CLOSE-UP:
SUMMER CITRUS

Sea freight:
Reefers ride to the rescue

Avocado from Peru:
assets and ambitions
A WIDE VARIETY OF QUALITY PRODUCTS

- all-year-round supply from various sources: Mexico, Florida, Israel, Turkey, Cyprus, Argentina, South Africa and Cuba,

- large range with several different varieties: Ruby Red, Star Ruby, Tropical Red, Flame, Sunrise and White Marsh,

- high-quality brands: Dole, Tropicana, Soleil, Carmel

- multiplicity of packaging on both loose and repacked fruits.
When you read the papers, you’d think that the Four Horsemen of the Apocalypse had homed in on the banana industry in Ecuador. In the New Testament, their ride heralds the end of the world. Although the first horseman on a white horse marks the start of a series of curses, he is very distinctly positive, at least in the Bible. He is the symbol of a conqueror. With a little imagination, one could see him as President Correa who defends small growers against the export companies, like the pressure currently applied by the Ecuadorean government in particular on Noboa (called on to cough up 85 million dollars in tax). This obviously has a cooling effect on the banana climate of the country, a bottomless reservoir where everybody in the world comes to load unlimited quantities of bananas that cannot be found elsewhere because of meteorological disasters or demand boiling over. We’ll see if the faithful come through richer or less poor! The second horseman, on a red mount, looks like the Tungurahua volcano that spat out its ash on the Ecuadorean plantations at the end of May/beginning of June, causing damage that is still difficult to measure. The third, on a black horse and representing famine, is the cold weather that is slowing production cycles and currently reducing Ecuadorean export capacity. Finally, the fourth rider is Death on a pale horse, bringing with him an outbreak of the dreaded Black Sigatoka, a fungal disease that attacks banana leaves. In all modesty, I propose to add a fifth rider on a horse with a fine dollar-green colour, who slices at growers’ incomes using his two-edged sword: weakening of the European market by a decrease in the customs tariff and the sliding of the euro against the dollar. But don’t go shouting that it’s the end of the world. This is only a FruiTrop editorial, not Chapter 6 of the Book of the Apocalypse. But let us pray all the same. You never know...

Denis Loeillet
Avocado

May 2010

The market was disappointing as demand was too slow for an unforeseen dip in supply to pay off. Supply of green varieties was larger than average, with average quantities from Peru but strong presence of South Africa and Kenya. However, volumes of 'Hass' were moderate. Deliveries from Peru were large, especially during the first two-thirds of the month. But the northern hemisphere seasons ended in mid-month and, above all, progress of the South African season was slowed by rain. Demand was slow, especially for large fruits (12/14/16). 'Hass' prices merely held their ground and those of green varieties decreased. An upward movement was observed at the end of the month as the dip in supply from South Africa continued.

[Table of prices and volumes]

- Spanish avocado: a stable 2009-10 season for both exports and orchards. Production in the Malaga area, where most of Spanish avocado is grown, is reported to have totalled some 40 000 t in 2009-10. Nearly 30 000 t was exported and 10 000 t sold on the domestic market. According to Benjamin Fauli, avocado specialist at ASAJA Malaga, these figures that are similar to last year's and to those of other recent seasons reflect a planted area that has stabilised at about 6 000 ha.

- 2009-10 Mexican avocado season in the EU: further decrease. Mexican avocado continued to lose ground in the EU in 2009-10. Preliminary estimates show that some 2.1 million 4-kg boxes were exported to Europe, the smallest total for more than ten years. Mexican shipments to the EU have halved since the full opening of the US border to fruits from Michoacán. Exports were focused on this nearby market once again. In spite of a much more competitive trading situation than in 2008-09 (imports from Chile up from 56 000 t to more than 127 000 t and Californian production multiplied by two and a half), Mexican exporters should have had their second largest season in the United States as the cumulated volume to the end of June is 242 000 t. More than a poorly targeted promotion campaign in April will be needed to revive sales in Europe!

- 2010-11 Chilean avocado season: negative alternate bearing coming up. According to Reefer Trends, exportable potential should be some 155 000 t in 2010-11. This is 20% less than the 193 000 t released on the international market during the preceding season. This conjunctural decrease caused by the physiological phenomenon of alternate bearing does not reflect the increase in the planted area in recent years. Estimated at 260 000 t in 2009-10, production should continue to increase in the years to come. The results of the official estimate performed from May onwards by the Comité de Palta should be announced shortly.

Source: ASAJA Malaga

Source: national customs authorities

Source: Reefer Trends

© Régis Domergue
Banana

May 2010

Seasonal fruits have been late and so banana operators danced joyfully around the maypole even though supply was fairly substantial.

Supply of dollar bananas seems to have been fairly small. Shipments from Ecuador were slightly larger than average and concentrated on the northern part of the EU and the Mediterranean, but production started to dip in Colombia. In contrast, large volumes continued to arrive from Africa even though shipments from Cameroon were small. Fruits from Ghana were still strongly present and, above all, arrivals from Côte d’Ivoire were still massive. In addition, the West Indian shortfall was reduced with the return of Guadeloupe to the market in mid-May after a halt in exports for several months.

Demand was very good for the season. The small supplies of Spanish and French strawberries and the late start to Spanish stone fruit crops allowed French strawberries and the late start to Spanish and other produce such as apple and orange that is unusual at this time of year. The market was tense from the beginning of the month and prices started a sharp and unusual upward movement in the middle of the month.

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Banana: purée prices in Europe in March 2010.

<table>
<thead>
<tr>
<th>Type of juice</th>
<th>Price (USD/t)</th>
<th>Origin</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aseptic purée, 22°Brix</td>
<td>630-645 fca</td>
<td>Ecuador</td>
<td>The market has firmed slightly in recent months.</td>
</tr>
<tr>
<td>dp</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: fca: free carrier / dp: duty paid (droits de douane acquittés) / Source: MNS-ITC Genève

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The Atlantic hurricane season will be severe. This is what the National Oceanic and Atmospheric Administration announced at the end of May. The NOAA forecasts 14 to 23 named storms of which 8 to 14 could become hurricanes during the six months of the hurricane season that starts on 1 June. Among the hurricanes, 3 to 7 are considered as major events of category 3 (wind speed 178 to 209 kph), 4 (wind speed 210 to 250 kph) or 5 (wind speed more than 251 kph). Meteorological experts consider that the probability is 70%. The Pacific hurricane season will be less intense than usual.

Source: NOAA

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The hurricane season started with a bang. The season is forecast as being very active on the Atlantic coast and less severe than usual in the Pacific. But as meteorology is unfortunately not an exact science, the first damage of the year was caused by a tropical storm moving in from the Pacific (29 and 30 May 2010). It formed off Guatemala and moved along a fair part of the frontier between Guatemala and Mexico. A great deal of infrastructure was damaged. According to official sources, about 5% of the 23 000 ha of producing banana plantations was affected. It is reminded that Guatemala produced 76 million boxes in 2009 (about 1.4 million metric tonnes) and its main customer is the United States.

Various sources

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Ramon Rey (ARC Eurobanan - Total Produce, Spain) remains President of Freshfel. He has just been re-appointed for a second term of office as President of the European lobby for the period 2010-2012. Philippe Henri (Creno, France) was re-confirmed as Vice-President and Jérôme Fabre (Compagnie Fruitière France) was elected as Treasurer. The association’s annual general meeting was the occasion for the creation of a working group on banana, implementing the taking over of ECBTA. Freshfel now has four working groups: Promotion, Image and Communication, Food Quality and Sustainability, Citrus and Banana. Philippe Binard is still the Secretary-General of the Association.

www.freshfel.com

Source: Freshfel

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Europe — Aldi import price (GlobalGap)

Europe - Aldi import price (GlobalGap)

<table>
<thead>
<tr>
<th>Country</th>
<th>May 2010</th>
<th>Previous month</th>
<th>Comparison last 2 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>normal</td>
<td>1.45</td>
<td>- 5%</td>
</tr>
<tr>
<td></td>
<td>special offer</td>
<td>1.27</td>
<td>- 6%</td>
</tr>
<tr>
<td>Germany</td>
<td>normal</td>
<td>1.20</td>
<td>- 5%</td>
</tr>
<tr>
<td></td>
<td>discount</td>
<td>1.02</td>
<td>- 6%</td>
</tr>
<tr>
<td>UK (E/kg)</td>
<td>packed</td>
<td>1.28</td>
<td>+ 3%</td>
</tr>
<tr>
<td></td>
<td>loose</td>
<td>1.00</td>
<td>+ 13%</td>
</tr>
<tr>
<td>Spain</td>
<td>plátano</td>
<td>1.68</td>
<td>+ 1%</td>
</tr>
<tr>
<td></td>
<td>banana</td>
<td>1.40</td>
<td>+ 1%</td>
</tr>
</tbody>
</table>

Source: Freshfel

---

Europe — Retail price

Europe — Retail price

<table>
<thead>
<tr>
<th>Country</th>
<th>May 2010</th>
<th>May 2009</th>
<th>Comparison last 3 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>normal</td>
<td>1.45</td>
<td>- 5%</td>
</tr>
<tr>
<td></td>
<td>special offer</td>
<td>1.27</td>
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<td>Germany</td>
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<td></td>
<td>loose</td>
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<tr>
<td>Spain</td>
<td>plátano</td>
<td>1.68</td>
<td>+ 1%</td>
</tr>
<tr>
<td></td>
<td>banana</td>
<td>1.40</td>
<td>+ 1%</td>
</tr>
</tbody>
</table>
**USA — IMPORT PRICE**

<table>
<thead>
<tr>
<th>May 2010</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>USD/box</td>
<td>previous month</td>
</tr>
<tr>
<td>15.34</td>
<td>+ 2%</td>
</tr>
</tbody>
</table>

**Russia — IMPORT PRICE**

<table>
<thead>
<tr>
<th>May 2010</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>USD/box</td>
<td>previous month</td>
</tr>
<tr>
<td>15.3</td>
<td>+ 6%</td>
</tr>
</tbody>
</table>

**Spain — IMPORT PRICE**

<table>
<thead>
<tr>
<th>May 2010</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>euro/box</td>
<td>previous month</td>
</tr>
<tr>
<td>11.1</td>
<td>+ 31%</td>
</tr>
</tbody>
</table>

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**Fruits and vegetables — Côte d’Ivoire — EU imports**

<table>
<thead>
<tr>
<th>Tonnes</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total fresh fruits, incl.</td>
<td>373 862</td>
<td>306 182</td>
<td>345 663</td>
<td>276 842</td>
<td>302 615</td>
<td>302 561</td>
</tr>
<tr>
<td>Dessert banana</td>
<td>210 760</td>
<td>183 752</td>
<td>221 668</td>
<td>189 366</td>
<td>216 953</td>
<td>229 195</td>
</tr>
<tr>
<td>Pineapple</td>
<td>137 528</td>
<td>99 889</td>
<td>94 495</td>
<td>59 237</td>
<td>58 902</td>
<td>47 421</td>
</tr>
<tr>
<td>Mango (and guava, mangosteen)</td>
<td>11 430</td>
<td>9 857</td>
<td>14 433</td>
<td>14 706</td>
<td>11 250</td>
<td>11 659</td>
</tr>
<tr>
<td>Papaya</td>
<td>1 164</td>
<td>1 398</td>
<td>1 857</td>
<td>1 806</td>
<td>3 574</td>
<td>1 061</td>
</tr>
<tr>
<td>Date</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>22</td>
<td>22</td>
</tr>
<tr>
<td>Plantain</td>
<td>16</td>
<td>98</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>21</td>
</tr>
<tr>
<td>Total fresh vegetables</td>
<td>1 184</td>
<td>1 329</td>
<td>1 330</td>
<td>1 307</td>
<td>997</td>
<td>559</td>
</tr>
</tbody>
</table>

