flowering then occurs that is not compatible with the commercial management of a plantation. Floral induction treatment (FIT) consists of changing the natural cycle of the plant for the following purposes:

- homogenisation of flowering;
- control of production;
- control of average fruit weight;
- harvest planning.

The date of FIT is determined according to:

- the harvest date desired;
- the FIT/harvest date interval for the period (historical or calculated from the sums of temperatures);
- plant weight (a good indicator being the weight of leaf 'D') that determines that of the fruit.

Three floral induction substances are used:

- acetylene in calcium carbide form: grains are placed in the centre of the floral rosette or mixed with water to make an acetylene solution;
- ethylene gas: less dangerous than acetylene, treatment with an ethylene solution can be mechanised;
- ethephon (Ethrel®): this is an ethylene generator. It is much easier to use than the first two alternatives but the results are often mediocre, especially in very hot conditions.

Degreening treatment

This is performed by application of Ethrel and is to achieve homogeneous fruit colour and reduce the number of picking operations. Ethrel releases ethylene as it breaks down. It does not have an effect on all maturation phenomena but mainly targets colour. It must be applied fairly close to natural fruit maturity in order to be effective with no major disadvantages. Fruits treated in this way are easy to recognise as their colour is not scaled from bottom to top but uniform throughout the shell.

Protection from sun scald

This seasonal phenomenon occurs above all during very sunny periods. Fruits that have lodged, whose stalks are too long or that have a deficient leaf system are those most exposed to sun scald. Several protective methods can be used: tying the leaves in a bunch over the fruit or the whole crop ridge, mulching with grass, or lifting up lodged fruits.



Photos © Claude Toussaint

Sun scalding





The main pineapple varieties

Photos © Guy Bréhinier

'Smooth Cayenne' was for a long time practically the only variety exported fresh and tinned. The Hawaiian hybrid 'MD-2' took over its position on the fresh pineapple market, mainly as a result of its extraordinary capacity for withstanding cold and transport. The robustness of this fruit after harvesting was hitherto unknown and is opening up new prospects in the breeding of new varieties by hybridisation. Other varieties with good taste qualities are preferred on domestic markets but do not keep at all well: 'Perola' in Brazil and 'Queen' in Asia and the Indian Ocean.

'Smooth Cayenne'

Leaf edges: spines behind tip only
Fruit shape: cylindrical
Fruit colour: green & yellow
Fruit eye diameter: medium
Fruit eye profile: slightly prominent
Flesh colour: pale yellow
Flesh firmness: medium
Flesh texture: smooth
Weight without crown: 1 500 g
Height without crown: 148 mm
Diameter: 121 mm
°Brix : between 14.5 and 16.5
Acidity (meq%ml): between 13.5 and 15.0
Sugar/acid ratio: between 1.0 and 1.2
Flesh maturity homogeneity from bottom to top: with a gradient
Agronomic potential: high yielding
Susceptibility: susceptible to core rot, susceptible to *Phytophthora*, susceptible to soil pests
Post-harvest potential: good, susceptible to internal browning



'Sweet'

Leaf edges: spines occur irregularly along both margins
Fruit shape: cylindrical
Fruit colour: green & yellow
Fruit eye diameter: medium
Fruit eye profile: flat
Flesh colour: yellow
Flesh firmness: medium
Flesh texture: smooth
Weight without crown: 1 400 g
Height without crown: 143 mm
Diameter: 116 mm
°Brix : between 12.8 and 13.7
Acidity (meq%ml): between 6.15 and 10.10
Sugar/acid ratio: between 1.31 and 2.11
Flesh maturity homogeneity from bottom to top: homogeneous
Agronomic potential: high yielding. **Maturation more rapid than Smooth Cayenne (- 4 to - 5 days)**
Susceptibility: low susceptibility to core rot, very susceptible to *Phytophthora*, average susceptibility to soil pests
Post-harvest potential: good, not susceptible to internal browning



'Victoria'

Leaf edges: spines along all margins
Fruit shape: trapezoid
Fruit colour: golden yellow
Fruit eye diameter: small
Fruit eye profile: prominent
Flesh colour: yellow
Flesh firmness: medium
Flesh texture: crisp
Weight without crown: 1 300 g
Height without crown: 172 mm
Diameter: 108 mm
°Brix : 14.8
Acidity (meq%ml): 10.9
Sugar/acid ratio: 1.36
Flesh maturity homogeneity from the bottom to the top: with a medium gradient
Agronomic potential: good yielding. Maturation more rapid than Smooth Cayenne (- 10 to - 15 days)



