

Kiwi

from Southern Hemisphere
Yellow kiwi expected to take off



**Kumquat, caviar
lemon and Kaffir lime**

**Organic banana
in Haiti**

Sea freight



BANANE À EMPORTER LE SNACK SAÏN ET VITAMINÉ !

DEL MONTE
5 ANNÉES D'AVANCE DANS LE SNACKING
AVEC LA BANANE CRT



- ✓ EXTENSION DE VIE DE LA BANANE JUSQU'À 5 JOURS
- ✓ PROTÈGE LE FRUIT, MAINTIEN LA FRAÎCHEUR ET RÉDUIT LA DÉSHYDRATATION
- ✓ AMÉLIORE LA TEXTURE, LE GOÛT, LA SÉCURITÉ ET L'HYGIÈNE
- ✓ QUALITÉ ET CALIBRE CONSTANTS
- ✓ EMBALLAGE RECYCLABLE
- ✓ ORIGINE COSTA RICA



What are international conventions worth, especially those on human rights? We might tend to reply “nothing” or “not much”. Indeed, across the globe and on a daily basis, the fundamental principles are being flouted, with seemingly complete impunity. And every breach of the most basic rights by whichever State or in whichever industry is immediately forgotten and forgiven. Not even contrition is required from the miscreant States or companies. As for awareness, it is very often manifested by the ratification of countless conventions, standards, and international declarations proposed by just as countless organisations such as the UN. We are talking about 317 multilateral conventions submitted to the UN. The idea is to provide proof that things will change; which goes without saying since the signatures are there at the foot of these increasingly fundamental texts. But are things really changing?

This highly pessimistic view should perhaps be put into perspective. In fact a study conducted by the *Ceriscope* magazine shows a positive correlation between the human development index (HDI) and democracy index (DI) of a country and the number of treaties ratified. The States most inclined to engage in multilateral conventions are those where democracy and above all human development are progressing. This would tend to prove that the commitments are not just empty gestures aimed at reassuring backers and investors. So international treaties are apparently a gradual vehicle for social progress. And the same can be observed in the case of companies which, it is true, are still well versed in the techniques of green and social washing, but which are bit by bit changing their behaviour. The only concern is the extreme slowness of the process, which as such does not necessarily address the most urgent world challenges, particularly those relating to the environment. So three cheers for the UN?

Denis Loeillet



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E. Imbert, D. Loeillet, C. Dawson, P. Gerbaud, T. Paqui, C. Céleyrette, R. Bright

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Cover photo: © Guy Bréhinier

Banana

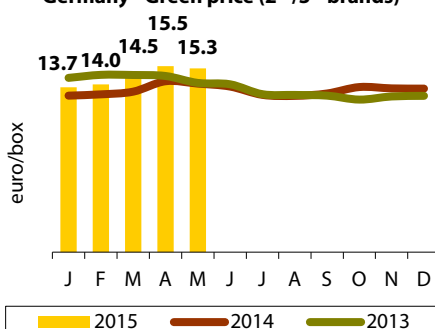
May 2015

The weakening of the market observed in early May quickly dissipated. In spite of a stable dollar banana supply, the reduction of the shortfall from Africa and the French West Indies, plus the appearance of spot volumes of dollar and Dominican bananas contributed to weighing down the markets at the beginning of the month. In addition, public holidays in several European countries slowed down demand. Hence the markets proved more fragile and under pressure, in particular in Eastern Europe where dollar banana prices continued to drop rapidly. However, a considerable improvement was observed from mid-May, due to the disappearance of spot supplies and to a further fall in African imports (logistical problems) and Colombia (effects of the drought). Demand on the West European markets found renewed vitality thanks to temperatures remaining cool and to the delayed seasonal fruit campaigns. Hence the few stocks available were cleared, and green prices were seen to strengthen somewhat at the end of the month in Northern and Eastern Europe. Conversely, the Spanish market continued to swell despite shipments from the Canaries on the wane, because of the seasonal slowdown in demand due to the increasing temperatures. In Russia, after a steep increase at the beginning of the month, prices remained stable, though the market started to weaken again toward the end of the month, under the effect of a supply surplus.

NORTHERN EUROPE — IMPORT PRICE

May 2015 euro/box	Comparison	
	previous month	average for last 2 years
15.31	- 1 %	+ 9 %

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



■ **Winds in Colombia: more fear than damage...** 200 to 400 ha were reportedly devastated by the storms in early June, out of the 34 000 ha in the Uraba region. So losses were relatively limited (600 000 to 1.2 million boxes), though this should not help Colombia make up for the poor export performance at the beginning of Q2 (9 % below the 2012-14 average), after a roaring Q1 (14 % above average).

Sources: Reefer Trends, CIRAD

■ **The banana: number 1 impulse buy in the United Kingdom.** This was the finding of a survey conducted for TESCO on a sample of 250 consumers; which puts the banana ahead of the strawberry... and "The Sun" newspaper!

Source: aol.co.uk

■ **No European Commission allowance to promote the OR logo.** The draft budget, worth 10 million euros over the period 2015-2018, has not been validated by the European Commission, which was to co-fund it to the tune of 50 %. This decision has dealt a tough blow to the advertising campaigns conducted for six products originating from the Outermost Regions (banana, but also melon, tomato, cucumber, lettuce and sugar cane syrup). APEB (Association of European Banana Producers) has condemned this decision, which comes in a "context of increased competition from countries with low costs, a consequence of the trade agreements signed in 2010 with the Central and South American producer countries, which have set up a gradual fall in customs duty until 2020".

Source: APEB



EUROPE - RETAIL PRICE

Country	May 2015		Comparison	
	type	euro/kg	April 2015	average for last 3 years
France	normal	1.66	0 %	+ 4 %
	special offer	1.39	- 2 %	+ 2 %
Germany	normal	1.37	+ 1 %	+ 3 %
	discount	1.24	0 %	+ 3 %
UK (£/kg)	packed	1.11	- 3 %	- 8 %
	loose	0.72	0 %	0 %
Spain	platano	1.95	0 %	+ 8 %
	banano	1.31	- 2 %	- 3 %

A woman with dark skin and hair pulled back, smiling warmly at the camera. She is wearing a light-colored, possibly beige, t-shirt. The background is a lush green banana plantation with large leaves, and in the distance, there are rolling hills under a clear blue sky.

**«The French banana
strives every day
to protect our jobs.»**



With 10,000 direct and indirect jobs, 90% of which on permanent contracts, our banana sector stands up for our French social model by facing up to international competition. With the sustainable banana plan, our 650 independent producers work every day for the environment and the biodiversity.

Together, let's defend our agriculture!

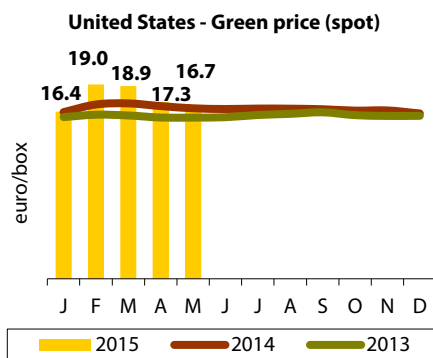
LE BON GOÛT DE NOS RÉGIONS

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Banana

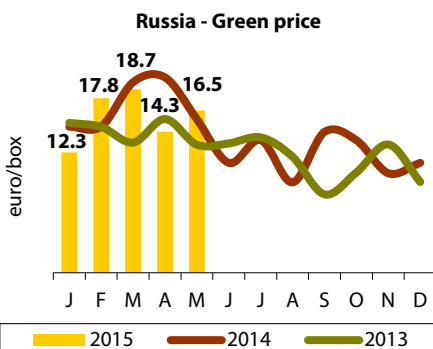
UNITED STATES



UNITED STATES - IMPORT PRICE

May 2015 USD/box	Comparison	
	previous month	average for last 2 years
16.70	- 3 %	+ 3 %

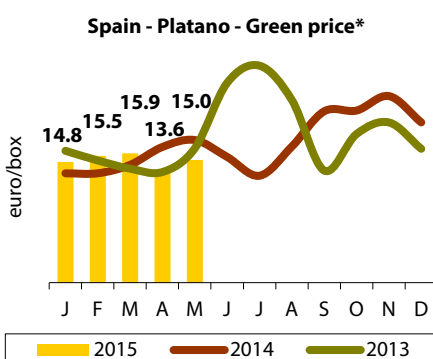
RUSSIA



RUSSIA - IMPORT PRICE

May 2015 USD/box	Comparison	
	previous month	average for last 2 years
16.50	+ 15 %	+ 15 %

CANARIES



CANARIES - IMPORT PRICE*

May 2015 euro/box	Comparison	
	previous month	average for last 2 years
15.00	+ 11 %	- 12 %

* 18.5-kg box equivalent

■ **Banana consumption: from record to record.** After a March 2015 very promising in terms of quantity, European banana imports (Eurostat data, still provisional) was up again in April by 2 % from April 2014. It is the dollar sources group which is driving the trend. Colombia is picking up after its climate mishaps and Costa Rica is yo-yoing, with a big surplus following the previous month's big shortfall. These two sources are favouring trade to the EU market. Ecuador and Panama saw a considerable drop. As for the ACP, Côte d'Ivoire and Surinam are dragging down the trend severely. Côte d'Ivoire fell 25 % in terms of volume over the first four months, while Surinam registered a very poor - 19 %. The Dominican Republic and above all Belize had an excellent month. For Belize, there was an 18 % rise from the beginning of the year. Yet the really nice



surprise was the excellent consumption level in the EU-28. Since if we add to these import figures European production (- 5 % in April) sold outside the production zone, we get a consumption record of 539 500 t for one month, a level never reached for a given month. Over the first four months of the year, consumption exceeded the 2-million tonnes mark, while the last twelve months (May 2014 to April 2015) set a high consumption mark of 5 638 000 t.

Consumption in the United States confirmed the upward trend in Europe: + 2 % over the first four months of the year. Only Costa Rica and Colombia are on a downward trend. All the other sources are achieving impressive performances: + 6 % for Guatemala, + 8 % for Ecuador and + 12 % for Honduras. The same applies to Mexico, Peru and the Dominican Republic.

Source: CIRAD

Banana - January to April 2015 (provisional)

000 tonnes	2013	2014	2015	Difference 2015/2014
EU-27 — Supply	1 858	2 000	2 010	0 %
Total imports, of which	1 645	1 778	1 789	+ 1 %
MFN	1 311	1 421	1 442	+ 1 %
ACP Africa	181	198	184	- 7 %
ACP others	153	159	163	+ 2 %
Total EU, of which	213	222	221	- 1 %
Martinique	58	65	63	- 4 %
Guadeloupe	20	22	21	- 5 %
Canaries	131	128	131	+ 2 %
USA — Imports	1 111	1 122	1 144	+ 2 %
Re-exports	175	185	184	0 %
Net supply	936	938	960	+ 2 %

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

EUROPE - IMPORTED VOLUMES - MAY 2015

Source	Comparison		
	April 2015	May 2014	2015 cumulative total compared to 2014
French West Indies	↘	- 17 %	- 4 %
Cameroon/Ghana/Côte d'Ivoire	↗	- 20 %	- 9 %
Surinam	=	- 25 %	- 15 %
Canaries	↘	- 8 %	0 %
Dollar:			
Ecuador	↘	- 1 %	+ 9 %
Colombia*	↘	- 4 %	+ 9 %
Costa Rica	=↘	+ 25 %	+ 20 %

Estimated thanks to professional sources / * total all destinations



DUNKERQUE PORT

THE FRESH PRODUCE HUB



Temperate fruits



■ Lukewarm results for the moment for Chilean pip fruit exports.