**EUROPE — IMPORTED VOLUMES — MAY 2010**

<table>
<thead>
<tr>
<th>Origine</th>
<th>April 2010</th>
<th>May 2009</th>
<th>cumulated total 2010 compared to 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>French West Indies</td>
<td></td>
<td>+ 15%</td>
<td>+ 14%</td>
</tr>
<tr>
<td>Cameroon/Ghana</td>
<td></td>
<td>- 7%</td>
<td>+ 2%</td>
</tr>
<tr>
<td>Surinam</td>
<td></td>
<td>+ 23%</td>
<td>+ 37%</td>
</tr>
<tr>
<td>Canaries</td>
<td></td>
<td>0%</td>
<td>+ 12%</td>
</tr>
<tr>
<td>Dollar:</td>
<td></td>
<td>+ 3%</td>
<td>+ 1%</td>
</tr>
<tr>
<td>Ecuador</td>
<td></td>
<td>+ 4%</td>
<td>- 6%</td>
</tr>
<tr>
<td>Colombia</td>
<td></td>
<td>+ 12%</td>
<td>+ 2%</td>
</tr>
<tr>
<td>Costa Rica</td>
<td></td>
<td>- 9%</td>
<td>+ 211%</td>
</tr>
</tbody>
</table>

---

**Côte d’Ivoire - OCAB: divided and weak.** What a muddle! This is what the whole profession must have thought when the divorce was finalised in Abidjan in May. After months and even years of tension, OBAM CI (Organisation banane, ananas et mangue de Côte d’Ivoire) was set up. It groups SCB (a subsidiary of Compagnie Frutière) and a number of producers. The remaining OCAB members continue as before and consist of the three other banana producer-exporters (Canavese, Sipef and SPDCIE), the main pineapple cooperatives (FDL, CFC) and the other pineapple and mango producer-exporters. We will not go into the reasons for the separation. Sectors, chains and their organisation have never been peaceful anywhere in the world. But it is a pity that the resulting dispersion weakens the voice of Côte d’Ivoire.

Indeed, for years many observers have deplored the silence or even apathy of Caribbean ACP professionals in negotiations concerning the future of the Common Market Organisation of Banana. In contrast, they observed the intense activity and even pugnacity of the African ACP countries. OCAB, bringing with it ASSOBACAM (the Cameroon professional organisation) and the authorities in three African exporting countries (Cameroon, Côte d’Ivoire and Ghana) has become a thorn in the side of the European Commission, the European Council, the European Parliament and the WTO. The Geneva agreement of 15 December 2009 setting a customs tariff of EUR114 per tonne in 2017 was not the end of the match. The ACP countries still have a lot to lose, especially in the signing of bilateral agreements (FruitTrop 177, April 2010, pages 20 and 21) but also much to gain, for example by obtaining part of the accompanying funds (FruitTrop 177) or by ensuring that the latter continue to flow. Pity…

Source: CIRAD

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May 2010

The distinct upward market trend continued. On the one hand, demand held at a good level because of the small supply of seasonal fruits. On the other, the quantities of both table and juice oranges were still moderate. The volumes of Spanish ‘Valencia’ available at production remained short while ‘Maroc Late’ was still little present in the EU (production deficit, shipments focused on Russia). In table oranges, the Spanish ‘Navelate’ season ended early. The very first ‘Navel’ from South Africa were delivered at the end of the month. Prices were already high and continued to rise for both ‘Valencia’ and ‘Navelate’.

■ Orange juice: marriage of giants. The second and third largest orange juice producers in the world are now one! In mid-May, Citrusuco (Fisher Group) and Citrovita (Votorantim Group) announced that they were merging. The new entity, that has not yet been named, will have 7 production units (6 in Brazil and 1 in Florida) and 7 port terminals. It will process 40% of the Brazilian harvest and control 25% of the world orange juice market. Although the main aim is the rationalisation of costs, the merger may also speed up joint projects in the Florida and Brazilian chains such as marketing and fighting greening.

Source: TheLedger.com

■ China open to Moroccan citrus. The Moroccan Office National de Sécurité Sanitaire des Produits Alimentaires announced in a press release at the end of May that the Chinese market is officially open to Moroccan citrus. A total of 18 groves—mainly ‘Maroc Late’ and clementine—have been approved for 2010.

Source: ONSSA

■ Citrus: juice prices in Europe in March 2010.

<table>
<thead>
<tr>
<th>Type of juice</th>
<th>Price (USD/t)</th>
<th>Origin</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orange</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FCOJ, 66°Brix, in bulk</td>
<td>2 000-2 050 fob Santos</td>
<td>Brazil</td>
<td>The market has remained distinctly buoyant. US demand was very strong in January but has now slowed. However, the Brazilian and Florida harvests are small whereas Mexico, the fourth largest processor in the world, has announced a limited harvest.</td>
</tr>
<tr>
<td>NFC</td>
<td>500-550 fob Santos</td>
<td>Italy</td>
<td>Demand increasing but still small, especially in the USA. As a result, production is stagnating and there is little supply on the market.</td>
</tr>
<tr>
<td>Blood orange juice</td>
<td>3.40-3.50 euros/kg fob Sicily</td>
<td>Italy</td>
<td></td>
</tr>
<tr>
<td>Frozen concentrate, 58°Brix, white</td>
<td>1 650-1 675 cfr Netherlands dup</td>
<td>Cuba</td>
<td></td>
</tr>
<tr>
<td>Frozen concentrate, 58°Brix, pink</td>
<td>1 675-1 700 cfr fca Rotterdam</td>
<td>Florida</td>
<td></td>
</tr>
<tr>
<td>Frozen concentrate, cloudy, 500 gpl</td>
<td>4 700-4 900 fca Rotterdam</td>
<td>Argentina</td>
<td>The Argentinian and Spanish harvests should be small. Demand for fresh fruits weighs on the volumes sold for processing. High prices seem to anticipate the shortage of volume, which will last until the last quarter of the year.</td>
</tr>
<tr>
<td>Frozen concentrate, clear, 400 gpl</td>
<td>3 700-4 000 fob Buenos Aires</td>
<td>Argentina</td>
<td></td>
</tr>
<tr>
<td>Frozen concentrate, cloudy, 400 gpl</td>
<td>3.40-3.50 euros/kg ddp Northern Europe</td>
<td>Italy</td>
<td></td>
</tr>
<tr>
<td>Lime</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frozen concentrate, 400 gpl</td>
<td>2 000-2 500 fca Rotterdam</td>
<td>Brazil</td>
<td>The Brazilian harvest is disappointing and the fruits are smaller than usual. Lime prices should follow the upwards trend for lemon.</td>
</tr>
</tbody>
</table>


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No. 179 June 2010
May 2010

The market was distinctly undersupplied as the southern hemisphere seasons started very late. Arrivals from South Africa were extremely limited because of rain and then a strike in South African ports. Similarly, deliveries from Argentina were particularly small as the export potential was smaller and operators were cautious as regards the EU, given the weak euro. Prices were very firm for fruits from both these sources. However, the remaining Israeli and Florida fruits only benefited a little from this as sizes were sometimes unsuitable, with Israeli supply consisting mainly of very large fruits, and the quality of some Florida brands was sometimes uneven.

Trade globalisation: buzzing in the citrus groves! The globalisation of trade sometimes caused the spread of 'exotic' pests and diseases. This was illustrated by no less than three examples in May 2010. The presence of woolly whitefly (*Aleurothrixus floccosus*) in Eastern Cape in South Africa was announced officially. The larvae feed on sap and excrete honeydew, both of which affect tree vigour and reduce flowering and fruiting. In South Africa again, a vigorous strain of fruit fly was found in May in Limpopo province at the frontier with Zimbabwe. This is a serious problem as *Bactrocera invadens* is a quarantine pest. Finally, an outbreak of Mediterranean fruit fly (*Ceratitis capitata*) was found at Boca Raton in southeast Florida. It is also a quarantine pest. Surveillance is a necessity more than ever and some countries lack this today, especially in the Mediterranean.

When Blaise Pascal joins the food industry! Is 'Pascalisation', a process drawn from the work of the great scientist and thinker a revolution in the world of fruit juice?
Pineapple

May 2010

Supply of ‘Sweet’ from Costa Rica was fairly irregular in May because of numerous logistic problems (late ships and freight capacity). Several promotion operations were organised to get stocks moving. Although they often prevented the market from clogging up they did not have much effect on the batches in store (selling at between EUR4.00 and 5.00 per box) that hampered the sales of arriving fruits throughout the month. It should also be noted that ‘Sweet’ supply was very unbalanced, with many ‘extreme’ sizes whereas the promotion operations mainly concerned size 8 fruits that were not readily available.

Sales were still very difficult for the few batches of ‘Sweet Cayenne’ available on the market as the fruits were green and supply balance was upset by large quantities of small fruits for which there was little demand.

The situation was good overall for pineapple shipped by air. Flights gradually resumed after the disturbances to air traffic and supply was limited for the month as a whole. Although prices remained stable, a decrease in demand could be observed from mid-month onwards. The few batches of ‘Sugarloaf’ were still sold well at between EUR1.90 and 2.10 per kg according to availability.

Sales were still dynamic as a whole on the ‘Victoria’ pineapple market, mainly because of small supply. An increase in shipments from Réunion and the arrival of seasonal fruits at the end of the month were signs of more difficult sales to come.

Pineapple — juice prices in Europe in March 2010.

<table>
<thead>
<tr>
<th>Type of juice</th>
<th>Price (USD/lt)</th>
<th>Origin</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frozen concentrate, 60°Brix, ‘Smooth Cayenne’ var.</td>
<td>2 000-2 050 fob Bangkok</td>
<td>Thailand</td>
<td></td>
</tr>
<tr>
<td>Aseptic concentrate, 60°Brix, ‘Smooth Cayenne’ var.</td>
<td>1 950-2 000 fob Bangkok</td>
<td>Thailand</td>
<td></td>
</tr>
<tr>
<td>Frozen concentrate, 60°Brix, ‘Smooth Cayenne’ var.</td>
<td>2 180-2 250 cfr EU</td>
<td>Thailand</td>
<td></td>
</tr>
<tr>
<td>Aseptic concentrate, 60°Brix, ‘Smooth Cayenne’ var.</td>
<td>2 120-2 225 cfr EU</td>
<td>Thailand</td>
<td>Little volume available, whatever the source. Prices are still rising.</td>
</tr>
<tr>
<td>Single juice, 13°Brix, ‘MD-2’ var.</td>
<td>800-825 fca Netherlands</td>
<td>Costa Rica</td>
<td></td>
</tr>
<tr>
<td>Frozen concentrate, 60°Brix, ‘Perola’ var.</td>
<td>1 900 fob Santos</td>
<td>Brazil</td>
<td></td>
</tr>
</tbody>
</table>

Fruits: juice and pulp prices in Europe in March 2010.