Observations made in commercial plantations in central and West Africa:

- average weight of exported fruits (size B10, B9, A8, A7, A6, A5) : 1 430 g, varying from 1 150 to 1 890 g
- °Brix: min 13.4° (October), max 14.5° (January)
- Free acidity (meq%ml): min 6.0 (April), max 7.7 (February)
- Sugar/acid ratio: min 1.8 (February), max 2.4 (April)

Susceptibility: very susceptible to core rot, susceptible to *Phytophthora*, susceptible to soil pests
Post-harvest potential: very susceptible to internal browning

Observations made in commercial plantations in Réunion:

- average weight of exported fruits: 700 to 800 g
- °Brix: average 13° in July-August and 18° from November to April
- Free acidity (meq%ml): average 16 in July-August and 13 from November to April
- Sugar/acid ratio: average 0.8 in July-August and 1.4 from November to April
- Crown weight: 15% of total fruit weight from August to December and 30% from March to May

Note: data collected in production conditions in Martinique except for the 'Observations' section (source: CIRAD)

Pineapple quality defects

Photos © Patrick Fournier, Pierre Gerbaud,
Horta Gabon



Internal browning



Internal browning



Thielaviopsis paradoxa
on a lateral blemish



Beginning of *Thielaviopsis paradoxa*
on peduncle



Thielaviopsis paradoxa
external appearance



Sun scald on 'Victoria'



Sun scald on 'Victoria'



Over-ripeness



Scales



Attack by insects



Crack
malformation or deformity



Colour variation
in the same batch



Damaged, scorched crown



Crown too long
and crushed by box lid



Beginning of internal browning



Beginning of internal browning in 'Victoria'



Thielaviopsis paradoxa



Beginning of *Thielaviopsis paradoxa* on a blemish



External symptom of *Penicillium funiculosum* on Sugarloaf



Internal symptom of *Penicillium funiculosum* on Sugarloaf



Translucent



Mould (*Penicillium*) on peduncle after transport



Mould after transport (*Penicillium*)



Micro-bruising



Dry bracts on 'Victoria'



Peduncle cut irregularity



Irregular crown size



Poorly reduced crown



Double crown



AnaGmaX ©: management assistance software for pineapple plantations

Using the results of research on pineapple, CIRAD (France) has developed AnaGmaX, a management tool for pineapple plantations.

AnaGmaX uses the temperature records and field characteristics (geographic position, variety, plant material, planting date, etc.) to calculate key dates in the cycle: probable date of floral induction treatment, flowering date and harvest date. It then adapts a reference crop management for the field cycle forecast, whatever the production zone and whatever the cycle length, which can vary from 11 to 18 according to the cultivation zone. The job calendar is re-specified continuously as new temperature data are entered. The grower can thus be sure that jobs are performed on the optimum dates and, finally, the traceability of all operations is conserved.

The other very important information provided by AnaGmaX is the forecasting of harvesting dates to within 1 or 2 days. This makes it possible:

- to plan harvests for both individuals and groups,
- to know at all times where the fruits to be cut are to be found and in what quantity.

AnaGmaX also makes it possible to manage production 'from downstream', that is to say a production period and a tonnage desired in a given zone are entered and the program specifies the areas to be planted and the desired planting dates.

AnaGmaX is intended for a very broad range of planters in the pineapple sector, from individual growers (from very small to very large plantations) to producers' groups, by way of advisory companies.

AnaGmaX currently exists in a French-English bilingual version and is set up for the cultivars 'Queen Victoria', 'Smooth Cayenne', 'MD-2' and 'Flhoran 41'.

Other parameters can be specified according to individual requirements: crop management sequences, types of task, sizes, defects, etc.