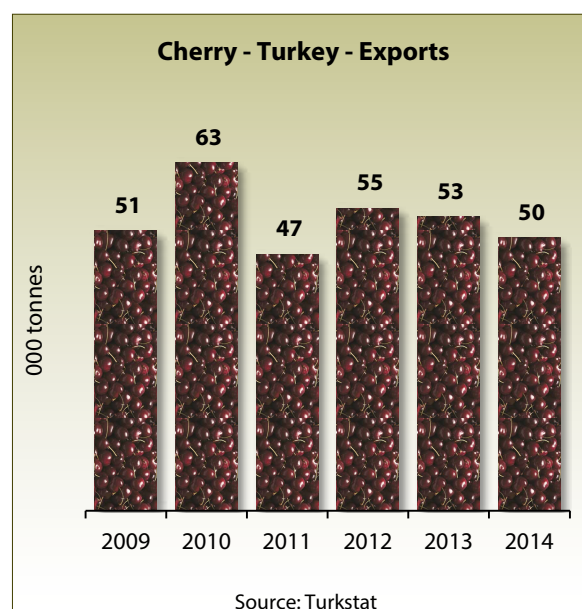
Apple exports were reportedly down at the beginning of the year, due to the sluggishness of the export markets, especially in Europe where demand is weak. Hence just 211 000 t of apples had been exported by late April, i.e. a 15 % fall in shipments across all destinations, and a 55 % drop on the European market (46 356 t at the end of week 19 according to Shaffe). Conversely, table grape exports were at a fairly good level (720 000 t, i.e. + 3 % on 2014), thanks to North American demand up by 11 %, whereas they fell by 4 % toward Russia. There were substantial pear shipments (62 700 t, i.e. aggregate total up 22 % according to the count in late April), with the entry into production of young orchards, particularly for Abate (25 300 t, i.e. + 71 %).

Sources: ODEPA, Infofruit

■ Turkish cherry: a really good production level.

The Turkish campaign started in early June with a slight delay of 7 to 10 days, like all stone fruits this year in Europe. Nonetheless the auspices are better than in 2014 (hail), when production did not get past 445 000 t (- 11 % on 2013), and could set a new record of more than 500 000 t. National surface areas are stabilising: 51 000 ha for the fresh segment in 2013, of which 21 000 ha for sour cherries. However, with yield still on the increase (irrigation, varietal innovation), the expected potential is reportedly 520 000 to 550 000 t in the medium term. The particularly cold weather in February and March, though above all in April, could however have consequences, despite producers reacting quickly by setting up heating in the orchards. The 0900 Ziraat variety (Napoleon) still accounts for the majority of the surface areas (70 % of production and 95 % of export volumes). However, exports have been stagnating in recent years (50 000 to 55 000 t), and reportedly even fell by 49 700 t in 2014, whereas the objective for several years has been to achieve 100 000 t.

Sources: Turkstat, Infofruit



■ Good performance by the Moroccan tomato.

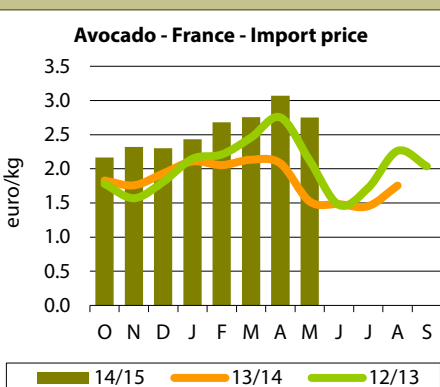
The provisional review of Moroccan tomato exports aimed at the European market has registered a rise of around 17 % from 2013-14 by volume (+ 8 % on the 3-year average). They reportedly reached a total of 283 000 t according to the provisional European Customs figures (October to March). This good performance in terms of volume but also value is on the one hand a structural phenomenon due to the progressively increasing the duty-free quota granted by the European Union in the Association Agreement with Morocco (249 000 t for 2014-15 + 28 000 t additional quota, i.e. + 3 % on the previous season). It can also be attributed to particularly favourable market conditions at the beginning of the campaign, with the European-produced seasonal tomatoes ending early, and the shortfall from the Murcia and Almeria zones in Spain.

Sources: European Customs/Infofruit

Avocado

May 2015

The avocado market started to sway around mid-May. Despite the South African supply still being in surplus, the under-supply in Hass remained in place at the beginning of the month due to the late progression of the Peruvian campaign. There was a more considerable increase in imports from the second half of May (incoming shipments from Peru above average, small fruits), and demand proved insufficient to absorb these volumes (retail prices still very high). In this context import prices started to drop in around week 20, while still registering above-average levels. In green varieties, the more limited supply from South Africa and the ongoing shortfall in the Peruvian supply helped restrain the fall in prices, which remained very high for the season.



■ Avocado: Peru chasing

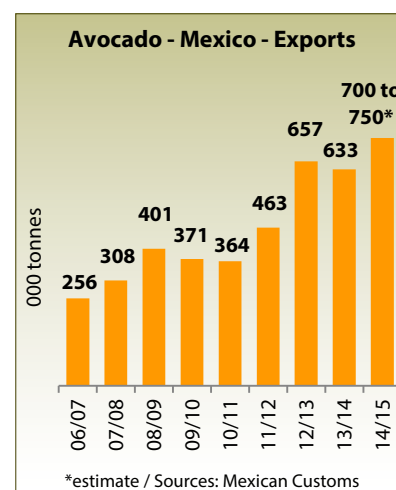
Mexico. Peruvian exports should have nothing to envy those of Mexico over the coming years, if we believe ProHass. The 25 000 ha cultivation area currently in place and the exceptional yields due to the pedoclimatic conditions and technical mastery should enable Peruvian exports to reach 400 000 t by the end of the decade, a level corresponding to more than double that expected this season (180 000 to 190 000 t if the temperature rise due to the El Niño phenomenon does not have too great an impact). Conversely, the comparison with Mexico ends there. The question of outlets is of a different order of intensity: maintaining strong growth in Europe and the United States and the take-off of the newly-opened diversification markets (Japan, Chile and China) are the priority.

Sources: Reefer Trends, CIRAD

■ Mexican avocado export campaign: a hit in 2014-15!

Every year, the admiration in our first look at the Mexican export record is inversely proportional to the level of suspense. The 640 000 t exported by the end of May (source: Info Hass), with one month of the campaign remaining, guarantees that 2014-15 will set a new record. If we add a relatively conservative projected volume for June, the aggregate total exports for the season should exceed 700 000 t: a figure up by approximately 70 000 t on the previous campaign, and by more than 300 000 t from 2010-11. And it should not stop there, at least in the medium term: surface areas have reportedly expanded again by 5 000 ha in Michoacán this campaign according to the USDA, whereas a good part of the 15 000 ha of the Jalisco cultivation area will very shortly receive authorisation to export to the US market, where growth in consumption is not weakening.

Sources: USDA, Reefer Trends, CIRAD



PRICE	Varieties	Average monthly price euro/box	Comparison with the last 2 years
	Green	7.21	+ 70 %
	Hass	11.51	+ 31 %

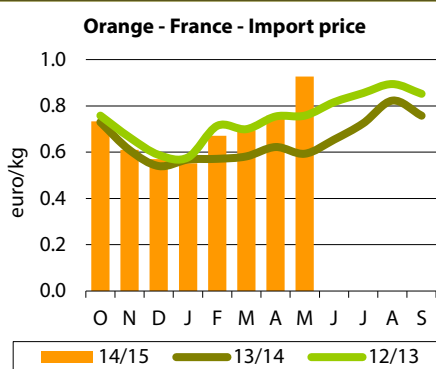
VOLUMES	Varieties	Comparison	
		previous month	average for last 2 years
	Green	↘	- 10 %
	Hass	↗	+ 6 %

VOLUMES	Source	Comparison		Observations	Cumulative total / cumulative average for last 2 years
		previous month	average for last 2 years		
	Peru	↗	+ 0 %	Volumes on the rise. Persistent shortfall of green varieties, though Hass levels 4 % above average.	0 %
	Kenya	↗	- 7 %	Supply progressing behind schedule, but volumes still in shortfall.	- 39 %
	South Africa	↗	+ 24 %	Hass volumes progressing rapidly to high levels (+ 30 %). Fall in shipments of Fuerte, though volumes still above average (+ 13 %).	+ 33 %

Orange

May 2015

The situation on the orange market remained exceptionally good. Demand continued its seasonal fall, though remaining lively. In the table oranges segment, volumes of Spanish Navelate continued to decrease early, entering shortfall (- 21 %), and some limited batches of other late varieties were to be found (Navel Powell). So prices strengthened again, to levels 29 % above average. In the juice oranges segment, after a flying start to the campaign, Valencia Late imports returned to average. Given the head start to the campaign, prices also registered a significant increase. The first South African volumes entered the North European markets in this uncluttered, buoyant context.



PRICE	Type	Average monthly price euro/15-kg box	Comparison with average for last 2 years
	Dessert orange	14.70	+ 29 %
	Juice orange	11.85	+ 20 %

VOLUMES	Type	Comparison	
		previous month	average for last 2 years
	Dessert orange	↘	- 21 %
	Juice orange	↗	- 2 %

VOLUMES	Varieties by source	Comparison		Observations	Cumulative total / cumulative average for last 2 years
		previous month	average for last 2 years		
	Spanish Navelate	↘	- 21 %	Spanish Navelate campaign winding down early, very lively sales having accelerated the progress of the campaign.	+ 11 %
	Spanish Valencia Late	↗	- 2 %	Peak in incoming Spanish Valencia Late shipments. Supply back to seasonal level after a very lively start to the campaign.	+ 20 %
	South African Navel	↗	- 6 %	First shipments reaching Northern Europe. Some coloration concerns reported.	- 6 %

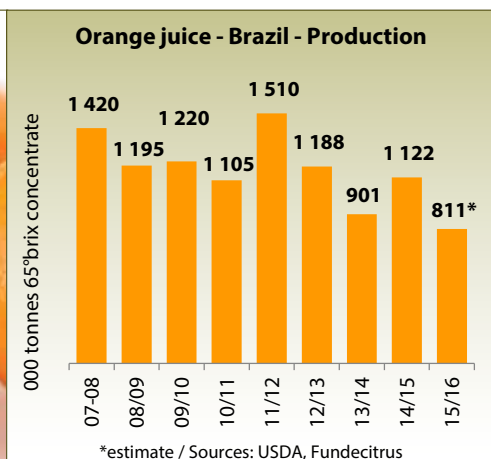
■ **Brazilian orange harvest at rock bottom in 2015-16.** The initial campaign forecast published by Fundecitrus is reckoning on 279 million 40.8-kg field crates, i.e. a harvest slightly less than the already extremely lean one of 2014-15. The projected juice production should fall even more drastically, by approximately 30 %, with an abnormally large share of the harvest comprising late fruits with very low juice content, of no interest to the industrial sector. This is good news on two fronts for the concentrated orange juice market: besides a direct effect on prices, this fall in production should bring the level of Brazilian stocks back below the strategic threshold of 300 000 t by summer 2016. However, the market is yet to react in proportion to the magnitude of this news. The recurrent poor sales in the United States, which in particular is weighing down on local production, has brought Floridian juice stocks up to nearly one year of sales.