<table>
<thead>
<tr>
<th>Type of juice</th>
<th>Price (USD/t)</th>
<th>Origin</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acerola</td>
<td>1 300-1 650 fob Brazil</td>
<td>Brazil</td>
<td>Market normal.</td>
</tr>
<tr>
<td>Guava</td>
<td>650-750 fob Brazil</td>
<td>Brazil</td>
<td>The harvest in Brazil could be down by 25%. As domestic demand has increased, supply could be limited this year.</td>
</tr>
<tr>
<td>Papaya</td>
<td>900-1 000 fob Brazil</td>
<td>Brazil</td>
<td></td>
</tr>
<tr>
<td>Pomegranate</td>
<td>3.90 euros/kg fca Rotterdam</td>
<td>Turkey</td>
<td>Market stable and normal.</td>
</tr>
<tr>
<td>Passion fruit</td>
<td>6 300-6 900 cfr EU</td>
<td>Ecuador</td>
<td>Market waiting to the harvest in Ecuador. Demand is very small as stocks are currently very limited; processors have replaced passion fruit by other juices.</td>
</tr>
<tr>
<td>Guava</td>
<td>50°Brix</td>
<td>Brazil</td>
<td></td>
</tr>
<tr>
<td>Guava</td>
<td>900-1 000 fob Brazil</td>
<td>Brazil</td>
<td></td>
</tr>
<tr>
<td>Guava</td>
<td>1 100 fob Brazil</td>
<td>Brazil</td>
<td></td>
</tr>
<tr>
<td>Acerola</td>
<td>900-1 000 fob Santos</td>
<td>Brazil</td>
<td>Prices still high and demand decreasing.</td>
</tr>
</tbody>
</table>

Pineapple — import price in France — main origins.

<table>
<thead>
<tr>
<th>Origin</th>
<th>Weeks 18 to 21</th>
<th>18</th>
<th>19</th>
<th>20</th>
<th>21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smooth Cayenne</td>
<td>Benin</td>
<td>1.80-1.95</td>
<td>1.80-1.95</td>
<td>1.85-1.90</td>
<td>1.80-1.90</td>
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<tr>
<td>Smooth Cayenne</td>
<td>Cameroon</td>
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<td>1.80-1.95</td>
<td>1.70-1.90</td>
<td>1.80-1.90</td>
</tr>
<tr>
<td>Victoria</td>
<td>Réunion</td>
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<td>3.50-4.00</td>
<td>3.50-4.00</td>
<td>3.50-4.00</td>
</tr>
<tr>
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<td>Mauritius</td>
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<td>3.00-3.50</td>
<td>3.30-4.00</td>
<td>3.00-3.50</td>
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</tbody>
</table>

E U R O P E

PINEAPPLE — IMPORT PRICE

<table>
<thead>
<tr>
<th>Origin</th>
<th>Weeks 18 to 21</th>
<th>18</th>
<th>19</th>
<th>20</th>
<th>21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smooth Cayenne</td>
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<td>5.00-7.00</td>
<td>3.50-7.50</td>
<td>5.00-7.50</td>
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<tr>
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<td>Cameroon</td>
<td>6.00-8.00</td>
<td>6.00-8.00</td>
<td>6.00-8.50</td>
<td>6.00-8.50</td>
</tr>
<tr>
<td>Smooth Cayenne</td>
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<td>6.00-8.50</td>
</tr>
<tr>
<td>Smooth Cayenne</td>
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<td>5.50-7.00</td>
<td>5.50-7.00</td>
<td>6.00-7.50</td>
</tr>
</tbody>
</table>

By air (euro/kg)

<table>
<thead>
<tr>
<th>Origin</th>
<th>18</th>
<th>19</th>
<th>20</th>
<th>21</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
<tr>
<td>Victoria</td>
<td>Réunion</td>
<td>3.50-4.00</td>
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<td>3.50-4.00</td>
</tr>
<tr>
<td>Victoria</td>
<td>Mauritius</td>
<td>3.00-3.50</td>
<td>3.00-3.50</td>
<td>3.30-4.00</td>
</tr>
</tbody>
</table>

By sea (euro/box)

<table>
<thead>
<tr>
<th>Origin</th>
<th>18</th>
<th>19</th>
<th>20</th>
<th>21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smooth Cayenne</td>
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<td>3.50-7.50</td>
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<tr>
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<td>6.00-8.00</td>
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<tr>
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</tr>
</tbody>
</table>

Note: fob: free on board / cfr: cost and freight / fca: free carrier / Source: MNS-ITC Geneva

Fruits: juice and pulp prices in Europe in March 2010.

<table>
<thead>
<tr>
<th>Type of juice</th>
<th>Price (USD/t)</th>
<th>Origin</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acerola</td>
<td>1 300-1 650 fob Brazil</td>
<td>Brazil</td>
<td>Market normal.</td>
</tr>
<tr>
<td>Guava</td>
<td>650-750 fob Brazil</td>
<td>Brazil</td>
<td>The harvest in Brazil could be down by 25%. As domestic demand has increased, supply could be limited this year.</td>
</tr>
<tr>
<td>Papaya</td>
<td>900-1 000 fob Brazil</td>
<td>Brazil</td>
<td></td>
</tr>
<tr>
<td>Pomegranate</td>
<td>3.90 euros/kg fca Rotterdam</td>
<td>Turkey</td>
<td>Market stable and normal.</td>
</tr>
<tr>
<td>Passion fruit</td>
<td>6 300-6 900 cfr EU</td>
<td>Ecuador</td>
<td>Market waiting to the harvest in Ecuador. Demand is very small as stocks are currently very limited; processors have replaced passion fruit by other juices.</td>
</tr>
<tr>
<td>Guava</td>
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</tr>
</tbody>
</table>
Mango sales. Indeed, it is a seasonal May is traditionally a difficult month for
exports from Côte d’Ivoire in the sec-
ond half of the month favoured stability
well in May. The strong reduction in
selling prices increased distinctly in the
peak in the West African mango pro-
duction countries while demand gradu-
ally switches to seasonal fruits. May 2010 was unusual in that market condi-
tions have rarely been as satisfactory
for mango. The rapid ending of the Pe-
ruvian season and the late start to the
season’s fruits after a hard winter and
late frosts did much to favour high
prices, especially for West African
fruits.

The dwindling of supply on the Euro-
pean market in the first half of May
made prices perk up; this was the case
for both ‘Tommy Atkins from Brazil and
West African mangoes. Initially stable,
selling prices increased distinctly in the
second half of the month. A few sales
were concluded at over EUR6.00 per
box but for limited quantities. The de-
crease in supply was particularly bene-
ficial for secondary sources such as
Burkina Faso and Mali, which partially
compensated the decrease in ship-
ments from Côte d’Ivoire and Brazil.

The air mango market also functioned
well in May. The strong reduction in
exports from Côte d’Ivoire in the sec-
ond half of the month favoured stability
and even an increase in prices. ‘Kent’ benefitted greatly from the decrease in supply volume. In contrast, ‘Valencia’ from Mali were more difficult to sell because of variations in quality. Their prices increased as a result of overall under-supply and not because of an increase in demand.

Thai litchi on the French market did not take place until mid-month. Probably shipped by sea, they sold at around EUR5.00 per kg. It was difficult to sell the small, not very attractive fruits on a market increas-
ingly focused on the season’s fruits.

Maximum residue limit for
sulphur abolished. The Euro-
pean Food Safety Authority recom-
manded that an MRL (maximum residue limit) should no longer be set for sulphur as its toxicity is very 
low. The EU authorities followed the recommendation. Sulphur has now been added to Annexe 4 of Regulation EC 396/2005.

Mango: juice and purée prices in Europe in March 2010.

MANGO — ARRIVAL ESTIMATES
Tonnes

Weeks 2010  18  19  20  21

By air
Brazil  5  -  -  10
Mali  70  70  60  50
Burkina Faso  30  20  25  20
Côte d’Ivoire  80  50  40  20

By sea
Brazil  1 360  1 140  1 140  1 030
Mali  220  310  420  350
Burkina Faso  240  180  130  150
Côte d’Ivoire  1 080  810  640  240

By air (kg)
Mali  ‘Amélie’  2.30-2.50  2.50  2.40-2.50  2.50  2.40-2.50  2.30-2.40
Mali  ‘Valencia’  2.50  2.00-3.50  3.00-3.50  3.00-3.50  2.60-3.25  2.20-2.60
Mali  ‘Kent’  3.00  3.00-3.80  3.00-4.00  3.00-4.00  3.00-3.70  2.55-3.15
Burkina Faso  ‘Amélie’  2.30-2.50  2.50  2.00-2.20  2.50  2.30-2.40  2.05-2.15
Burkina Faso  ‘Kent’  3.00  3.00-5.50  3.00-4.00  2.40-3.50  2.85-3.35  2.45-3.05
Côte d’Ivoire  ‘Kent’  3.50-4.00  3.80-4.00  4.00-4.50  4.00-4.50  3.80-4.25  3.00-4.00

By sea (box)
Peru  -  -  -  -  -  3.80-4.30
Brazil  ‘Tommy Atkins’  3.00-3.50  -  5.00-5.50  5.00-6.00  4.30-5.00  2.75-4.20
Côte d’Ivoire  ‘Kent’  4.50-5.00  4.00-5.00  4.60-6.00  5.00-6.00  4.55-5.50  3.10-4.85
Mali  ‘Kent’  -  4.00-5.00  5.00-6.00  5.00-6.00  4.65-5.65  2.85-4.25

MANGO — IMPORT PRICE ON THE FRENCH MARKET — Euro

Weeks 2010  18  19  20  21 May 2010 average May 2009 average

By air (USD/t)
Mali  ‘Amélie’  900 cfr Rotterdam  India
Mali  ‘Magdalena’  950 cfr Netherlands  Colombia
Mali  ‘Kent’  1 400 cfr Netherlands  Colombia
Mali  ‘Tommy Atkins’  800-900 fob Santos  Brazil
Mali  ‘Tommy Atkins’  1 300-1 400 fob Santos  Brazil
Mali  ‘Kent’  1 325-1 375 cfr EU  Brazil
Mali  ‘Kent’  900-1 000 cfr EU  Ecuador

Notes: cfr: cost and freight / fob: free on board / Source: MNS-ITC Geneva

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May 2010

With reefer operators sending their vessels into lay-up one voyage earlier than they did last year the supply/demand equation remained in equilibrium after the mini-peak in March/April. Historically the Time Charter Equivalent (TCE) average has lost up to 70% of its value as the market nosedives from a time of capacity famine to one of feast. For various reasons this year that degree of volatility has not been apparent; although charterers have always had the upper hand in rate negotiations operators have steadfastly refused to trade below cost.