For information, contact:
patrick.fournier@cirad.fr



Wholesale market prices in Europe

September 2013

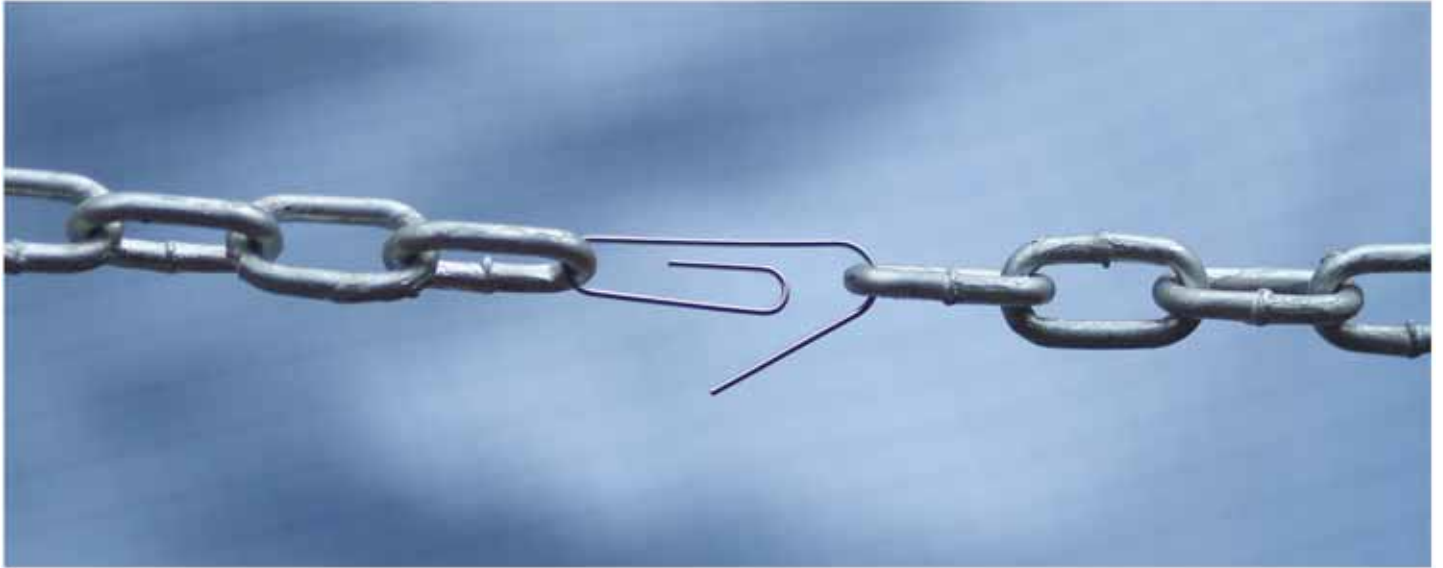
					EUROPEAN UNION — EURO				
					Germany	Belgium	France	Holland	UK
AVOCADO	Air Sea	TROPICAL ETTINGER	BRAZIL	Box				15.68	
			ISRAEL	Box	6.50				8.30
		FUERTE HASS	SOUTH AFRICA	Box				5.25	
			CHILE	Box	9.25				10.08
			KENYA	Box			5.70		
			PERU	Box	8.25	12.00	6.69	10.50	8.72
		NOT DETERMINED	SOUTH AFRICA	Box		12.00	6.69	9.50	8.42
			BRAZIL	Box					7.11
			PERU	Box		10.00			
			SOUTH AFRICA	Box		10.00			
		PINKERTON RYAN	SOUTH AFRICA	Box				7.50	
			SOUTH AFRICA	Box	5.00			7.13	7.41
		TROPICAL	BRAZIL	Box			13.80		
DOMINICAN REP.			Box			12.00			
BANANA	Air	RED SMALL	ECUADOR	kg				4.88	
			COLOMBIA	kg			6.80	5.17	
	Sea	RED SMALL	ECUADOR	kg		5.67			
			ECUADOR	kg				2.29	
			ECUADOR	kg			1.70	2.65	
CARAMBOLA	Air		BRAZIL	kg					3.95
			MALAYSIA	kg		4.67	4.80	5.02	
	Sea		COLOMBIA	kg					3.39
CHAYOTE	Sea		COSTA RICA	kg				1.32	
COCONUT	Sea		COSTA RICA	Bag		6.00			
			COTE D'IVOIRE	Bag			13.00	11.23	12.75
			SRI LANKA	Bag				20.10	8.66
DATE	Sea	BAHRI MEDJOOOL NOT DETERMINED	ISRAEL	kg				3.80	
			ISRAEL	kg			8.00	7.65	
			ISRAEL	kg					6.88
			JORDAN	kg			3.00		
			TUNISIA	kg				2.00	2.08
EDDOE	Sea		COSTA RICA	kg				1.77	
GINGER	Sea		BRAZIL	kg		1.85	2.50	1.92	1.98
			CHINA	kg	1.54		1.77	1.79	1.37
GUAVA	Air		BRAZIL	kg			6.25	6.34	
KUMQUAT	Air		ISRAEL	kg					5.93
			SOUTH AFRICA	kg			4.80		
LIME	Air		MEXICO	kg			4.15		
	Sea		BRAZIL	kg	0.83	1.22	1.34	0.88	1.28
			MEXICO	kg			1.39	0.88	1.09
LITCHI	Sea		ISRAEL	kg				6.44	
LONGAN	Sea		THAILAND	kg				6.50	
MANGO	Air	KENT NAM DOK MAI PALMER	BRAZIL	kg			4.90		
			THAILAND	kg				8.20	
			BRAZIL	kg				3.88	