Sources: Fundecitrus, Foodnews



■ **Spinach too strong for greening.** The US sanitary authorities have approved the launch of field tests of genetically modified orange trees, apparently showing effective resistance to greening. This character was obtained thanks to the addition of a spinach gene by a scientific team from Weslaco University in Texas. The tests will be conducted at Southern Garden Citrus, a producer also based in Texas.

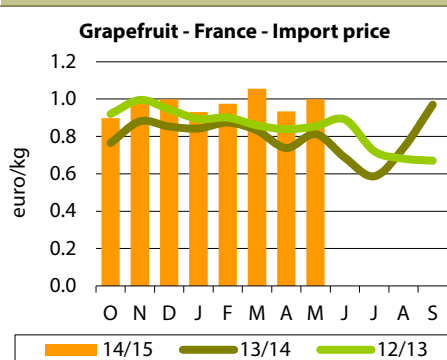
Source: Physorg



Grapefruit

May 2015

The transition between the winter and summer seasons proceeded under good conditions despite the arrival of spring. The Florida campaign came to an end early, with only a few moderate stocks available until mid-May. Hence, sales continued to register good fluidity for other sources, whose supply was also moderate. Mediterranean contributions continued to dwindle, with Turkey finishing early and Corsica, Spain and Israel on the wane. Volumes from the latter source remained 9 % in shortfall, and prices strengthened throughout the month, registering levels 18 % above average. Finally, shipments from South Africa continued to progress, while maintaining a shortfall of 4 %. Rates were high for the first fruits on the market in spite of heterogeneous sizing.



PRICE	Type	Average monthly price euro/17-kg box equivalent	Comparison with average for last 2 years
	S. Hemisphere	17.68	+ 9 %
	Mediterranean	13.94	+ 18 %

VOLUMES	Type	Comparison	
		previous month	average for last 2 years
	S. Hemisphere	↗	- 4 %
	Mediterranean	↘	- 12 %

VOLUMES	Source	Comparison		Observations	Cumulative total / cumulative average for last 2 years
		previous month	average for last 2 years		
	Florida	↘	-	End of the campaign. Some moderate stocks available until mid-May.	- 18 %
	Israel	↘	- 9 %	Campaign winding down, with smaller volumes than in previous years. Fluid sales.	- 11 %
	South Africa	↗	- 4 %	South African supply progressing, though with volumes slightly in shortfall. Fruit size mainly small (50/55).	- 4 %



■ **Grapefruit prevents arterial stiffness.** That is the conclusion of a study sponsored by the Florida Department of Citrus, and run by the National Institute of Agronomic Research (France) and the National Institute of Health and Medical Research (France). The panel, comprising 48 women, demonstrated that blood flow speed through the femoral artery (a marker of arterial stiffness) was lower in the individuals consuming grapefruit.

Source: William Reed

■ **Indonesian market closed to citrus this summer?** That is the fear of Indonesian importers, the national authorities seemingly not inclined to issue the import approval for products besides the lemon during the June to September period. Indonesia imports approximately 20 000 t of citrus besides the lemon during the summer, i.e. less than 1 % of world trade. Australia, which exports approximately 9 000 to 10 000 t per year (i.e. 5 to 6 % of total volumes) to this destination, is set to be the only supplier country seriously affected by this possible embargo.

Sources: Reefer Trends, CIRAD



Southern Hemisphere Citrus - Indonesia Imports excluding lemon					
tonnes	2010	2011	2012	2013	2014
S. Hemisphere total	21 206	27 380	25 503	15 945	21 014
Australia	5 530	8 521	10 222	8 987	9 900
Argentina	11 839	13 522	10 635	4 857	7 296
South Africa	2 924	4 099	4 214	1 291	3 794
Uruguay	913	1 238	432	810	24

Source: Comtrade

Pineapple

May 2015

In May, the fruit marketing process was at times disrupted by the public holidays. During the first half-month, the Sweet supply was fairly limited because of the shipping delays. Though not exactly lively, demand was able to absorb volumes available more or less well, with seasonal fruits still expensive. Yet from mid-May, the situation tightened progressively. ALDI's cancellation of its promotions and a downturn in demand forced operators to lower their prices to keep sales fluid.

Throughout the month, the air-freight pineapple market maintained a fairly positive trend. The supply, affected by several factors (rain, quality concerns, strikes) was often short of demand. The supply from Benin seemed to be heaviest hit by the reduction in volumes. Nonetheless, prices did not take off, since the quality was very often irregular, with several batches lacking coloration. So these under-coloured batches caused the rates range to widen. The Sugarloaf supply was also reduced, selling at between 1.75 and 2.00 euros/kg depending on the quality. We should also note the arrival of fruits of this variety from Togo, which although less significant in terms of volumes, were nonetheless highly prized for their taste quality and their good coloration.

The Victoria market was lacklustre throughout the month. The limited supply often struggled to sell well, since demand gradually switched toward seasonal fruits. However rates remained fairly stable, thanks in particular to the scarcity of the overall supply.



Mango

May 2015

The last batches from Peru, of variable quality, sold in early May across a wide price range. While Brazil and Puerto Rico had partially offset the Peruvian slump in April, the Kents remained marginal. The start of the West African sea-freight campaign rapidly made up for this shortfall. Initially moderate, shipments from Côte d'Ivoire boomed in the first half-month, obtaining rates taking over where Peruvian mangoes left off. As the Ivorian supply progressed, prices took a downturn in the second half-month, more particularly at the end of the month, when competition with seasonal fruits was becoming livelier. The irregular maturation and uneven size distribution also caused prices to deteriorate, more quickly for the small sizes in the majority in the Ivorian supply. In late May the Dominican campaign was starting, with Keitts swelling West African volumes and boosting the progressive deterioration of the market.

After an auspicious April, the air-freight market shrank with the incoming shipments from Mali, Burkina Faso and

Côte d'Ivoire, a source which regularly shipped large quantities soon in excess of demand. The storage entailed by these poor sales was accompanied by a deterioration in quality (advanced maturity), itself generating price falls. The other sources were subjected to the weight of Ivorian shipments, leading to a fall in rates that was particularly marked due to the more heterogeneous quality. In the second half-month, the particularly early shipments from Mexico swelled the supply and nonetheless obtained higher prices due to higher costs, but also to the "novelty" effect.

MANGO - INCOMING SHIPMENTS (estimates in tonnes)

Weeks 2015	19	20	21	22
Air-freight				
Peru	20	-	-	-
Burkina Faso	30	25	20	20
Mali	40	40	30	20
Côte d'Ivoire	120	140	100	80
Mexico	5	20	30	30
Sea-freight				
Brazil	1 300	1 200	1 100	1 230
Côte d'Ivoire	2 200	3 300	4 400	4 400

EUROPE

MANGO - IMPORT PRICE ON THE FRENCH MARKET

Weeks 2015		19	20	21	22	Average May 2015	Average May 2014
Air-freight (euro/kg)							
Burkina	Amélie	3.00	-	-	-	3.00	2.65
Burkina	Valencia	3.00-4.00	-	2.00-3.00	-	2.50-3.50	nd
Burkina	Kent	3.00-4.00	3.00-3.50	3.00-4.00	2.80-3.20	2.95-3.65	2.95-3.60
Mali	Amélie	3.00	2.60-2.80	3.00	-	2.85-2.90	2.60-2.70
Mali	Valencia	2.50-3.80	2.50-3.00	2.00-3.00	2.00-3.00	2.25-3.20	2.90-3.25
Mali	Kent	3.50-4.00	3.00-3.50	3.50-4.00	2.50-3.80	3.10-3.80	3.05-3.85
Côte d'Ivoire	Kent	4.00-4.50	3.50-4.50	3.00-4.20	3.00-4.00	3.35-4.30	3.50-4.35
Mexico	Kent	-	-	-	4.50-5.00	4.50-5.00	-
Sea-freight (euro/box)							
Peru	Kent	4.00-8.00	-	-	-	4.00-8.00	4.00-4.30
Dom. Rep.	Keitt	-	-	-	6.00-6.50	6.00-6.50	4.00-5.00
Mali	Kent	-	-	-	4.50-5.50	4.50-5.50	4.30-5.30
Puerto Rico	Keitt	6.50-8.00	6.00-7.00	5.00-7.00	5.00-7.50	5.60-7.35	5.00-5.50
C. d'Ivoire	Kent	6.50-8.00	6.00-7.50	5.00-7.00	4.50-6.00	5.50-7.10	4.60-6.30

PINEAPPLE — IMPORT PRICE

Weeks 19 to 22	Min	Max
Air-freight (euro/kg)		
Smooth Cayenne	1.75	2.10
Victoria	3.00	3.80
Sea-freight (euro/box)		
Smooth Cayenne	6.50	8.00
Sweet	7.00	10.00

EUROPE

PINEAPPLE - IMPORT PRICE IN FRANCE - MAIN SOURCES

Weeks 2015		19	20	21	22
Air-freight (euro/kg)					
Smooth Cayenne	Benin	1.80-1.90	1.80-1.90	1.80-1.90	1.80-1.90
	Cameroon	1.80-1.90	1.75-2.00	1.75-1.95	1.75-1.95
	Ghana	1.85-2.00	1.85-2.00	1.75-2.10	1.75-2.10
	Côte d'Ivoire	1.80-2.00	1.80-1.90	1.80-1.90	1.80-1.90
Victoria	Reunion	3.00-3.80	3.00-3.80	3.50-3.80	3.50-3.80
	Mauritius	3.00-3.50	3.00-3.50	3.00-3.50	3.00-3.50
Sea-freight (euro/box)					
Smooth Cayenne	Côte d'Ivoire	-	6.50-8.00	6.50-7.50	6.00-7.50
Sweet	Côte d'Ivoire	8.00-10.00	8.00-10.00	8.00-10.00	8.00-10.00
	Ghana	8.00-10.00	8.00-10.00	8.00-10.00	8.00-10.00
	Costa Rica	8.00-10.00	8.00-9.000	8.00-9.000	7.00-9.00

Sea freight

May 2015

The charter market may not have been busy, but supply and demand for capacity remained in equilibrium and rates held. Seatrade, Star and Cool Carriers' units were fully occupied with contract positions while Baltic Shipping was obliged to charter in tonnage after unexpected delays to vessels in Peru and Chile. For the majority of the month, owner operator Maestro was the only game in town.

Ecuadorian bananas were cheap and plentiful and pricing in the Med remained stable, if not firm. The transit markets were occupied with ensuring there was enough fruit held in stock for the start of the holy month of Ramadan, which this year occurs in mid June. The combination encouraged some speculative chartering from the traders. With no vessels available on the open market, this obliged more time charter inter-operator action than voyage business and was another reason for the highest monthly TCE average since 2008.

After a slow start South African citrus exports proceeded in an orderly manner. The only disappointment to date relates to rejections to fruit in China for cold sterilization failures. Unfortunately for the industry, the phytosanitary protocol for entry into Chinese ports has been written only for reefer containers, leaving citrus shippers short of a more reliable service provided by the specialized reefer.

Meanwhile good demand/activity levels from a number of origins continued to buoy the market for small and handysize ships. Rates held firm at over USD 200 per MT for fish cargoes up to and including 4K MT, which would ordinarily

attract the attention of the larger ships – however with such a high percentage of large tonnage occupied or tied into contracts, operators could not take advantage.