The decision to lay-up this year was facilitated by bunker costs that were almost 50% higher at the start of the month than they had been in May 2009. With an estimated cost of 10-15c/cbft to lay-up compared to an expense of 55-60c/cbft to keep a vessel operational the decision is a no-brainer if the H2 TCE yields for the past decade are taken into consideration. Only in 2006 did the average return climb above 60c/cbft between July and December, and that was largely due to a collision of unforeseeable circumstances towards the tail end of that year.

While the trading environment has been difficult in the first quarter of this year there is not enough historical evidence to support a theory that demand will improve sufficiently over the course of the next three quarters to justify the commercial risk of not laying up. That is not to say that it will not happen: if it does, those operators obliged to continue trading vessels will be more than thankful!

In May demand for capacity was heavily influenced by events in South Africa – not only was Spot tonnage taken from the market but Seatrade in particular was able to schedule more units into its European service, which it shares with NYKCool. With fewer vessels ballasting across the Atlantic, operators were able to maintain and even increase box and TC rates on banana cargoes.

This stability was brought to a dramatic end with two volcanic eruptions in Guatemala and Ecuador and the first tropical storm of what is forecast to be an ‘extreme’ hurricane season. Del Monte’s banana plantations in Guatemala were especially badly hit by Tropical Storm Agatha with the company losing perhaps 200-250K boxes per week for the short and possibly medium term. Del Monte will likely have to supplement volume from the Ecuadorian market.

This, in turn, will drive up the exit price of bananas and restrict availability of fruit for the Mediterranean traders. The knock-on impact will be lower chartering activity and therefore a weak charter market for as long as Del Monte, or any of the majors with retail programmes, is short of its own fruit.

Papaya exports: Mexico is the world leader. Mexico exported 136 000 tonnes of papaya at a value of USD78 million in 2009. Most (92%) was shipped to the United States. It confirmed its leading position in the first four months of 2010 with a 12% increase in shipments, that is to say 4 732 tonnes more than during the same period in 2009.

Source: Reefer Trends, CIRAD

<table>
<thead>
<tr>
<th>Papaya — USA — Import</th>
</tr>
</thead>
<tbody>
<tr>
<td>tonnes</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>Total, incl.</td>
</tr>
<tr>
<td>Mexico</td>
</tr>
<tr>
<td>Belize</td>
</tr>
<tr>
<td>Brazil</td>
</tr>
<tr>
<td>Guatemala</td>
</tr>
<tr>
<td>Dom. Rep.</td>
</tr>
<tr>
<td>Jamaica</td>
</tr>
<tr>
<td>Panama</td>
</tr>
<tr>
<td>India</td>
</tr>
<tr>
<td>Thailand</td>
</tr>
</tbody>
</table>

Source: USA customs

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

reeftertrends

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

MONTHLY SPOT AVERAGE

<table>
<thead>
<tr>
<th>REEFER</th>
<th>US Cents/cubic foot x 30 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large reefers</td>
<td>Small reefers</td>
</tr>
<tr>
<td>May 2010</td>
<td>50</td>
</tr>
<tr>
<td>May 2009</td>
<td>29</td>
</tr>
<tr>
<td>May 2008</td>
<td>101</td>
</tr>
</tbody>
</table>

Source: Reefer Trends, CIRAD

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At Damco, we understand the importance of cargo care when dealing with frozen or perishable products. We ensure that cargo travels in an unbroken cold chain from point of origin to final destination in close coordination with leading reefer ocean carriers and first class service providers.

Our global team of reefer specialists offers customised solutions ranging from single corridor port-to-port to multiple corridor door-to-door solutions with full end-to-end visibility. Supported by a strong team of logistics experts around the world, we strive to keep our organisation at the forefront of market and technology developments within the reefer sector.

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Sea freight

Reefers ride to the rescue

Although there were negative consequences to both fruit production and inland transportation, the principal logistical impact of the Chilean earthquake on 27 February was felt by the country’s container ports. Landside cranes at the ports of Lirquen and San Antonio were rendered inactive either by safety concerns or because of a lack of power. In contrast the ports of Valparaiso and Coquimbo, from where the specialised reefer vessels traditionally load, remained largely unaffected. This was partly because they were further away from the quake’s epicentre and partly because the infrastructure required to load specialised reefers is less cumbersome.

Not only were Chilean charterers able to replace all the reefer box capacity lost directly and indirectly to the quake from the Spot market, but the self-gearered reefers were also able to utilise the berths in San Antonio that could not accommodate the container vessels.

In May South African citrus exporters faced similar logistical problems although with a different cause. A strike over operations in Durban and Cape Town worked normally – although to avoid congestion some citrus that would ordinarily have loaded in Durban was diverted to the strike-free port of Maputo in Mozambique. The avocado industry was less fortunate: unable to delay the harvest or hold fruit in coldstorage, exporters resorted to airfreighting product to markets at a cost of almost five times that of sea-freight.

Had it not been for two extra-ordinary events in February and May respectively the performance of the charter market in the first half of 2010 would have been even worse than for the same desperately disappointing period in 2009. However, that specialised reefers were able to twice come to the rescue of exporters who had been intending to ship out their fruit on container services is another example of the flexibility of the sector – and an option charterers will miss once the mode is eventually phased out.

Prior to the strike, one vessel per week on the Seatrade/NYKCool vessel sharing arrangement (VSA) had been planned to load cargo for the UK and northwest continent during the month of May. However the reefer operators were able to respond immediately to the increased demand for shipping space, demonstrating their flexibility by diverting an additional seven vessels to South Africa over the four-week period to enable shippers to ship at least 22,000 pallets of citrus to the markets of Europe alone. More fruit also went to Russia. This emergency ‘Dunkirk-like’ lift enabled exporters to market 1.5m cartons of citrus which would otherwise have been left stranded in cold stores in South Africa at considerable storage costs and severe loss of earnings.

Meanwhile the timing of the imposition of an average US$150 per FFE strike-related force majeure congestion surcharge by all the container lines did little to endear them to exporters. However industry representative body Fruit South Africa clearly attributed the blame for the strike on ‘monopolistic parastatal’ Transnet and called for exporters to forward the surcharge to the company for compensation. Chairman Anton Rabe also took the opportunity to ask the Government to ‘re-think the state monopoly on transport systems’.

Unless or until South Africa’s ports are privatised there will always be an added element
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- Beyond expectations of their clients with one of the world’s biggest and most diverse fleet of modern reefer ships
- Beyond limits with extensive capacity and experience in the carriage of perishables as well as vehicles, yachts, project and deck cargoes
- Beyond tradition, by pioneering new services and fostering existing trade lanes

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2030 Antwerp 3, Belgium

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mailbox@seatrade.com
www.seatrade.com
of risk in the logistics chain for third party containerised cargo – another variable outside influence or control for shippers. And with the pace at which specialised reefer capacity is shrinking it will not be for much longer that the sector can answer any emergency call.

Analysis

So what went wrong this year? At first sight the fundamentals appeared to be marginally better aligned than over the same period in 2009, especially for bananas: on the plus side Central American banana production had recovered while Ecuadorian banana exports were also greater. On the downside there was a steep fall in US poultry exports in reefer vessels while the South Atlantic squid season ended before it had started. With ever more being containerised either in the Falkland Islands or Montevideo the chances of the squid business bailing out a weak reefer peak recede year-by-year.

The Chilean season was late but it has long since stopped being the driver of Spot demand between the end of January and early April. Finally, bunker prices have been averaging 60%-75% higher than in 2009, which has affected the yield on box rate fixtures.

The biggest change to the trading dynamic however has been the introduction of the Maersk Ecubex service from Guayaquil to northern Europe and the Baltic. Less than a year after its launch the service is loading 800 reefer boxes per week from Ecuador into northern Europe and St Petersburg – equivalent roughly to five handysize reefer vessels per week!

Other than the cost advantages the service offered charterers a strategic alternative to the specialised reefer: exporters can not only ship in smaller denominations but they can also divert volumes away from reefer demand if the charter market shows signs of heating too quickly.

Vessel sinking calls nitrate cargo into question

The most distressing incident of the year saw the loss of the Holy House-owned and operated 445’cbft blt’82 Kea, which sank in a violent storm in the Bay of Biscay. The vessel started listing when its cargo of ammonium nitrate shifted during a Beaufort Wind Force Scale 11 swell. All crew members bar two were rescued.

Ammonium nitrate is a notoriously difficult cargo to ship – a Seatrade vessel was lost in similar circumstances in the 1990s. The difficulty lies in the heavy-liquid-like behaviour of the crystalline state of the compound in rough transit, which exacerbates the list of a vessel. Insurers insist on highly specific conditions for securing the cargo during transportation.

However the high nitrogen fertilizer also makes an ideal, if somewhat unstable, backhaul cargo from the Baltic to the counter-seasonal fruit producing regions in the southern hemisphere. Whether the tragedy precipitates a modal shift into containers remains to be seen.

In the midst of what was otherwise a miserable start to the year for operators there was some good news: the most significant aspect of which was that the containership market finally bottomed out. As a result boxship owners and operators have become more reluctant to agree to short-term (voyage, three or six month) charters. In other words the extraordinarily low-cost deals that charterers CSAV, Dole and Del Monte were able to do last year (and only because they had access to reefer equipment) to manage seasonal peaks or supplement banana supply are now effectively off the table.

However the fundamental overcapacity problem remains: unless the reefer fleet is culled significantly there will be little-to-no material change to the status quo. It is simply not practical to maintain a fleet on the off-chance of a demand spike caused by an earthquake!

How many units need to disappear before a degree of equilibrium is restored? Too few and the business will continue to bleed: too many and the change in fortunes of those with tonnage will likely be spectacular if a) demand rises and b) investment reefer equipment stalls. There is no sign yet of the widely anticipated capacity crunch.
STAR Reefers is continuing to invest in new refrigerated vessels with the delivery of the third series of 4 high specification newbuildings from Japan. Our 44 vessel fleet of specialised reefer ships are the most modern afloat. These fast new self-sustaining ships have a 200 FEU on-deck container capacity which combined with a generous under-deck pallet intake means that each vessel can transport over 9,000 pallets. We continue to offer all of our customers a safe, reliable and quality service.
Forecast

To the end of May the Time Charter Equivalent average for 2010 was roughly similar to the figure for the first five months of 2009 but trending well above of last year’s figure at the start of the ‘off-season’. The removal of an estimated 50 vessels (18.5m cbft of capacity) from the market – 25 of which have either been, or are scheduled to be demolished with a further estimated 25 in lay-up – should certainly be enough, at worst, to maintain the current rate structure throughout the off-season, barring any further unforeseen incidents. However, any significant up-turn in demand under these circumstances may cause the market to re-balance at a much higher level.

While this may sound either alarmist and/or overly optimistic, the possibility of such a market reaction cannot be ruled out: on the supply side, once a vessel is committed to full lay-up in May it will not re-emerge for an absolute minimum of six months. Consequently operators of these units will not be able to take advantage of any short-term or indeed prolonged surge in demand. If the market rises there is a good chance the momentum will hold for some time.