					EUROPEAN UNION — EURO					
					Germany	Belgium	France	Holland	UK	
MANGO	Sea	ATKINS	BRAZIL	kg			1.65	2.01	1.72	
			BRAZIL	kg				2.25		
		KEITT	ISRAEL	kg			2.10		2.66	2.04
			PUERTO RICO	kg					3.18	
	Truck	PALMER	BRAZIL	kg				2.13		
			OSTEEN	SPAIN	kg		2.50	2.90		3.12
MANGOSTEEN	Air		THAILAND	kg			9.50	7.72		
MANIOC	Sea		COSTA RICA	kg			1.10	1.17		
MELON	Sea	CANTALOUPE	BRAZIL	kg				1.75	0.96	
			BRAZIL	kg					1.46	
		GALIA	BRAZIL	kg					1.55	1.31
			BRAZIL	kg					0.73	0.95
		SEEDLESS WATER	BRAZIL	kg				0.69	0.62	
		WATERMELON	BRAZIL	kg				0.54	0.56	
PAPAYA	Air	FORMOSA	BRAZIL	kg			3.30	3.20	3.63	
			BRAZIL	kg			3.40	3.71		
			ECUADOR	kg					2.88	
	Sea		ECUADOR	kg		2.29		2.20		
PASSION FRUIT	Air	NOT DETERMINED	COLOMBIA	kg	7.00	4.50	5.75	6.35	4.75	
			KENYA	kg		4.50		5.25	4.45	
			SOUTH AFRICA	kg			7.00			
		YELLOW	COLOMBIA	kg			8.50		8.97	
			ECUADOR	kg					8.75	
PHYSALIS	Air	PREPACKED	COLOMBIA	kg			9.00	9.40	7.91	
	Sea		COLOMBIA	kg	6.14	5.83		7.19		
PINEAPPLE	Air	SMOOTH CAYENNE	BENIN	kg			2.15			
			MAURITIUS	Box				13.35		
			MAURITIUS	kg			3.55			
			REUNION	kg			4.20			
	Sea	MD-2	SOUTH AFRICA	Box				16.00		
			COSTA RICA	Box	8.33	7.25	6.67	6.73		
			COSTA RICA	Piece					0.71	
			COTE D'IVOIRE	kg			0.90			
PITAHAYA	Air	RED	THAILAND	kg				6.62		
			VIETNAM	kg			8.50	6.68		
		YELLOW	COLOMBIA	kg				10.00		
			ECUADOR	kg				9.00		
PLANTAIN	Sea		COLOMBIA	kg			1.04	1.00		
			ECUADOR	kg			0.90			
RAMBUTAN	Air		THAILAND	kg				7.80		
			VIETNAM	kg			9.50	7.50		
SWEET POTATO	Sea		DOMINICAN REP.	Box					9.19	
			EGYPT	kg			1.10	1.21		
			HONDURAS	kg				1.27		
			SOUTH AFRICA	kg			1.50	1.45	0.83	
TAMARILLO	Air		COLOMBIA	kg				6.94		
TAMARIND	Air		THAILAND	kg			3.08	3.07		
YAM	Sea		BRAZIL	kg					1.54	
			GHANA	kg			1.50	1.43		
			UGANDA	kg				1.47		

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

reefer trends

UNIVEG, YOUR DIRECT CONNECTION TO THE FIELD



This year UNIVEG Katopé France import the first Fairtrade litchi. Its objective is to ensure the sustainable development of its productions. The Madagascar litchi exportation industry is essential for the life of 300.000 families and of the utmost importance in the Malagasy exportations. UNIVEG Katopé France is aware of its responsibilities and involved in a production and logistics that meet the standards and quality expected by its European customers.



UNIVEG Katopé France S.A.

15, boulevard du Delta | Zone Euro Delta | DE1 - 94658 | RUNGIS CEDEX | France
T. +33 1 49 78 20 00 | F. +33 1 46 87 16 45 | katopeintl@univeg.fr | www.univeg.fr

Content published by the Market News Service of CMCAD - All rights reserved