Demand for small tonnage was boosted by a Nigerian Government fish quota declaration for the first half of the year. Licences were granted for 300K MT of imports before the end of June. With the South Atlantic continuing to occupy the majority of the Lavinia fleet, it looked as if market equilibrium would be maintained for another month for the small and handysize units.



■ **Organic or conventional products: discriminating by analysing their microbial ecology.** The food crises of recent years have led European consumers to be more vigilant as regards the safety and origin of the products they consume. The popularity of organic agricultural products, amongst others, reflects the demand for healthy, natural and certified foods. But once they are on the market, how can we discriminate between a foodstuff produced by the organic sector and another produced by the conventional farming sector, using pesticides? This was the question posed in a study by CIRAD of the traceability of fruits, using an overall microbial molecular analysis method developed in its laboratories. Researchers from CIRAD suggested that the chemical treatments, particularly fungicides, used in conventional farming modified the microbial flora of products. By analysing that flora, they believed it would be possible to pinpoint how they were produced. Trials on nectarines, peaches, apples and bananas were highly conclusive. They showed that it was possible to distinguish fruits in terms of how they were produced, through statistical comparisons of their microbial profiles.

Source : CIRAD

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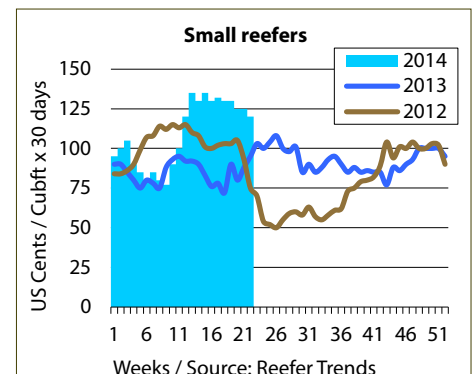
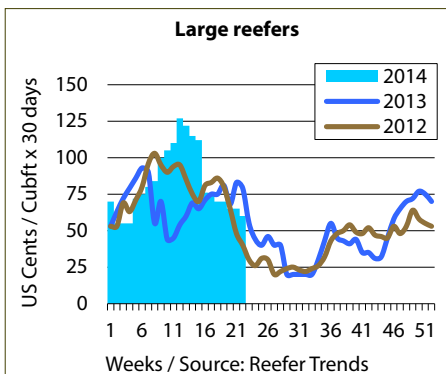
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The independent news and information service for the reefer and reefer logistics businesses

EUROPE

MONTHLY SPOT AVERAGE

USD cents/cubic foot x 30 days	Large reefers	Small reefers
May 2015	63	122
May 2014	59	90
May 2013	52	95



Southern Hemisphere kiwi

Yellow kiwi expected to take off



© Guy Brehm

Large-scale planting of yellow varieties over the past few years should quickly erase memories of the fall in potential registered in recent campaigns, and inject some colour into the fruits shelves. However, while New Zealand is emerging strongly from the Psa crisis, Chile has not yet completely brought the propagation of this parasite under control, and its spread is continuing. Nonetheless, the planting dynamic remains just as strong in this country.

Premises still unsure in 2014, with the Chilean market frozen

Southern Hemisphere kiwi production is preparing to take flight once more. The 2014 harvest should have already manifested the production renewal underway, but the overall potential was held back by the frosts of late 2013, which slashed Chile's production by 60 %. Finally, the supply was very lean, with overall exports falling by another 15 % from 2013, with New Zealand's resurgence not completely making up for Chilean losses. However, thanks to resistant yellow varieties returning to production (approximately 50 000 t exported in 2014 as opposed to 290 000 t of green kiwi), Chile has been locked in a downward spiral the last few years, due to uprooting after the ravages of *Pseudomonas syringae* pv. *actinidiae* (Psa). Exports were up 10 %, after reaching the 312 000 t threshold in 2013.

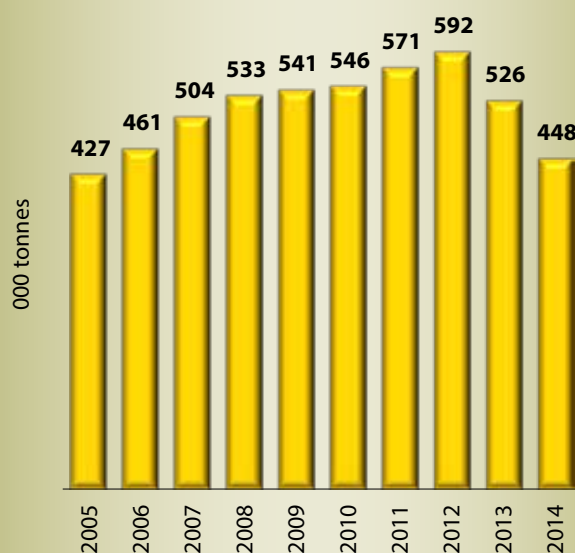
Shipments to Europe however fell by approximately 20 % in 2014, with Chile down 58 %, and a small yet considerable rise of 5 % from New Zealand. Given the economic conditions, exports to Russia have also decreased (- 47 %), from both Chile (- 46 %) and New Zealand (- 54 %). There was a significant downturn to Latin America (- 59 %) and the United States (- 39 %), where Chile is dominant. There was no fall recorded in Asia (+ 3 %), thanks to New Zealand's strong presence there. New Zealand exports were actually up by 10 % with the growth in the yellow varieties highly prized on these markets (China, South Korea and Japan), while Chilean shipments were down by 47 %.

Rebirth of the New Zealand phoenix more evident

If, as the German philosopher Friedrich Nietzsche claimed, "that which does not kill us makes us stronger," we can say indeed that Psa that has hastened the research efforts already implemented by the New Zealand industry in recent years. Since resistance to Psa needed to be added to the characteristics already sought such as colour, yield, size and health assets, while also creating more crosses. As a reminder, the Hort 16 variety marketed by the name Kiwi Gold by Zespri, was not resistant to Psa. The disease colonised 80 % of the New Zealand cultivation area within just a few years from 2010, but it now seems to have been contained thanks to the measures taken. Hence surface areas for this particularly sensitive variety have been divided by ten in the space of three years (200 ha in 2014 as opposed to 2 700 ha in 2011).



**Southern Hemisphere Kiwi
Total exports**



Sources: ODEPA, New Zealand statistics

However, planting of new resistant varieties is starting to bear fruit. There has been massive planting of yellow varieties, with the clone Zesy002, better known by the name Gold3 and dubbed Sungold by Zespri. The variety already occupies 4 500 ha, with 1 130 additional licences taken out in 2013, as opposed to only around one hundred hectares as recently as 2011. This year, production should reach 100 000 t (38 % of the total) in the conventional segment, which should be supplemented by 1 800 t of organic Zespri SunGold. Conversely, the other yellow-fleshed cultivar, Zesy003, better known as Gold9 (Zespri Charm kiwifruit), does not seem as promising, with a significant propensity for dehydration during storage. Hence planted surface areas reached 150 ha in 2013, though around one hundred hectares had already been converted to Gold3. Nonetheless, volumes are not falling for the moment in green varieties, and should reach 250 000 t this year in the conventional segment, and 12 500 t for Zespri Organic Green. The group should also present three new varieties in the near future (one green variety and two red varieties) in order to continue diversification. Nonetheless, no decisions have been taken for the moment. The varieties are still in the observation phase. Overall, New Zealand production now covers 11 500 ha for a potential of just under 400 000 t. Yet surface areas should see a further considerable rise, and could reach 14 000 ha from 2016. Zespri is planning on a potential of 435 000 to 495 000 t from 2018, with an increasing proportion of yellow varieties.



Kiwi — Southern Hemisphere Exports in 2014			
tonnes	Total	New Zealand	Chile
Total	447 649	345 000	102 649
EU-28*	171 832	136 269	35 563
Asia	186 676	174 634	12 042
Latin America	17 806	-	17 806
USA	29 352	9 686	19 666
Russia	10 748	775	9 973
Middle East	4 746	3 647	1 099

Sources: New Zealand statistics, ODPA/ASOEX, *Eurostat
Processed by Infofruit

Chilean kiwi still struggling to spread its wings

Psa is continuing to spread in Chile's central provinces, despite the efforts made in production to control its propagation (information, foot baths, hand disinfection, exclusiveness of equipment used in affected zones). After the two zones infected toward the south — region VII (Maule) and region VIII (Bio Bio) — now region VI (Bernardo O'Higgins) has tested positive for Psa, as the country's sanitary authorities have confirmed. So the Kiwi Committee has asked producers to step up the measures in the orchards.

However, the disease is not holding back planting, particularly for yellow varieties, although they are not necessarily resistant to the disease. Hence it is continuing in Jintao, though it is being staggered. Approximately 400 ha has already been planted in Curicó and Colchagua provinces, 50 % of which is now in production and 50 % will enter production within three years. The potential is currently 3 500 t, and should rise to 5 000 t in 2016. Planting should also continue,

with an objective of 800 ha by 2018. Similarly, considerable development is expected from the Soreli variety. Approximately 50 ha have already been planted in the Metropolitan and Maule regions. This planting will also be staggered. Surface areas could approach 200 ha in 2016, and 400 ha in 2018. Conversely, the Kiwi Kiss variety appears too sensitive to *Psa*. Surface areas were estimated at 600 ha in 2014.

Operators are also banking on several green varieties, retaining for the early segment Summerkiwi, whose total cultivation area now amounts to 500 ha, but also a variety suited to organic production, highly resistant to *Botrytis* and with a good size, the Mega kiwi, launched in 2011.