The most likely source of demand unpredictability is the potential resumption in the poultry trade between the US and Russia. Trade was suspended by the Russian veterinary service at the start of the year in a dispute over sanitary standards in the preparation of poultry for exports. Despite appearing to reach an agreement at various times the trade was still suspended at the end of May.

Russia operates a quota system for its poultry imports of which at just over 600K MT, the US has the largest share. As soon as a deal is finally concluded there is likely to be a spike in demand for reefer and freezer capacity; if supply has been cut this will lead to a parallel spike in reefer rates.

However in truth the prospects for the ‘off-season’ are fairly bleak: although globally-traded banana volumes are expected to rise on the transatlantic routes, demand in the eastern Mediterranean and Black Sea is constrained by the lingering impact of the global economic crisis and the shortage of credit.

For the southern hemisphere citrus season a combination of hot weather in the Spring of 2009 and a 7-month drought has done irrevocable damage to a large swathe of Argentinean lemon production, covering 38,900 hectares. Estimates suggest that between 20-30% of the lemon crop in Tucumán, the world’s largest single lemon producing region, has been lost for both 2010 and 2011.

After a bumper year in 2009 preliminary forecasts suggest a reduction in the exports of Chilean citrus with the production of oranges and lemons hit by a frost that affected blossom. The production of Chilean clementines meanwhile is likely to be lower as a result of a natural ‘off-year’.

Shipments of South African citrus are tipped to be the second largest ever after a 7% fall in volumes last year from the record 94m cartons exported in 2008. According to Citrus South Africa estimates, exportable volumes this season will total 91.9m cartons – up from last year’s 87.6m cartons but lower than the 94.4m cartons shipped in 2008.

Although banana volumes have recovered somewhat in the first half of 2010, the July to December trade may be hit by any number of factors including an Atlantic hurricane season that is forecast to be ‘extreme’ and the fallout caused by volcanic eruptions in Central and South America. Under such conditions the decision to err on the side of caution and lay-up instead of continuing to trade has to be the wisest choice.

Richard Bright, Consultant
info@reeftertrends.com

Reefer owners downbeat

Given the weakness of the Spot market it was no surprise to see both Star Reefers and Green Reefers post disappointing sets of results for 2009 and give downbeat forecasts for their prospects in 2010. Star’s problems started and ended with the bankruptcy of vertically-integrated Russian distributor Sunway, to which it had five vessels on charter. The situation for Green is more complicated. Both owners find themselves more exposed this year after charterers opted to redeliver top-end tonnage and gamble on the Spot market.

Star has publicly stated it will send between 5-7 of its units - approximately 13% of its total capacity - into lay-up. Green’s focus is very much on reducing its overall cost picture and claims it is moving ‘rapidly forward’ in this respect. Declining to give details it says that it has been very active in making several internal changes which already have started to show a positive result. Also on the plus side most of the costly dry docking for the fleet is now past, which should make ‘an important contribution to a healthy cost reduction for the future’.
CAMPOSOL

Camposol S.A., the leading agroindustrial company in Peru with a broad variety of products, is the largest exporter of avocados, harvested at the precise moment to assure a superb quality fruit with a perfect ripening. Camposol is focused in building consistent and steady programs along with an innovative and creative packaging that enhances the product’s appearance.

By maintaining a close relationship with our customers we assure them total traceability with the solid support of our certifications:

GLOBALGAP / IPM Sustainable Agriculture / Global Compact / GMA-SAFE / GMP-GAP / LEAF.
Avocado from Peru

Assets and ambitions

Making the desert bloom

Impressive. This is the first word that comes to mind when seeking a description of the Peruvian avocado industry. Impressive first of all as regards the production conditions that at first sight seem unpromising for an exotic fruit. Although it is in the tropics, the corridor some 2 500 km long running between the cold Humboldt current and the Andes has a desert climate and this is where practically all the fruits are grown. However, although there is practically no rain, relative humidity and temperature are ideal, with no risk of frosts or heat waves.

In addition, irrigation is possible as good quality water is available thanks to the rivers—often underground—that flow from the Andes. Avocado is thus grown under practically hydroponic conditions in large irrigated perimeters such as Chevimochic in Libertad province in northern Peru and in the valleys to the north and south of Lima.
AVOCADO AT ITS BEST

Year-round supplies of the finest varieties from the best sources in the world.

Gabriel Burunat
Low production costs and high yields

The competitiveness of these fruits is also impressive. First, plant nutrition is strictly controlled in this farming system and yields are extremely high, averaging 18 to 20 tonnes per ha in the orchards belonging to the large Peruvian operators who handle the greater proportion of the planted area. In comparison, productivity in Mexico, the world’s leading production source, is some 10 t per ha. Second, the favourable climatic features also give excellent yields at packing, generally in excess of 90%. Finally, production costs are usually low. Although fertiliser and pesticides are generally imported and costly, water is cheap and of good quality and labour is extremely cheap. The average farm salary is less than USD300 per month and this considerably reduces the cost of establishing plantations (seedlings cost no more than USD5.00) and also those of operation and packing. Together with the high yields, this aspect means that the source has very substantial advantages.

Rocketing production since the end of the 1990s

It is not surprising that production of avocados for export has also displayed impressive dynamics. Although avocado has been grown in Peru for a long time, the development of the 'Hass' variety is very recent. Previously, only local cultivars such as 'Topa Topa' or Creole varieties were grown in hot areas in the foothills of the Andes and in the Amazonian region in the eastern part of the country. Started practically from scratch in the mid-1990s and after tremendous expansion in recent years, Peruvian plantations of 'Hass' total 7 500 ha in 2010. Production is between 60 000 and 65 000 t.

It is true that most sector stakeholders are groups with sufficient resources for large-scale operations. Camposol, an agroindustry company with Norwegian and Peruvian capital, is the sector leader and has planted more than 2 500 ha since the beginning of the 2000s. Other large local groups whose core activities are banking or construction have also planted massively: Agricola Hoja Redonda with 340 ha, Agricola Casa Blanca with 230 ha, etc. Avocado, know locally as 'pulga' as everywhere in the Southern Cone, alongside other export crops such as asparagus and coffee, has become one of the driving forces of the economy. This sector comes after the powerful mining industry—Peru is one of the main producers of gold, copper and silver—after fishing. More
generally, export farming is playing a growing economic role in some formerly underprivileged regions of the country where precariousness and unemployment were the rule. In addition to providing jobs, some of the companies in the sector have also contributed to improving health care and education via their social programmes.

One of the pillars of Peruvian agricultural exports

Of course, this development has not gone unnoticed on the international scene. In less than a decade, Peru has become the third largest avocado exporter in the world, with shipments increasing from 2 000 t at the beginning of the century to some 50 000 to 55 000 t in 2008 and 2009. In the latter year, Peru also became the largest supplier of counter-season avocado to the European market, sliding ahead of South Africa, the historic leader.

Which are tomorrow’s markets?
A giant challenge is approaching

So is everything wonderful? The answer is no. First, demand on the European market, the outlet for practically the entire Peruvian avocado crop, is beginning to show signs of inadequacy. Although average season prices are still satisfactory, some periods such as June have become very risky. In 2009, simultaneous Peruvian and South African production peaks sent prices down to some EUR3.50 to 4.50 per box. Furthermore, production growth is far from over. A large proportion of areas planted in recent years is not yet in production. Thus the giant producer Camposol should triple its exportable volume by 2015. Likewise, even though some companies seem to be more cautious with regard to avocado and are diversify-
ing—especially into easy peelers—the area under avocado is still increasing. Several agro-industry companies have expressed a wish to invest in the Olmos 48 000-ha irrigated perimeter east of Chiclayo in the north of the country. Others have already begun development in the Ayacucho region where highland plantations at between 800 and 2 200 m mean that the production calendar is earlier than in the rest of the country (packing starting in mid-January). Peruvian ‘Hass’ export potential should therefore exceed 100 000 t in the short term. This is the present size of the European counter-season market for all suppliers. Peruvian exporters must therefore develop their market very rapidly. ProHass, the Peruvian avocado producers' association, has made this a priority. It is focusing efforts on the only two large markets for avocado in the world—Western Europe and the United States—that alone account for nearly 85% of international trade.

### The United States, a high-potential priority

Today, Peruvian avocados are not sold in the USA, which is much more than just a diversification market. First, imports display a growth trend that is unique in the world, increasing from less than 100 000 t at the beginning of the 2000s to more than 370 000 t in 2008-09. Prices are also very profitable. Finally, the nearby US market is more natural for Peruvian exporters than the distant European Union as logistic costs are lower and shorter delivery times improve market visibility and reduce trade risks.

In January 2010, after years of effort, ProHass succeeded in securing the opening of the US frontier hitherto closed to Peruvian avocado because of the presence of several types of fruit fly. However, the sanitary protocol requiring disinsectisation is still very limiting. Methyl bromide treatment, one of the two technical solutions proposed by APHIS, cannot be used as the effect on fruit quality is too great (skin burns and shorter shelf life). So cold treatment is the only alternative. But tropical fruits have poor resistance to the low temperatures required by these procedures. Exporters are currently working with physiologists on the pre-conditioning of fruits at 5 to 6°C for several days so that they can withstand two weeks of quarantines at 1°C without damage. Small-scale trials are in progress as exporters are strongly aware of the importance of not harming their image during this start-up phase. However, the quantities exported should be minimal this year, especially as not all exporters possess treatment facilities.
or are not yet ready to take the financial risk of these trials.

Other much less stringent solutions are being examined

ProHass is also working along other lines that would make it possible to avoid the considerable constraint of disinsectisation. A study has been commissioned in relation with the Peruvian sanitary control service (SENASA) and APHIS in the United States to show that Peruvian ‘Hass’ is not a host for fruit fly. If this is found to be so and recognised as such by APHIS, the gates to the US market will open wide. This could be the case from the next season onwards.

The eradication programme in danger

Eradication of fruit fly is another approach and far from impossible. One of the SENASA officials in charge of the dossier stated recently that in 15 years Peru could be free of fruit fly from Tacna in the far south to Tumbes right in the north. First, the coastal strip consists mainly of desert zones and fruit and vegetables for export are grown there. This means that the zones to be treated are separate from each other and also smaller than might appear. Second, the SIT (sterile insect technique) using the release of sterile males has already proved its effectiveness. Eradication has been successful in northern Chile (Arica) and in southern Peru (Tacna and Moquegua). Although such programmes have a high cost, this is outweighed by the returns on the investment generated by the opening up of new markets. Furthermore, the stakes are not only economic but also social (jobs created in severely underprivileged areas) and environmental (reduction of pesticide spraying). It thus appears that continuing the fruit fly eradication programme in the other parts of the country is a clear priority. However, the global economic downturn has led the Peruvian government to apply serious cuts to the SENASA budget, calling the programme into question. One can rightly question the coherence of government policy as on the one hand thousands of millions of dollars are invested in creating irrigated perimeters (this is the scale of the cost of infrastructure developed at Chevimochic and Olmos) to develop export agriculture that is to be an economic and social driving force and on the other operators have just been cut off from their market.