Photos © Guy Brehinier

Yellow varieties expected to soar from this campaign

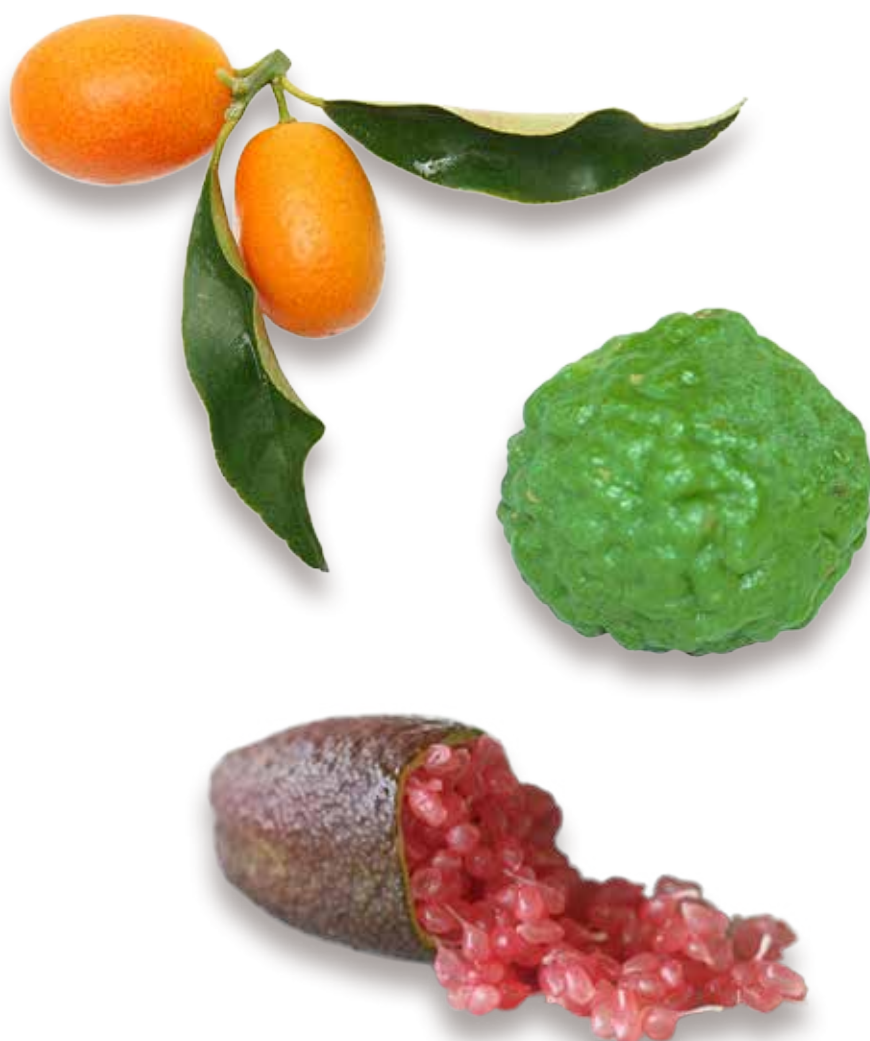
After a particularly lean 2014, the 2015 campaign should bring a more plentiful supply, although the potential is set to be slightly below normal, with some ongoing consequences due to the 2013 frosts in Chile. Production should not exceed 170 000 t, i.e. twice the volumes of last year (86 000 t), though potential will be 20 % below normal. The harvest should reach a total of 160 000 to 163 000 t for Hayward (- 24 % on 2013) and 7 000 to 8 000 t for other varieties. Yet there are uncertainties weighing down on the campaign, particularly in terms of logistics, due to the strike threats by the dockers, who have already paralysed shipments for long weeks in the past. Conversely, we are expecting an increased potential from New Zealand. Exports should approach 365 000 t (+ 6 % on 2014), with 263 000 t of Green (- 10 %) and 100 000 t of Sun-gold (50 000 t in 2014).

The campaign started in early May for Chile. The first New Zealand volumes arrived a little earlier than last year (1st May). The progression of the New Zealand supply has again been accompanied by a big marketing campaign, with a three-week TV media plan which launched the campaign between late May and early June, with in-store actions taking over throughout the season. A billboard campaign is also planned from 25 August to 1st September, to mark the new academic year, in order to revitalise sales ■

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Kumquat, caviar lemon and kaffir lime

Small is beautiful!



Some have the particularity of being completely edible, others of containing little juicy beads, or giving off an indescribable aroma. What these citruses have in common is being highly prized in gastronomy and pastry making: the kumquat, the caviar lemon and the kaffir lime.



Kumquat

The kumquat belongs to the Rutaceae family, like the citruses, but from a completely different botanical genus, *Fortunella*. This name was attributed to it in memory of Robert Fortune (1812-1880), a 19th Century British botanist. To this traveller and his numerous voyages to China, Taiwan or Japan we owe the introduction of many plant species to Europe, such as the peony, rhododendron, chrysanthemum and kumquat (in 1846).

The kumquat is a shrub growing up to 3 to 5 metres in height in northern China, its country of origin. The leaves have a dark green topside, and a paler underside. The flower are small, white and highly aromatic. The fruits, ovoid or elongated depending on the species, are a more or less yellowish orange. Several kumquat species can be distinguished in particular by the shape of their fruits, the main ones being the Nagami (*Fortunella margarita*) with its oblong fruit, the Marumi (*Fortunella japonica*) with its round fruit or the Fukushu (*Fortunella obovata*), which has a more or less round fruit but is larger than the Marumi. The Fukushu can also be distinguished from the rest by its rounder leaves. There seem to be numerous hybrids between these species, creating multiple new varieties. For example, the Meiwa kumquat



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KUMQUAT



JANUARY
FEBRUARY
MARCH
APRIL
MAY
JUNE

JULY
AUGUST
SEPTEMBER
OCTOBER
NOVEMBER
DECEMBER

GLOBAL-GAP, BRC, IFS CERTIFICATION



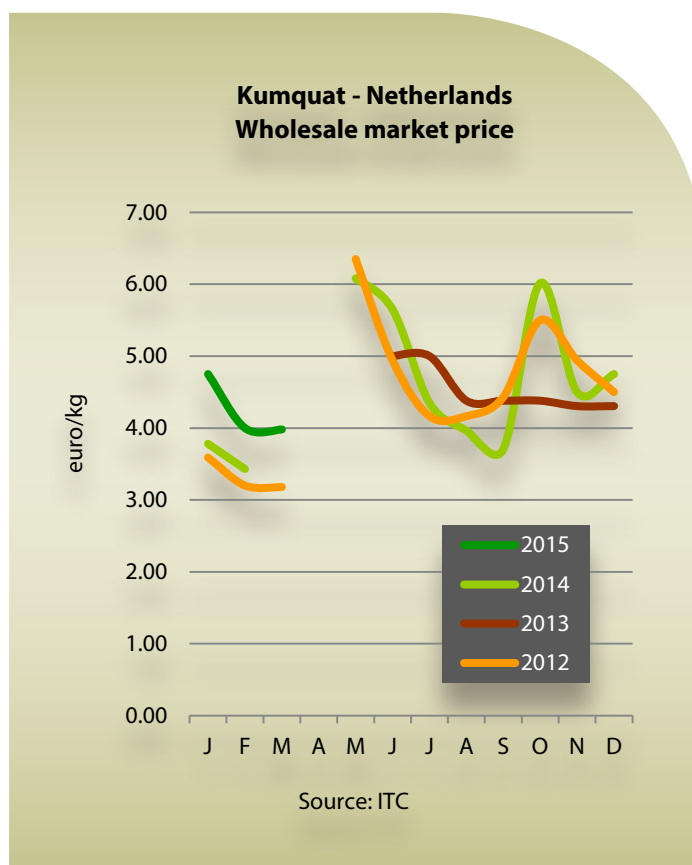
is probably a hybrid of *F. margarita* and *F. japonica*, although some authors consider it a species in its own right (*F. crassifolia*). Intergeneric crosses between species of *Fortunella* and *Citrus* or *Poncirus* are also known, such as Calamondin (*Fortunella* × *C. reticulata*), the limequat (*Fortunella* × *C. aurantium*) or the orangequat (*Fortunella* × *C. sinensis*).

The fruits are completely edible, including the peel, since it is free from the burning agent found in the other citruses. The fruits have an acidic, bitter and sweet taste, and are mainly processed before consumption: chutney, marmalade, jam, and whole fruits crystallised or preserved in syrup. For the past few years the kumquat has been adorning cocktails as a decoration, but also vodka-based mixes. In Australia, a specific liqueur is even prepared using the fruits. The kumquat is also used by pastry chefs.

It is also an ornamental bush appreciated in the United States for the quality of its dense and verdant foliage. It lends itself particularly well to pot planting, where it flowers and bears fruit readily. In Vietnam, the fruits are used in traditional medicine to treat coughs.

Kumquat market: growth on standby for the biggest of the minor-league fruits

The kumquat is certainly the best known of the exotic citruses. Nonetheless, the European market for this gem of a fruit remains extremely limited. The volumes sold in the EU-28 are probably between 1 200 and 1 300 t per year, going on the export figures of the main supplier countries, for lack of European Customs data. According to professionals for this product, they have hardly developed in recent years, with none of the main outlets exhibiting a particular dynamic. As with most minor products, the share of the wholesale market remains high, in order to supply the network of fruit retailers or specialists in Asian products. Supermarket sector interest varies with latitude. In Southern Europe (including France), it is stocked on a very seasonal



Kumquat — European Union — Market calendar by source												
Sources	O	N	D	J	F	M	A	M	J	J	A	S
Israel												
Spain												
Corsica												
South Africa												



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basis, practically exclusively for the end-of-year holidays. The North European distributors allow a broader allocation, with a minor current of sales persisting year round. Finally, the crystallised fruit sector practitioners or manufacturers absorb considerable volumes via large spot orders. Prices fluctuate within a relatively narrow range, from 3.50 to 4.50 or even 5.00 euros per kilo at the import stage. The peaks occur in late November/early December when demand is at its highest, and in early autumn when the supply is limited.

Low diversity

Varietal diversity is under-represented. The Nagami, an oval kumquat measuring 20 to 30 mm and weighing 5 to 20 g, reigns practically supreme. Some Spanish operators offer the Meiwa. This variety, also oval, is known for being tastier (particularly sweeter) and less seeded, but its larger sizing is a brake on its development. The Marumi, a round kumquat, is practically absent from the European markets. The fruits are imported in 2-kg boxes, with or without their stalk, and generally non-sized (some brands offer an L, XL and XXL grading, very difficult and costly to implement). The fruits aimed at the supermarket sector are sometimes repacked for import in transparent punnets (generally 200 g or 250 g).

Two main suppliers during the winter season, and a single one in summer

During the winter season, the supply comes from the Mediterranean, and relies on two mainstays.

Spain is probably the leading source, although there are no figures to confirm this. The season runs from early December to late April. The orchards, covering an unknown area, are scattered throughout the citrus growing zone, from the Valencian Community to Andalusia, by way of Murcia. Axarquia, better known for its production of exotics such as the avocado or mango than for citrus growing, is among the suppliers.

Kumquat — European Union — Markets by source					
Sources	Volumes	Trend	Varieties	Logistics	Main suppliers
Israel	400 to 550	=	Nagami	sea-freight (5 days)	Mehadrin, Galilee, etc.
Spain	220 t	↗	Nagami (Meiwa)	truck	Earmur, Trops, Anecoop, Xarqui, etc.
Corsica	35 to 40 t	=	Nagami	truck	OPAC, etc.
South Africa	450 to 500 t	=	Nagami	air-freight	Premier Fruit, etc.

Israel is the other big player on the winter market. The season starts in October and ends in April. Nonetheless, nearly 60 % of the 400 to 550 t shipped every year to the international market is exported during the four weeks preceding the end-of-year promotions. The cultivation area, comprising 35 ha of the Nagami variety, is stable.

Corsica provides a small supplementary volume, which has the particularity of organic certification. The cultivation area, comprising 3 ha of the Nagami variety, is located on the eastern plain. The volumes of approximately 35 to 40 t per year, are sold from February to June, or even July, by OPAC. The counter-season market supply relies entirely on South Africa. The cultivation area, packed into Limpopo, supplies the European market with Narumi from May to October. Exports, primarily by air-freight, are reportedly around 450 to 500 t per year. Just as in Israel, the surface areas are relatively stable. Argentina, which used to export to Europe thanks to a cultivation area estimated at around one hundred hectares, withdrew from the market at the end of the 2000s.



Caviar lemon

The caviar lemon (*Microcitrus australasica*, also known as *Citrus australasica*) or “finger lime” is one of the few species not originating from Asia. It is actually native to the undergrowth of the rainforests of eastern Australia. This natural habitat boasts significant genetic diversity, influencing the size of the tree, the density of spines on the branches, the size and colour of the fruit. Some trees can reach 6 metres in height, whereas others remain rather bushy. However, the specificity of the fruits of this species is to contain small, compressed juicy vesicles (like small fish eggs) which pop out when the fruit is opened, naturally detaching from each other, whence its trade name of caviar lemon.

The finger-shaped fruits measure less than 10 cm long. Upon maturity, their peel colour varies with the variety: green, yellow, orange, red, purple, brown or even black. The vesicles are juicy, acidulous, with a flavour similar to the lime (*Citrus aurantifolia*), with a slight note of kaffir lime (*Citrus hystrix*).

The caviar lemon has really only been cultivated for around fifteen years to meet the demand from the “bush food” market in Australia. It is now highly prized overseas, especially by restaurateurs, who serve it to accompany seafood such as oysters. Traditionally, it is also an ingredient in sauces and is preserved in pickles or processed to make jams.



Kaffir lime

The kaffir lime (*Citrus hystrix*) is native to the Sunda Islands. It is uncommon worldwide, and encountered primarily between South-East Asia and New Caledonia. It is also highly prized on Reunion, where it is often cultivated in Creole gardens, or even in small orchards. The fruits are sold individually on all the markets on the island, and often at speculative prices. Thailand and India are the main exporters of the fruits and leaves of the kaffir lime, especially for the London market. The quantities sold remain very limited, however.

The kaffir lime is generally a small, more or less spiny tree with a fairly erect habit. The leaf stalk is highly characteristic for its very wide wings. The pear-shaped fruit is narrowed at the top to form a nipple, while its base is rounded. The green-coloured peel of the fruit is thick and bumpy. The greenish pulp is highly acidic and bitter. On maturity, the fruits are coloured yellow, but they are harvested green when their essential oil concentration is at its highest.

On Reunion, production extends year round, though with a peak in March and April. The kaffir lime has a powerful characteristic aroma, possibly reminiscent of lemongrass. The fact remains that a mere little zest of kaffir lime on a salad, in a cream sauce to accompany fish or even on a black chocolate coulis, adds to these dishes an indescribable aroma. More traditionally, the fruit zest (or its leaves) is used in perfumery or as a condiment. It intensifies the taste of numerous dishes, such as "rougail" tomato sauces or pepper sauces, as well as aromatising Reunion "bouchon" dumplings.



Kaffir lime market: specialists talking to specialists

Small as it is, the kumquat market towers above the kaffir lime market. There are no Customs sources to estimate volumes sold in Europe, but it is clear that they are very limited, in view of the players working this product. This seems reasonable, as this rare citrus is used mainly in cooking for the exotic touch brought by the aroma of its zest. Furthermore demand, extremely limited and stable even during the big exotics promotion periods, only gets moving after the broadcast of TV programmes featuring recipes including this product!

Hence distribution of this citrus relies practically exclusively on wholesalers supplying specialist fruit traders, Asian product stores, and very occasionally the supermarket sector, which is hesitant to stock its shelves with a fruit with such a high cost which could be taken for a green lemon. It is true that its import stage price, which fluctuates year round between 9 and 12 euros/kg, clearly makes it a luxury product, and ends up placing it in the world of spices and condiments rather than fruits and vegetables. We should note that kaffir lime production is limited, comes from afar and is shipped exclusively by air-freight.

It is Malaysia which provides the bulk of the supply to the European market. This country is capable of providing quality production year-round, generally shipped in 3-kg boxes (non-sized fruits, though generally more than 3 cm in diameter). Some volumes are shipped on a very occasional basis from the French West Indies (mainly from March to September) and Reunion (from January to June).

Production and preservation of these citruses

The agro-ecological requirements of these three species and their varieties are no different from those of other citruses (orange, mandarin, lemon, etc.). These easy peelers may be cultivated in highly diverse climate zones, often different to their areas of origin. However, their cultivation is limited by low temperatures. Indeed, although most citruses can withstand frost, the damage caused by temperatures less than 5°C may be severe. The vegetation thresholds of Citrus are estimated at 12°C and 36°C. High temperatures enable good development of the tree, and good productivity. Low temperatures when the fruits reach maturity are also beneficial, mainly for coloration.

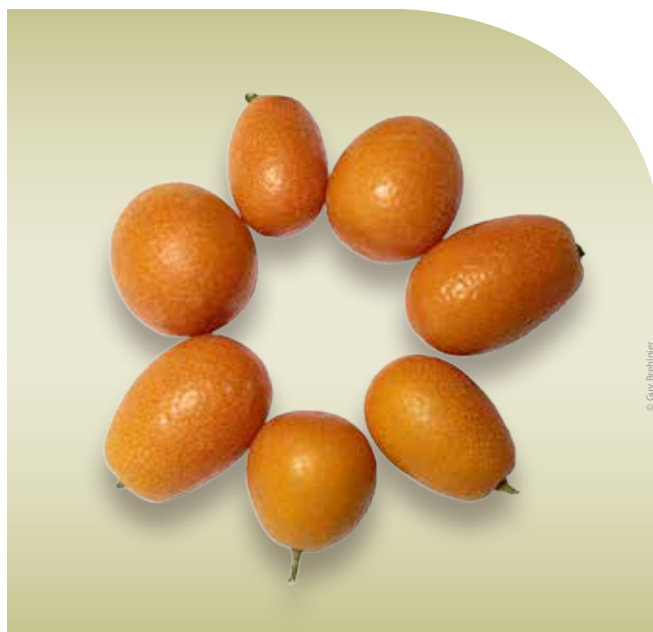
Citruses are demanding in terms of water, especially regularity of input. Their requirements are approximately 1 500 mm of water per year. They can adapt to highly variable air humidity conditions. However, high levels improve the fruit quality, providing in particular a higher juice content. These ecological requirements, combined with cropping practices (choice of rootstock, planting density, pruning, irrigation and fertilisation, control of competition from weeds, etc.) are factors determining the fruit quality before harvesting.

The bioaggressors of these three species are not specific to them. However, various sensitivities have been reported, such as to melanose (*Diaporthe citri*) in caviar lemons — the spines on the branches are known to cause lesions on the fruits. The kaffir lime is extremely sensitive to citrus canker (*Xanthomonas campestris* pv. *citri*), unlike the kumquat which is tolerant to it.

The fruits of these three species are mainly aimed at the fresh market, with the exception of the kaffir lime, the peel of which may be frozen or reduced to powder. This type of market seeks high quality fruits: both aesthetically (appearance) and internally (organoleptic and nutritional properties). So the post-harvest storage conditions are essential for preserving all these qualities, especially the temperature and humidity level, which are therefore two vital factors. The ideal preservation temperatures are 5 to 10°C for 4 to 5 weeks for the caviar lemon, whereas they are seemingly higher for the kumquat, at around 10 to 15°C. The humidity levels must be between 85 and 95 % ■

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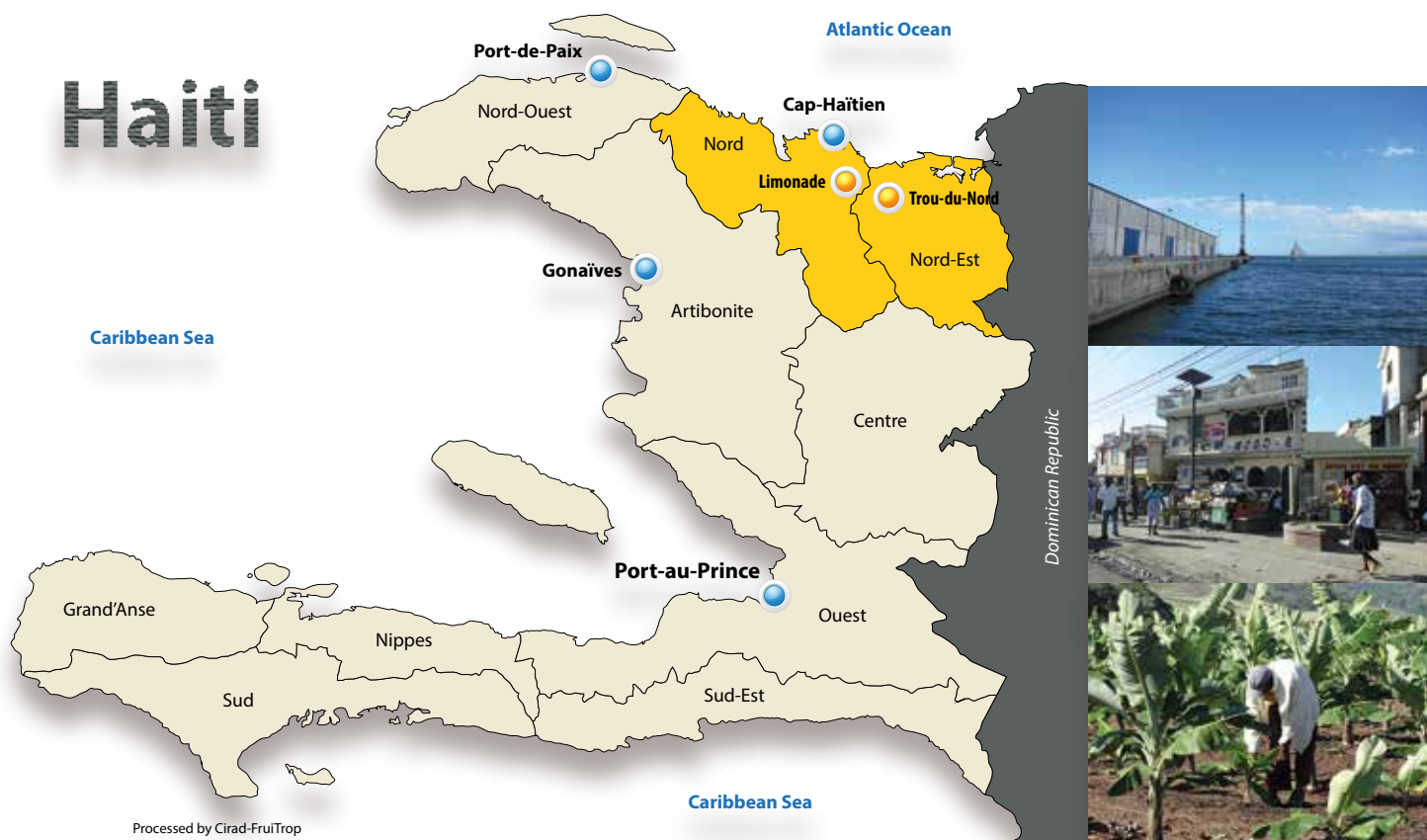


Organic banana in Haiti

The Agritrans project

Photos © Denis Loeillet, Thierry Lescot, Luc de Lapeyre, Yvan Mathieu

In a country of natural catastrophes and chronic economic under-development, the Haitian organic banana production and export project is a genuine piece of good news. The first fruits should be shipped to Europe by September 2015. The initial project involves 1 000 ha, though a land reserve of more than twice that is available. In the medium term this project could considerably increase the world organic banana supply, in which the neighbouring Dominican Republic leads the way. Furthermore, the project has an essential asset: it is designed to fit perfectly into the local economic and social fabric... in a word, its inclusiveness!



Processed by Cirad-Fruitrop

Vitroplant nursery in shade shed



Situated in the North-East Department, in the Limonade – Trou du Nord zone, this big coastal plain zone is well-suited to banana production. It comprises a 40 to 60 cm clay-silt soil on top of a deep sandy (coral) layer (advantageous for drainage), unused for 50 years (formerly a concession of several thousand hectares farmed for extensive production of sisal).