'Avocados: Nature's Alternative'

This is the slogan used in the promotion campaign launched in Europe in mid-June for Peruvian ‘Hass’ avocados. The positive health aspects of the fruit are highlighted, and especially the high vitamin and mineral contents. ProHass is funding these operations entirely and has chosen to continue the efforts on promotion started in the United Kingdom in 2009 and focus on a new target, France. In practice, the campaign is based on tastings and promotion operations in retail outlets (recipes and health features) and sports clubs in the UK. The British public will also have a chance of winning a trip to Peru, thanks to entry forms distributed with the fruits. Awareness is to be enhanced among professionals as well, especially at Rungis wholesale market in France. A web site in French and English is now on line: www.deliciousavocados.com

These operations are handled by the Bokooplus agency in France and by RED Communications in the United Kingdom.
Another major approach: increasing consumption in the EU

Developing consumption on the EU market is the other priority for Peruvian professionals. There is considerable room for improvement as annual average consumption in the western European countries with large GNP’s is about 500 g—a third of that of the United States. Strongly populated countries like Germany and Italy are still avocado consumption deserts with consumption at less than 200 g per person per year.

ProHass has thus decided to devote a budget of some USD300 000 in 2010 to continue its promotion of avocado on the British market and, for the first time, to extend promotion to France. Operations consist of both a media campaign and point of sale demonstrations and will run from mid-June to the end of August (see box). The targeting seems excellent. Consumption in the United Kingdom is still moderate at about 600 g per person per year with the best growth dynamics of the EU. There is as much scope for growth in France, one of the main EU consumer countries along with Scandinavia. Avocado is well known there but little promoted, especially in the summer (see graph). In addition, the replacement of green varieties that are still very present by ‘Hass’ also forms substantial development potential.

And when will there be grouped promotion operations?

Unity is strength, especially in marketing. Production is increasing and Peruvian exporters need powerful development programmes. They are not the only ones. Production is also climbing steeply in Chile. In the Mediterranean region, planting has been massive in Israel in recent years and Morocco is beginning to

| Avocado — European Union — Counter season market supply |
|---|---|---|---|---|---|---|---|---|---|---|
| Tonnes | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 |
| South Africa | 38 205 | 38 908 | 36 266 | 36 404 | 29 872 | 46 955 | 35 934 | 37 944 | 50 451 | 38 345 |
| Peru | 1 299 | 2 849 | 4 401 | 11 266 | 14 590 | 18 096 | 30 508 | 35 857 | 49 829 | 45 777 |
| Kenya | 10 294 | 15 600 | 11 523 | 19 828 | 16 236 | 15 458 | 13 641 | 11 999 | 11 841 | 15 015 |
| Argentina | 58 | 326 | 440 | 460 | 709 | 1 224 | 1 804 | 1 709 | 863 | 1 984 |
| Swaziland | 104 | 112 | 235 | 411 | 252 | 352 | 395 | 178 | 530 | 313 |
| Zimbabwe | 137 | 285 | 207 | 739 | 404 | 599 | 260 | 323 | 128 | 115 |
| Total | 50 098 | 58 080 | 53 073 | 69 108 | 62 063 | 82 684 | 82 542 | 88 010 | 113 642 | 101 549 |

Source: EUROSTAT
emerge. Finally, new challengers are appearing, such as Colombia. Even if the United States is opening the border, exporters in Peru and other sources will need increased sales in Europe, the only market capable of taking large volumes.

The system set up in the United States by Californian producers and Mexican, Chilean and Dominican exporters is exemplary. The substantial budget raised by a special tax levied on each box of fruit sold in the country made it possible to develop a joint tool for managing volumes and to run powerful, regular advertising that is both generic and specific to each source—a proportion of the budget is allocated to each supplier country so that it can focus on its own themes. The results speak for themselves as consumption has been multiplied by two and half in ten years. Peruvian exporters will have to find solutions for the sale of a strongly increasing export potential in the coming years and must play a leading role in the setting up of such a structure, working with South Africa, to achieve larger sales on the European counter-season market. The existence of a professional organisation in each of these countries (ProHass and SAGAA) and experience in promotion operations are assets. A first step before setting up a European Avocado Board grouping all the stakeholders working in this market!

**The British market**

The British market displays a clear preference for ‘Hass’, with this variety forming about three-quarters of the volumes sold. The percentage is even higher at 85% in supermarkets, which sell by far the largest proportion of fresh fruits (‘Hass’ is the only variety accepted by some chains). The smooth varieties go mainly to wholesalers and the catering industry, but these nonetheless also favour ‘Hass’.

Supplies are markedly segmented in supermarkets. There can be two references for loose fruits: large (especially sizes 14 and 16) and medium, forming the heart of the range (mainly sizes 18 to 22). Packages of ‘baby’ avocados (mainly sizes 22 to 26) are always on display as a traffic builder. The great majority of the avocados sold in supermarkets are ‘ready to eat’ or have at least spent time in a ripening facility (for eating within 3 or 4 days). There are also ‘twin packs’ consisting of one fruit ready to eat and the second for eating fairly soon.

The consumption calendar differs from those of the other EU countries. More fruits are sold in spring and summer than during the rest of the year (the result of the South African promotion operation). Another original feature of the market is that a large proportion of the purchases by supermarket chains are the subject of contracts with suppliers that can cover as much as the entire season.

**The French market**

Avocado is the subject of impulse buying. Promotion operations thus play a key role in sales dynamics. Large distributors concentrate on avocado during three main periods: Christmas (as for all exotic fruits), Easter and November (with the switch to the ‘winter range’ and various supermarket theme periods and anniversaries). Sales operations with batches at an attractive price (3 fruits for EUR 1.50 for example) result in the shifting of large quantities. The French market responds well to these marketing operations and sizeable quantities are sold in years of large production. The range available in supermarkets generally consists of loose avocados (mainly sizes 16 or 18 depending on the region) and a fairly recently introduced low-price pack (a net of three or four size 20, 22 or 24 fruits). An increasing number of retailers supply ripe avocados, generally available in pairs in rigid transparent plastic packaging.

![Avocado - Evolution of the promotion rates on the French](image)

**Photos © Eric Imbert**
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The market for southern hemisphere citrus has grown almost exponentially since the beginning of the 2000s, gaining more than a million tonnes. However, the growth rate of international trade seems to have slowed in recent seasons while the area under citrus has continued to increase in a fair number of producer countries. FRUITROP examines the dynamics of the main markets around the world to highlight the scope for development that still remains in a context of increased production and logistic costs.

Summer citrus

A report by Eric Imbert
The flavour of Mexico...

Of the unique land of Michoacan

<table>
<thead>
<tr>
<th>Variety</th>
<th>Jan</th>
<th>Feb</th>
<th>March</th>
<th>April</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>Aug</th>
<th>Sept</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rio Red</td>
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<tr>
<td>Star Ruby</td>
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<td>Ruby Red</td>
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</tbody>
</table>
Climatic necessity means that international trade in citrus fruits is based on southern hemisphere production during the period running roughly from May-June to September-October. This ‘summer’ or ‘counter-season’ market in the major northern hemisphere countries forms only 20% of world trade in citrus evaluated at 12.3 million tonnes in 2008-09. However, the volume involved—averaging 2.4 million tonnes each year—is far from marginal. To see it in perspective, it exceeds world trade in stone fruits or all exotic fruits, including pineapple.

More limiting geography and soil and climate conditions

The size difference between the ‘summer’ and ‘winter’ markets is explained first of all by very seasonal international demand, as is illustrated perfectly by the functioning of the southern European markets illustrated below. However, other supply-related factors are involved. The southern hemisphere has less land area and accounts for a little less than 30% of world production. Furthermore, a large proportion of the area under citrus is north of the Tropic of Capricorn where climatic conditions and the resulting pressure from phytosanitary problems mean that the sanitary and organoleptic (especially colour) standards required by an increasingly demanding international market are not usually attained. In the southern hemisphere, the degree of latitude is a gauge of competitiveness in terms of quality and a key for not suffering from sanitary restrictions limiting access to the world’s major markets! The major producer countries in the tropics therefore devote their crops more to processing or the domestic market. The 20 million tonnes harvested annually in Brazil, the regional champion and the second-largest producer in the world, supplies concentrated orange juice factories. The 2.5 million tonnes grown in Indonesia is sold on the domestic market.

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20% of all citrus trade, but large volumes change hands

Summer citrus market
In search of value-added

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## Citrus — The 10 leading exporters in the World and the main ones in the southern hemisphere

<table>
<thead>
<tr>
<th>Position in world classification</th>
<th>Exportations (000 tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Spain</td>
<td>3 200</td>
</tr>
<tr>
<td>2 South Africa</td>
<td>1 385</td>
</tr>
<tr>
<td>3 China</td>
<td>1 000</td>
</tr>
<tr>
<td>4 United States</td>
<td>1 000</td>
</tr>
<tr>
<td>5 Turkey</td>
<td>900</td>
</tr>
<tr>
<td>6 Egypt</td>
<td>825</td>
</tr>
<tr>
<td>7 Argentina</td>
<td>660</td>
</tr>
<tr>
<td>8 Morocco</td>
<td>530</td>
</tr>
<tr>
<td>9 Mexico</td>
<td>520</td>
</tr>
<tr>
<td>10 Pakistan</td>
<td>270</td>
</tr>
<tr>
<td>11 Australia</td>
<td>140</td>
</tr>
<tr>
<td>12 Uruguay</td>
<td>135</td>
</tr>
<tr>
<td>13 Brazil</td>
<td>110</td>
</tr>
<tr>
<td>14 Chile</td>
<td>100</td>
</tr>
<tr>
<td>15 Paraguay</td>
<td>55</td>
</tr>
</tbody>
</table>

Sources: FAO, professionals, average for 2008-09

## Citrus — The 10 leading producers in the World and the main ones in the southern hemisphere

<table>
<thead>
<tr>
<th>Position in world classification</th>
<th>Production (million tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 China</td>
<td>21.5</td>
</tr>
<tr>
<td>2 Brazil</td>
<td>20.9</td>
</tr>
<tr>
<td>3 United States</td>
<td>10.9</td>
</tr>
<tr>
<td>4 Mexico</td>
<td>7.3</td>
</tr>
<tr>
<td>5 India</td>
<td>7.0</td>
</tr>
<tr>
<td>6 Spain</td>
<td>5.6</td>
</tr>
<tr>
<td>7 Iran</td>
<td>3.8</td>
</tr>
<tr>
<td>8 Italy</td>
<td>3.6</td>
</tr>
<tr>
<td>9 Nigeria</td>
<td>3.4</td>
</tr>
<tr>
<td>10 Egypt</td>
<td>3.2</td>
</tr>
<tr>
<td>11 Argentina</td>
<td>2.7</td>
</tr>
<tr>
<td>12 Indonesia</td>
<td>2.5</td>
</tr>
<tr>
<td>13 South Africa</td>
<td>2.2</td>
</tr>
<tr>
<td>14 Peru</td>
<td>0.8</td>
</tr>
<tr>
<td>15 Australia</td>
<td>0.6</td>
</tr>
<tr>
<td>16 Brazil</td>
<td>0.3</td>
</tr>
<tr>
<td>17 Chile</td>
<td>0.3</td>
</tr>
<tr>
<td>18 Paraguay</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Sources: FAO, professionals, average for 2008-09
Two major supplier countries...

The countries involved in the market can thus be counted on the fingers of a single hand. South Africa, with a market share of some 55%, has an ultra dominant position. It has achieved this by using the competitiveness of a range that is complete, of high quality and very diversified in oranges and easy peelers and a very large client portfolio. Producers use good organisation and technical skill to make the most of the comparative advantages of South Africa’s climatic diversity. The climate is subtropical in the north and Mediterranean in the south, where pest and disease pressure is much smaller than in most competing countries. Argentina is second in the list, controlling about 25% of the world market. The soil and climate advantages of the Tucuman region in the north-west and growers’ know-how have enabled the country to become the world’s leading lemon producer to supply a growing world market for concentrated juice. Outlets were diversified in the 1990s and Argentina gained the position of leading supplier of the world trade in counter-season fresh lemons. This now forms 55 to 60% of citrus exports; the other major citrus fruits in the range (oranges and easy peelers) are grown in the north-east where the climate is hot and humid and the fruits are not as competitive as lemon.

...and a small number of secondary sources

The four other supplier countries cover only 20% of world trade. Although their production is moderate, the few large Uruguayan operators play a significant role on the European orange and easy peeler market. Australia is still a major player but tending to slow down in spite of the often excellent quality of the ‘Navel’ oranges grown in the south and the easy peelers from Queensland. Handicapped by high production costs, exporters are tending to lose ground in

### Citrus — Southern hemisphere — Trend in planted areas

<table>
<thead>
<tr>
<th></th>
<th>Argentina</th>
<th>South Africa</th>
<th>Uruguay</th>
<th>Argentina + South Africa + Uruguay</th>
</tr>
</thead>
<tbody>
<tr>
<td>hectares</td>
<td>Area in 2008</td>
<td>Trend 2006-08</td>
<td>Trend 2006-08</td>
<td>Area in 2008</td>
</tr>
<tr>
<td>Orange</td>
<td>49 391</td>
<td>- 1 497</td>
<td>38 683</td>
<td>+ 1 051</td>
</tr>
<tr>
<td>Easy peelers</td>
<td>35 793</td>
<td>- 18</td>
<td>5 033</td>
<td>+ 349</td>
</tr>
<tr>
<td>Grapefruit</td>
<td>10 427</td>
<td>- 703</td>
<td>9 166</td>
<td>+ 715</td>
</tr>
<tr>
<td>Lemon</td>
<td>43 844</td>
<td>+ 1 647</td>
<td>4 426</td>
<td>+ 18</td>
</tr>
<tr>
<td>Total</td>
<td>139 455</td>
<td>- 571</td>
<td>57 308</td>
<td>+ 2 133</td>
</tr>
</tbody>
</table>

Sources: FEDERCITRUS, CGA, DIEA
the face of increasing competition from other sources on their traditional markets Asia and the United States.

Furthermore, two outsiders in Latin America—Chile and Peru—entered the international scene in the 2000s. With production know-how gained for supplying their domestic markets and possessing infrastructure and knowledge of export markets, the two countries ship moderate but strongly increasing volumes to the US market. Brazil, penalised by a climate with a negative effect on fruit colour, is not a major player but occasionally ships oranges.

Although they are in the northern hemisphere, Mexico, Honduras and Cuba play a role on the summer grapefruit market. Although Honduras and Cuba have phytosanitary and climate problems and are tending to lose ground, Mexico is experiencing development thanks to production in the Yucatán and the emergence of large orchards devoted to export fruits in the Michoacán.

Increasing production

The southern hemisphere producer countries displayed strong, rapid growth of some one million tonnes from 1999 to 2007, reaching 7.5 million tonnes. The decrease observed since 2008 seems to be conjunctural and related to a considerable degree to repeated meteorological problems in Argentina, one of the main producers: frost in July 2007 and September 2009 combined with serious drought. Furthermore, cultivated areas seem to be practically stable in Argentina, with increased lemon and, to a lesser degree, easy peelers, making up for the decrease in orange and grapefruit. Southern hemisphere production should resume in the medium term. In addition to the increase in lemon production in Argentina noted above, the southern hemisphere orange harvest should continue to increase, driven in particular by Uruguay and South Africa. Furthermore, easy peeler production—late hybrids in particular—should also increase, with new orchards in Peru whose are is difficult to measure and renewed planting in South Africa and Uruguay.

Where will these additional volumes be sold? The question is particularly relevant as production has increased much more strongly than trade, especially for grapefruit, orange and lemon (see table). Production increased by approximately a million tonnes from 2003-04 and the last years of normal harvests (2006-07), whereas the international market gained some 400 000 t with reference to 2008, the best export season. Will processing and domestic sales be such as to take the balance of the increasing volumes? Fruitrop provides a tour of
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the various counter-season markets for fresh citrus.

The European Union, a major but lack-lustre leading market

The EU was the founder of the international summer citrus trade and is still by far the leading destination for southern hemisphere fruits. The 1.0 to 1.2 million tonnes received each year forms two-thirds of total world exports. Nevertheless, volumes have remained practically stable since the beginning of the 2000s, seemingly indicating that the growth period is over. Sluggishness is obvious for grapefruit, with even a few worrying signs of a consumption decrease during the 2009 season. The situation is hardly any brighter for orange. The usual annual 550 000 to 600 000 t is only exceeded when there is a shortfall in the orange harvest in the northern hemisphere—the case of Spain in 2008—or a shortage of competing seasonal fruits, as in 2007. Two exceptions should be mentioned: first the easy peeler market, but this has a narrow geographic focus on the United Kingdom, and second the lemon market, where 'Eureka' from the southern hemisphere is tending to gain some of the market share of Spanish 'Verna', a variety penalised by its external appearance.

Increased competition from northern hemisphere crops

The tendency for seasons to become longer in northern hemisphere producer countries is complicating the work of exporters shipping fruit to the EU market. Facing very serious problems of profitability, Spanish growers are tending to reduce their easy peeler production capacity during the overloaded period from November to January and shift to periods during which there is still room for growth. This strategy—described in Fruitop since 2006—has become reality for oranges. The planting of more than 3 million trees in 2004-05 and 2005-06 (mainly 'Lanelate' and 'Powell') is beginning to enable Spain to supply the table orange market until the end of June. This longer season was distinct in 2009 when it was very difficult for southern hemisphere 'Navel' oranges to gain a foothold on the market. A similar pattern is emerging for easy peelers. The arrival in 2010 of the first triploids ('Garbi' and 'Safor') and other classic hybrids such as 'Murta' will allow a similar

<table>
<thead>
<tr>
<th>kg per person</th>
<th>USA</th>
<th>EU-27</th>
<th>Japan</th>
<th>EU-15*</th>
<th>EU-12**</th>
<th>Russia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (million inhab.)</td>
<td>305.7</td>
<td>500.3</td>
<td>127.3</td>
<td>375</td>
<td>104</td>
<td>142</td>
</tr>
<tr>
<td>Orange</td>
<td>0.09</td>
<td>1.24</td>
<td>0.21</td>
<td>1.62</td>
<td>0.32</td>
<td>0.89</td>
</tr>
<tr>
<td>Easy peelers</td>
<td>0.19</td>
<td>0.35</td>
<td>0.02</td>
<td>0.39</td>
<td>0.09</td>
<td>0.33</td>
</tr>
<tr>
<td>Grapefruit</td>
<td>0.01</td>
<td>0.27</td>
<td>0.45</td>
<td>0.34</td>
<td>0.19</td>
<td>0.16</td>
</tr>
<tr>
<td>Lemon</td>
<td>0.06</td>
<td>0.56</td>
<td>0.14</td>
<td>0.70</td>
<td>0.59</td>
<td>0.50</td>
</tr>
<tr>
<td>Total</td>
<td>0.34</td>
<td>2.42</td>
<td>0.82</td>
<td>3.05</td>
<td>1.19</td>
<td>1.88</td>
</tr>
</tbody>
</table>

* Extra-EU imports from the southern hemisphere - re-exports to EU-12 (June to Sept.) - exports (June to Sept.)
** Extra-EU imports from the southern hemisphere + releases from EU-15 (June to Sept.) - exports (June to Sept.)

Source: customs
lengthening of the season. They will overlap the early varieties (especially ‘Satsuma’) shipped by southern hemisphere producer countries. Likewise, late lemon production could recover a little in Spain. Today, there is no alternative to the ‘Verna’ variety, with its poor appearance and yields. However, some growers are top-grafting ‘Fino’ groves with ‘Verna’ as it is finally more profitable and less under fire from low-cost Turkish competition.

Very rigid consumption patterns favourable for seasonal fruits in southern Europe

The positive or negative impact of seasonal fruits has been clear in recent years. The effect has been particularly strong on certain markets like France, a large stone fruit producer. Citrus consumption in the summer is a quarter of that of the main winter season months. Retailers’ shelves are dominated by peaches, nectarines and apricots, where citrus fruits would be seen in the winter (see graph). Nevertheless, in contrast with competing seasonal fruits, the prices of citrus fruits are more attractive in the summer than in the winter. For example, the difference in the prices of oranges and other fruits increases from less than EUR 0.40 per kg in winter to more than EUR 0.70 in the summer. This shows that the price argument is not a powerful lever for sales in France. This consumption pattern featuring the very strong influence of the season’s fruits seems very rigid and common to the major producer countries in southern Europe (France, Spain, Italy and Greece).

More open northern European markets

Fortunately for southern hemisphere citrus producers, consumption habits are different in northern Europe. The United Kingdom is a particularly interesting case as the consumption of southern hemisphere citrus fruits is 2.5 times that of a country like France and is over 40% of that of the winter period. This example shows the development capacity of markets where domestic production is little present in the summer (northern Europe). Promotion is probably a powerful tool and a way of tapping any remaining scope for growth on these markets where the consumption model seems more ‘plastic’. In this context, why not apply the recipe elsewhere? The consumption difference between the British market and the northern European markets shows that there is still considerable
potential for growth. The campaign launched this year by the CGA in the United Kingdom and Germany is undoubtedly an excellent example to follow.

An increase in certain summer fruit crops

Might promotion become an essential tool for countering increasing pressure from competing fruits? The question can be asked. The development of new stone fruit orchards in Spain and Italy might indicate that the southern European consumption pattern could spread to the other EU countries in the medium term. Production of ultra-early (April) peach and nectarine should not increase much for lack of a positive response from consumers. In contrast, the European market should be more amply supplied during the heart and the end of the season, with the considerable increase in planted areas in Catalonia. A similar trend is starting for apricot. The distribution of new varieties for a longer harvest calendar has re-launched plan-
tations in Italy and especially in Spain. This is a very recent phenomenon but should be closely monitored. An excellent snack fruit, high-quality widely grown apricots could become the 'summer banana'.