The dry climate requires irrigation to be installed (annual average rainfall less than 1 000 mm). Conversely, this climate is an advantage since it severely limits the impact of the main banana disease, black cercosporiosis or black leaf streak disease (BLSD or Sigatoka). This disease is present throughout Haiti (since 2000), in the neighbouring Dominican Republic (since 1996) and throughout the Caribbean-Latin American sub-region. Hence the climate situation in the zone is crucial for organic production, as is the case for the main organic producers in the Dominican Republic, in Peru (north-west), Ecuador (south-west), Colombia (north-east) or Ghana.



A project with good local integration

The Agritrans project, promoted by Jovenel MOISE, an entrepreneur native to the region, has been in development for around a decade. It arose from two observations:

- there had been banana production for export in the northern plains region in the 1950s. At the time, the fruits were exported by the city of Port-de-Paix, and their natural destination was Florida, particularly close to the Haitian coast (two or three days by sea);
- the region's agricultural land has been practically unfarmed for nearly 60 years. Only highly precarious food-producing agriculture has been developed on this land, which belongs to the Haitian State. This would facilitate "Organic Agriculture" certification.

So the project incorporates all these parameters. It will produce organic bananas, and its investments incorporate the idea that the local fabric (population, current users, the region) must benefit from the economic development generated. Hence a dialogue has been opened with all the local stakeholders concerned, which has led to the implementation of a number of actions, such as compensation for food crop plots destroyed due to land consolidation, the promise to preferentially hire local labour, forming cooperatives to eventually produce banana and other fruits and vegetables in association with the project, etc. At present, the project extends over nearly 1 000 ha, and holds a State concession for a 25-year period.



Land ready for planting



Plantation machinery



**27 000 m³
holding pond**

Drainage network



First plantation

Desuckering and drip system

Drip irrigation

Double row planting

Large-scale work completed to have bananas available from September

The first work started in September 2013: land preparation, drainage network, digging wells and the water reservoir pond, primary irrigation network, pathway and plot network, reinforcing a dyke, etc.

Field work

The plant stock came from pre-detached vitroplants (William variety), originating from Costa Rica. The hardening phase (one month) in plastic sachets was carried out in a shade shed built especially on the site, with a capacity of 230 000 vitroplants. At present, the hardening rate is 80 000 to 150 000 vitroplants per month, and vitroplants are arriving from Costa Rica every two weeks.

The first planting, initially scheduled for late April 2014, began in October, though rainy spells pushed back actual planting until late November. In May 2015, nearly 200 ha had already been planted, at a planting rate of 7 to 8 ha per week. The planting density is 2 500 plants/ha in double rows.

Organic certification is issued by the Peruvian company Control Union, which has an office based in Santiago, in the Dominican Republic, where it is the main certification company.

Irrigation is provided by a network of around ten wells equipped with electric pumps and connected to a 27 000 m³ holding pond (enabling settling). The water is then redistributed by pumping to the drip irrigation network.

In the medium term, a damming project on a neighbouring river is in the study phase, with the support of the Haitian State. Under the plan, a pipeline around 20 kilometres long would be built, bringing water upstream of the banana zone, and enabling irrigation by natural pressure without the need for pumping. The water reserve capacity would be nearly 100 000 m³, enabling the irrigation of approximately 5 000 ha. A large-scale drainage network has been installed (rare cases of heavy rainy spells).

As regards diseases and pests, the risk of nematode contamination (one of the major constraints on banana production, especially in Haiti) is theoretically

zero, if the golden rule of using vitroplants is strictly adhered to, with an absolute ban on introducing local sprouts (suckers), and taking certain precautions to prevent contamination by imported soil (e.g. by the workforce). Efficient fertilisation and irrigation, as well as scrupulous control of the defoliation techniques should be sufficient to limit the impact of black leaf streak disease (high pressure possible in the few rainy weeks of the year).

A cableway network for transporting bunches from the plots to the conditioning station is being installed. A single packing station is planned for the 1 000 ha, which should be built very shortly. It will have the biggest capacity of the whole Caribbean zone.

Bananas will be exported from the port of Cap-Haïtien, situated 30 km from the production site. The transport time to reach Europe (Dunkirk) would be at least 16 days, depending on the shipping routes taken. The first harvests are scheduled for June-July 2015, and the first containers would be shipped around August-September.

Other entrepreneurial investors, both Haitian and foreign, are interested in this project, and should in the short or medium term launch a similar set-up over 1 500 ha.



Container yard

Loading dock at the port of Cap-Haïtien



Thanks to the support of the French Embassy, the project can call on the expertise of CIRAD, in terms of:

- crop science (organic fertilisation, technical procedures, service plants, irrigation, etc.);
- phytopathology (organic management of black leaf streak disease);
- environmental and social impacts of the project as a whole on the zone;
- Vitropic (a subsidiary of CIRAD) setting up to supply high quality vitroplants (banana and plantain);
- training.



**Nursery of fruit trees
for small local producers**

New "Roi Henri Christophe" State University



Furthermore, the proximity of the new "Roi Henri Christophe" State University 500 m from the project is of great interest, especially since the new Crop Science Faculty has 100 ha of wild land for the trial. A collaborative project with CIRAD and the French Embassy is in the study phase ■

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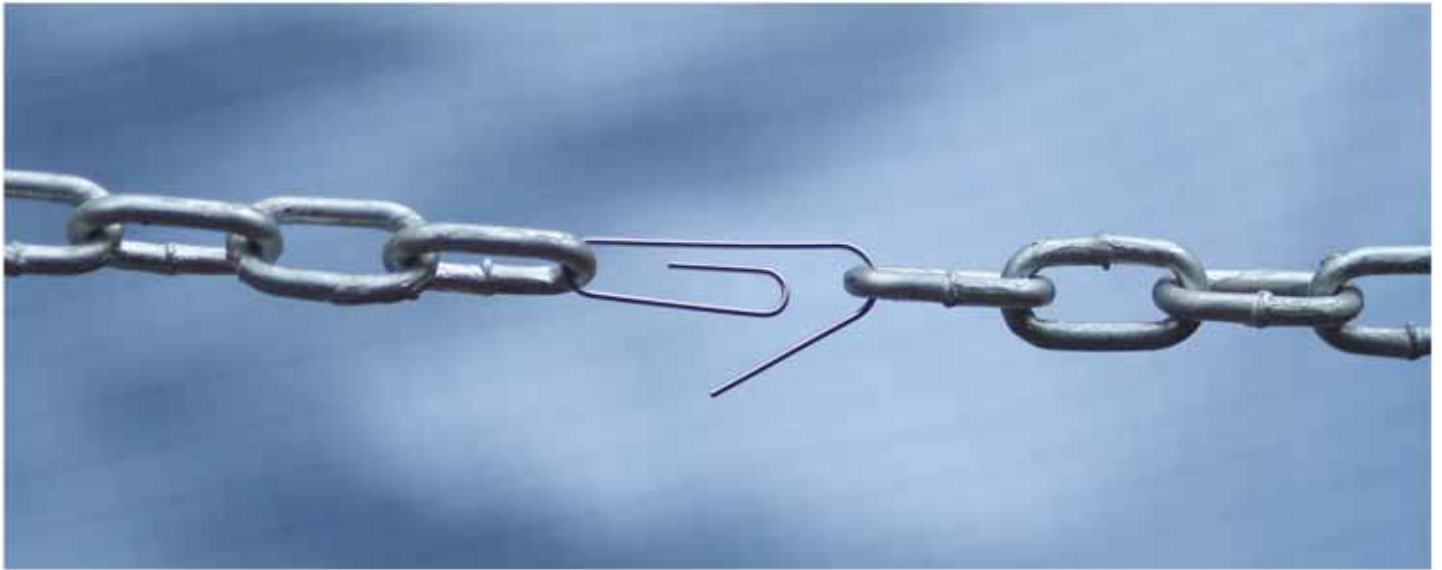
Sea freight

Charter market — 1st half 2015



After the strongest start to the year since 2011, the focus of reefer operators switched to management of the 'off season', when the supply of tonnage more often than not exceeds demand, and when spot rates can fall to sub-economic levels. Historically a proportion of the reefer fleet lays-up for six months to mitigate risk: this year however, the lowest bunker costs seen since 2008 will encourage operators to continue trading.

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.

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reefer trends

May and June

With peak demand for reefer capacity effectively over by late March, and April voyages used to position vessels for the southern hemisphere citrus and kiwifruit seasons, May provided the first real test of how operators would manage the 6-8 months of the year when the charter market is relatively quiet. All the major players were running tight on tonnage as the month ended, suggesting that the market in June would continue where May ended. And while the Time Charter Equivalent average for the month was encouraging for operators, one month alone does not make for a successful off-season.

The challenge for the sector is to maintain the supply/demand equilibrium at a time when units started to re-appear on the market after long voyages from the South Atlantic into the Far East and when expectations of surplus bananas east of the Panama Canal were diminishing on a weekly basis, largely because of adverse weather conditions.

The lack of spot fixing may have made for a less dynamic charter market over the past 12-18 months but it is also illustrative of the re-structured reefer business and what some might say is a more mature industry approach to both customers and competition. If the reefer is to be able to continue as a valid modal alternative to the container carriers, the industry will need to assume a more collaborative and less combative approach with other supply chain stakeholders, which include immediate operator competitors.

It will also need for the oil price to stay below USD80 per barrel! This now looks likely in the short term and probable in the medium term: at its meeting in early June OPEC said the oil cartel would keep its collective output level unchanged at 30m barrels a day, the second time in six months it decided to take no action amid a global glut of crude and weak oil prices.

The oil price is one of the key variables in the economics of specialized reefer shipping. The majority of reefer ships trading were built for speed at a time when fuel was cheap — a competitive oil price keeps the price of bunker fuel low and enables what is an ageing specialized reefer fleet to compete more effectively with newer, larger and more fuel-efficient containership services. Independently, however, a low fuel price will not be enough to encourage more investment in the sector. On the other hand, if the reefer can maintain its market share in the face of heavier competition over the next 24 months, this view will likely be re-evaluated.

Importantly, the impact of the weak rouble against the USD on imported volumes of bananas and deciduous fruit from both Argentina and Chile was not as severe as had been feared. It remains to be seen just how badly the citrus trade from South Africa will be affected. There is little to suggest that the Russian economy will improve unless the oil price rises: neither will sanctions disappear if Russia continues to show no sign of leaving Ukraine. A weak and volatile rouble in recessionary Russia is not good for any of the stakeholders in the chain.



Russia is a core market for the specialized reefer: despite heavy investment in infrastructure in the St Petersburg container terminals, the Russian market remains predominantly specialized reefer-centric. For example, the majority of bananas are shipped in to Russia by Banana Exchange on Star Reefers tonnage, and Baltic Shipping, whose main customer is Russia's largest retail chain Tander/Magnit. The specialized reefer services also benefit from low bunker costs, which in St Petersburg are priced well below the benchmark rate in Rotterdam.

Meanwhile after the third successive strong first quarter of the year, the 120c/cbft-plus TCE average for the small segment was the highest on record for April and May days. In a normal season without heavy squid volumes, there would have been an accumulation of capacity between the end of the Blue Whiting and the start of the Mackerel seasons. And while there was certainly a fall in activity levels, with Lavinia tonnage all deployed in the South Atlantic, there was instead a good balance between supply and demand.

Going forward, the only material threat to the small and handysize vessels is that posed by the large ships, which have the ability to part load fish cargoes for example at a lower absolute voyage cost and still return more than transatlantic banana business.



Corporate

Siem Shipping (Star Reefers) recorded a profit of USD0.5m in Q1 2015 (Q1 2014: net loss USD-1.5m). Gross revenue was USD43.3m compared to USD58.2m in 2014 and USD66.9m in Q1 2013. Star's net capacity decreased by 6% to 49.2m cbft — the reduction was mainly due to redelivery of Regal Star in December 2014 and the sales of Chile Star and Uruguay Star in January 2015. At 31 March 2015, about 77% of the Company's fleet capacity for the balance of the year has been fixed, compared to 72% at the same stage last year. Star's contract backlog at 31 March 2015 was USD428m, compared to USD522m in 2014.

Meanwhile, resurgent reefer earnings helped the Lavinia Group, the diversified empire of Greece's Laskaridis shipping family, to a record year in 2014. The group has been diversifying in recent years, with a move into the dry bulk trades among the major investments, partly as a reaction to the waning demand for breakbulk reefers.

The Laskaridis-owned reefer fleet has shrunk to 30 vessels, from 60 just a decade ago, although the group's Hamburg-based Alpha Reefer Transport pool consists of 42 reefers. "Our plans were to have dropped out of reefer-ships altogether by 2017," said Athanasios Laskaridis, CEO of Lavinia and Laskaridis Shipping Co. "But we ended up buying six ships in the past six months — old but worthy [vessels] still able to provide service."



Some trades are difficult or impossible to containerise, among them the transport of fish cargoes loaded onto reefers on the high seas from the international fishing fleets, a business on which Lavinia has concentrated heavily since it established itself in 1977. Lavinia, which opened a small office in Shanghai 17 years ago, has found itself handling unexpectedly large volumes of cargo, despite having planned for a scaling back of operations.

Growth has come mainly from a quadrupling of the Chinese-owned fishing fleet active worldwide. "Twenty years ago, there were no Chinese vessels operating in the squid fishing grounds off Argentina and the Falklands," Mr Laskaridis said. "Today, there are more than 200." A Chinese presence in the reefer trades is an even more recent phenomenon. He estimates it will be "several years" before Chinese companies can cover their own reefer transport needs, given the boom in their fishing fleet.

Lavinia has plans in its drawer for a series of "simple fish carriers fitted with derricks" of an in-house design but has struggled to reduce the building cost to below USD22-24m per ship. "That is not a small amount for a ship for which you can't build a 15-year forward business plan," said Mr Laskaridis. "As long as we can service our contracts of affreightment with our in-house fleet and chartering from the market, we are hesitating to push the button to order ships," he concluded.

Future

The specialized reefer business has had to downsize, rationalize and change its mindset and modus operandi since the global economic downturn in 2008 in order to stay afloat. Despite the massive increase in low-price competitive reefer capacity offered by the container lines, the specialized reefer has reached a relatively comfortable position — not only has it survived, but it has also prospered. The impact of the fall in the price of oil on the ability of the reefer to compete with the lines should not be underestimated: this will continue to play an important role in the coming months and perhaps years.

One of the most significant changes in the reefer market dynamic is the conversion of the banana trade into the eastern Mediterranean from specialized reefer to third party container service. There are several inter-related reasons for the switch, which on the demand side include the destabilizing impact of the Arab Spring, annexation of the Crimea, the civil war in Syria, unrest in Libya and continuing sanctions against Iran. On the supply side the container lines have upped their commitment to the region.

In the year-to-date, banana pricing in the transit markets of Turkey and Syria was firm between January and end-March, allowing all the stakeholders in the chain to profit. The balance was more delicate in May, because away from Algiers and Mersin (and Koper and Bar for Slovenian banana trader Rastoder), opportunities to sell large spot banana cargoes are minimal to non-existent — a far cry from the situation prior to the Arab Spring, global recession and Russian occupation of the Crimea, when reefer vessels could and would discharge in upwards of 10 ports in the Odessa to Tripoli range.

In the long term there is some doubt whether spot banana cargoes will ever return to these ports: receivers are currently supplied with smaller quantities in reefer containers, and by the time regional geo-political-economic stability does improve, there may not be enough reefer vessels to service any uplift in demand.

Aside from the massive investment in container shipping over the past decade, the two major game changing events in reefer have been the deregulation of the EU banana market in 2006 and the dramatic rise in the price of oil. The next event likely to have a similar game-changing impact will be the opening of a wider Panama Canal in 2016. This will allow the passage of larger, more fuel-efficient and therefore more cost-effective container ships. It will not be long before the mettle of reefer operators is tested once again ■

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Wholesale market prices in Europe

May 2015

					EUROPEAN UNION - EURO				
					Germany	Belgium	France	Holland	UK
AVOCADO	Air	TROPICAL ETTINGER FUERTE	BRAZIL	Box			18.00	17.50	16.95
			PERU	Box				9.00	9.18
			KENYA	Box			6.00		
			PERU	Box			7.50	8.50	
		HASS	SOUTH AFRICA	Box			7.50	9.50	10.59
			ISRAEL	Box					11.30
			KENYA	Box			7.33	7.50	
			MOROCCO	Box			11.50		
	Truck	NOT DETERMINED PINKERTON	PERU	Box	10.00	10.00	8.67	10.00	10.59
			SOUTH AFRICA	Box		10.00	8.67	11.50	10.59
			PERU	Box	10.00				
			ISRAEL	Box				10.00	
		ZUTANO FUERTE HASS	SOUTH AFRICA	Box			6.50	9.38	
			PERU	Box				9.00	
			SPAIN	Box			7.50		
			SPAIN	Box			13.50		
BANANA	Air	SMALL	COLOMBIA	kg			6.90		
			ECUADOR	kg				5.67	
	Sea	RED	COLOMBIA	kg				2.94	
			ECUADOR	kg				2.33	
			SMALL	kg			1.70	2.65	
CARAMBOLA	Air		COLOMBIA	kg					4.04
			ISRAEL	kg					7.06
	Sea		MALAYSIA	kg		6.00	4.86	5.32	
			MALAYSIA	kg					4.04
COCONUT	Sea	NOT DETERMINED	COTE D'IVOIRE	Bag			10.00	12.46	14.13
			DOMINICAN REP.	Bag				25.45	
		YOUNG	SRI LANKA	Bag					11.30
			COSTA RICA	Bag				15.50	
DATE	Sea	DEGLET MEDJOOL	ALGERIA	kg			5.50		
			ISRAEL	kg			11.00	7.60	6.22
			MEXICO	kg					4.24
			PERU	kg				6.00	
		MOZAFATI NOT DETERMINED STONELESS	SOUTH AFRICA	kg				7.77	
			IRAN	kg				3.30	
			TUNISIA	kg				2.02	2.16
			TUNISIA	kg				2.75	
GINGER	Sea		CHINA	kg		1.30	2.30	1.39	2.13
			THAILAND	kg				1.97	1.62
GUAVA	Air		BRAZIL	kg				6.50	
	Sea		BRAZIL	kg					2.59
KUMQUAT	Air		ISRAEL	kg					7.06
			SOUTH AFRICA	kg				5.38	
LIME	Air		BRAZIL	kg			5.00		
	Sea		BRAZIL	kg	2.07	2.67	3.30	2.18	2.30
			MEXICO	kg				2.28	2.51
LITCHI	Air		THAILAND	kg				9.15	
	Sea		SOUTH AFRICA	kg					1.41
MANGO	Air	AMELIE	BURKINA FASO	kg			2.60		
			MALI	kg			4.20		
		KENT	BURKINA FASO	kg			2.60		
			COTE D'IVOIRE	kg			4.90	4.58	
			MALI	kg			5.50		
			PERU	kg			5.80	4.58	
		NAM DOK MAI	THAILAND	kg				8.72	
			MALI	kg			3.80		
		VALENCIA	MALI	kg	1.13				
			BRAZIL	kg			1.50	1.57	1.75
		AMELIE	COSTA RICA	kg			1.00	1.13	
			ATKINS						
		KEITT	PUERTO RICO	kg				1.72	

					EUROPEAN UNION - EUROS				
					Germany	Belgium	France	Holland	UK
MANGO	Sea	KENT	COTE D'IVOIRE	kg	1.46	1.50	1.40	1.69	2.20
			GUATEMALA	kg				1.42	
			MALI	kg				1.57	
		NOT DETERMINED PALMER	PERU	kg			1.80		
			PERU	kg					2.20
			BRAZIL	kg			1.75	2.06	
MANGOSTEEN	Air		INDONESIA	kg				8.25	
MANIOC	Sea		COSTA RICA	kg			1.35	1.14	
MELON	Sea	CANTALOUPE	COSTA RICA	kg			1.10		1.20
			HONDURAS	kg				1.50	1.14
		CHARENTAIS	HONDURAS	kg				1.56	
			MOROCCO	kg			1.28		
		GALIA	MOROCCO	kg			0.90		
			PANAMA	kg			1.05		
		HONEY DEW	BRAZIL	kg			0.75		
			COSTA RICA	kg			0.80		1.44
		PIEL DE SAPO	COSTA RICA	kg			1.10		0.76
			PANAMA	kg				0.71	0.76
		SEEDLESS WATER	BRAZIL	kg			0.95		
			COSTA RICA	kg			0.90		
WATERMELON	PANAMA	kg			0.85	0.55			
	PAPAYA	Air	FORMOSA NOT DETERMINED	BRAZIL	kg				3.30
BRAZIL				kg		3.28	3.50	3.57	3.93
THAILAND			kg				5.25		
Sea		FORMOSA NOT DETERMINED	BRAZIL	kg				2.07	
			ECUADOR	kg				2.73	2.42
		PASSION FRUIT	Air	NOT DETERMINED PURPLE	COLOMBIA	kg	4.75	5.88	6.00
ISRAEL	kg						7.00		
KENYA	kg					5.25			5.13
SOUTH AFRICA	kg						6.80		
VIET NAM	kg						8.50		
YELLOW	ZIMBABWE			kg		5.88		5.72	
	COLOMBIA			kg				8.39	
	ECUADOR			kg				7.88	
PERSIMMON	Air		BRAZIL	kg				4.95	
			SOUTH AFRICA	kg	1.93			2.97	
PHYSALIS	Air		COLOMBIA	kg			9.00	10.17	9.42
	Sea		COLOMBIA	kg		7.08		7.20	
PINEAPPLE	Air	MD-2 VICTORIA	GHANA	kg		2.20			
			MAURITIUS	Box				14.43	
			MAURITIUS	kg			3.80		
	Sea	MD-2	SOUTH AFRICA	Box				12.70	
			COSTA RICA	Box	8.75	8.50		9.46	11.30
			COSTA RICA	kg			0.97		
			COTE D'IVOIRE	kg			1.02		
			GHANA	Box				8.00	
			PANAMA	Box				9.99	
PANAMA	kg			0.90					
PITAHAYA	Air	RED YELLOW	VIET NAM	kg				7.80	
			COLOMBIA	kg				10.52	
			ECUADOR	kg				8.80	
PLANTAIN	Sea		COLOMBIA	kg			1.00		
			ECUADOR	kg			0.90	0.94	
			WINDWARD ISL.	kg					1.40
RAMBUTAN	Air		THAILAND	kg				8.38	
SWEET POTATO	Sea		EGYPT	kg			1.00		
			HONDURAS	kg					1.77
			SENEGAL	kg					1.65
			SOUTH AFRICA	kg			1.60		
TAMARILLO	Air		COLOMBIA	kg				7.53	
TAMARIND	Air		THAILAND	kg				3.24	
YAM	Sea		GHANA	kg			1.40	1.25	



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