**Nothing new on the eastern front**

Twelve new EU members with over 100 million consumers has not added sparkle to the southern hemisphere citrus market. Annual consumption is estimated to be about 120 000 t (1.2 kg per person to year), about 40% of that of EU-15. The reason for such a difference on these markets with an 'intermediate' standard of living seems to be a more marked impact of competing produce and especially of the difference in the price between these fruits and citrus. Apples are widely grown in Poland, Hungary and Romania and are very competitive in the summer (see graph). The other summer fruits such as red fruits in Poland and plums are also likely to have a strong impact. Likewise, some imported fruits are much more competi-
tive than oranges in the summer. This is the case of banana, with generally very attractive prices at this time of year because sales are poor in western Europe. Oranges thus become less competitive and even become expensive on some markets like the Czech Republic (see graph). Playing on retail prices is probably a powerful tool for increasing sales. However, the level of some EUR1.00 per kg to join competing fruits might not be compatible with cost prices.

Russia:
strong market potential
but hit hard
by the economic downturn

Unlike those of the other eastern European countries, the Russian market has been very dynamic in recent years. Counter-season citrus imports more than tripled from the end of the 1990s to 2006, when the total exceeded 300 000 t. Although the situation in terms of GDP is no better than that in the eastern European countries that have joined the EU and banana is a very aggressive competitor in the summer, the retail price of oranges has not increased markedly, remaining level throughout the year. In addition, Russians often own their homes and can spend a larger proportion of income on food than in some neighbouring countries (see graph). Finally, the port of St Petersburg is a major entry point and may also play a major role. However, the world economic crisis has strongly affected the market, with the latter losing more than 50 000 t in 2009. On the one hand, the plunging rouble has made all imported fruits more expensive. On the other, the financial fragility of some major importers has increased the risk of bad debts and encourages exporters to be cautious. However, improvement in the economy with 4% growth in GDP forecast for 2010 and consumption still 40% less than that of EU-15 (1.88 kg per person per year in comparison with more than 3.00 kg) indicate that market growth should resume rapidly.

Ukraine, a large neighbouring market with a population of 46 million people, also displays excellent dynamics. However, the standard of living is low and import volumes are still fairly small at an annual 30 000 to 40 000 t, mainly from Argentina and South Africa. The per capita income estimated by the IMF to be USD4 000 in 2008 is small in comparison with that of the other countries in the region (USD14 000 in Russia for example). It will probably take many years of strong economic growth for the market to express its considerable potential.
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**United States: large consumption potential...**

There is currently no large market in the richest countries outside Western Europe. US imports of southern hemisphere citrus fruits hardly exceed 150,000 t, that is to say less than 500 g for each of the 300 million inhabitants! This small development is caused by a feature of Californian production. California accounts for some 30% of US citrus production and covers most of domestic supply and although it is in the northern hemisphere, significant volumes of lemons, grapefruits and ‘Valencia’ oranges can be marketed in the summer. But it is clear that the market has a very large growth potential. Annual per capita consumption is estimated to be between 8 and 9 kg, much smaller than in the EU and even tiny for a producer country. In comparison, the figure is about 25 to 30 kg in Spain and Italy.

**...but closely controlled!**

The reasons? Californian growers have particularly high production costs and want to protect their territory. Sanitary regulations applicable to produce from third countries are still very restrictive, especially for the prevention of black spot and fruit fly. Thus, only produce from certain regions of South Africa (Western Cape and some parts of Northern Cape), Australia (Riverland, Sunraysia and Riverina), Peru and Chile (easy peelers only) is allowed entry today. These measures considerably limit the export potential and considerably increase cost prices.

**Might greening in California change the situation?**

The arrival of the Asian form of greening may well cause changes. The risk of occurrence is very high. The psyllid vector is already present and the bacterial disease has spread rapidly to neighbouring Mexico where it was detected in late 2009 in Nayarit and Jalisco states, about 1000 km from the US border. Orange production has decreased by a third and grapefruit production by half in Florida where the disease appeared in 2005. The long-term forecasts drawn up by FDOC are even more disturbing, showing that the decrease will continue unless a remedy is found quickly. In addition to decreased production, the additional costs involved in the removal of infected trees and psyllid control already form a difficult shock for a sector that already displays economic fragility because of questions of the cost and availability.
of labour and water. A Florida estimate talks in terms of a 40% cost increase (+ 400 USD/ha). This situation could lead to broader market opening or the radicalisation of California growers whose position is even more delicate. This would also change the situation on certain Asian markets (Japan, South Korea and Hong Kong) and Canada, to which California exports an estimated 600 000 tonnes to 1 million tonnes each year, with 90 000 to 130 000 t shipped from June to September.

**Japan: a 'small' single produce market that is difficult to develop**

The hardly more than 100 000 t imported by Japan is a very small quantity. Grapefruit apart, annual citrus consumption per person is extremely small. However, the scope for development appears to be limited in the medium term. In fact, all varietal groups lost ground even before the economic downturn hit most of the markets in the world. There was even a decrease in sales of grapefruit, the leader that forms the bulk of imports. Displays were reduced in winter 2004 because of the drop in Florida production and no longer achieve their former scale in the summer. The sanitary protection measures in force together with the extremely conservative nature of a large section of Japanese society leave doubts as regards any rapid growth capacity of this market.

**25 to 30% of volumes sold on the other world markets**

The markets in the major developed countries are not the only ones. Summer citrus consumption is high in other countries in Asia and the Middle East. Our estimates based on the difference between cumulated exports from source countries and cumulated imports by the large northern hemisphere markets (EU, United States, Japan and Russia) show that these other destinations probably import 630 000 to 640 000 t each year, that is to say 25 to 30% of the world citrus trade.

**A fine trend in the Middle East**

Handling some 280 000 t per year, the Middle East is the leading market by volume in this category and is growing significantly, having gained 70 000 to 80 000 t from 2006 to 2009. Although the large Saudi Arabian market
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seems to be comparatively stable, imports by the United Arab Emirates are growing considerably, making this group of countries the largest market in the region. The market is also growing in Kuwait although smaller volumes are involved. In both cases, this development is driven by South Africa, the leading source way ahead of Argentina, which in turn is followed by Uruguay and Australia. But the varietal range is limited and consists practically only of oranges. Easy peeler imports are growing but still extremely marginal.

Other Asian countries: large but stable markets, with a few exceptions!

Japan apart, the Asian markets import large but fairly stable volumes estimated to total about 200 000 t, that is to say a little less than 10% of the world citrus trade. This is the case of Hong Kong (about 80 000 t), Malaysia (about 40 000 t), Singapore (25 000 to 30 000 t) and Indonesia (15 000 to 20 000 t). Australia and South Africa share these markets that are mainly purchasers of oranges, with supply completed by some batches from Argentina. However, China and South Korea are both noteworthy exceptions, displaying good dynamics. With growing production and the stagnation of a number of traditional markets, South Africa and South American sources have sought to diversify their outlets by gaining new client countries. Not without effort as procedures to remove phytosanitary regulation barriers have been long. Although volumes are still limited, these populous markets form a large potential for development.

In search of markets where value-added is conserved

Which markets will be able to take the increasing production—especially of oranges, lemons and easy peelers—in the southern hemisphere countries? The emerging countries, that is to say states in Eastern Europe and the new markets in Asia and the Middle East undoubtedly provide large scope for development. But how profitable are they? Attractive selling prices will open up the doors to these markets more widely. Which southern hemisphere producer countries can afford to sell at low prices during a period of increasing cost price? The inexorable rise in oil prices already weighs heavily on sea and land transport costs and in farm inputs. The threat of Asian greening may further increase the bill in some directly threatened countries like Argentina. In such a context, it seems essential to step up efforts to develop the markets in rich countries. Re-launching promotion in Europe seems to be a key step in trying to use the margins for growth on the Northern European markets, to allow to the lengthening of the production calendar in the Mediterranean countries and perhaps, in the medium term, to guard against the increase in stone fruit production.

Broader opening of the United States market, that would seem to have very large potential for development, is undoubtedly a major line of approach. The switch from face-offs to a strategy of alliances between domestic growers and the import sector is probably a key to this. The example of the avocado market speaks for itself. The tools for promoting consumption and for market management set up by Californian growers and South American exporters by means of a special tax on each box sold has tripled the size of the market while conserving satisfactory financial returns. This is an example to be followed!

Eric Imbert, CIRAD
eric.imbert@cirad.fr

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Citrus — South Africa — Production

<table>
<thead>
<tr>
<th></th>
<th>2 220 000 t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rank in SH* production</td>
<td>2nd</td>
</tr>
<tr>
<td>% of SH production</td>
<td>32%</td>
</tr>
<tr>
<td>Areas</td>
<td>57 309 ha</td>
</tr>
<tr>
<td>Average yield</td>
<td>38.4 t/ha</td>
</tr>
</tbody>
</table>

3 500 producers (of which 1 300 export fruit)
75 packing stations (10 major)
100 000 jobs in the sector

Citrus — South Africa — Exports

<table>
<thead>
<tr>
<th></th>
<th>1 340 000 t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rank in SH exports</td>
<td>1st</td>
</tr>
<tr>
<td>% of SH exports</td>
<td>55%</td>
</tr>
</tbody>
</table>

Citrus — South Africa — Major markets

<table>
<thead>
<tr>
<th></th>
<th>Percentage of total citrus exports from South Africa</th>
<th>Proportion of SH citrus supplied by South Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>3%</td>
<td>24%</td>
</tr>
<tr>
<td>EU-27</td>
<td>49%</td>
<td>61%</td>
</tr>
<tr>
<td>Russia</td>
<td>10%</td>
<td>49%</td>
</tr>
<tr>
<td>Japan</td>
<td>6%</td>
<td>61%</td>
</tr>
<tr>
<td>Middle East</td>
<td>20%</td>
<td>na</td>
</tr>
</tbody>
</table>

*SH: southern hemisphere
**South America**

<table>
<thead>
<tr>
<th>Region</th>
<th>Citrus</th>
<th>Orange</th>
<th>Lemon</th>
<th>Easy peelers</th>
<th>Grapefruit</th>
</tr>
</thead>
<tbody>
<tr>
<td>SALTA</td>
<td>10%</td>
<td>9%</td>
<td>4%</td>
<td>2%</td>
<td>59%</td>
</tr>
<tr>
<td>JUJUY</td>
<td>6%</td>
<td>9%</td>
<td>3%</td>
<td>5%</td>
<td>2%</td>
</tr>
<tr>
<td>BUENOS AIRES</td>
<td>3%</td>
<td>6%</td>
<td>-</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>

By region:
- Noroeste argentino: 64%
- N.E.A. Noroeste argentino: 33%
- Buenos Aires: 1%

**Fruit Export Statistics**

- Citrus: 3%
- Orange: 6%
- Lemon: -
- Easy peelers: 1%
- Grapefruit: 1%

Source: [Link to source]
**Citrus — Argentina — Major markets**

<table>
<thead>
<tr>
<th>Country</th>
<th>Percentage of total citrus exports from Argentina</th>
<th>Proportion of SH citrus supplied by Argentina</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>PR</td>
<td>PR</td>
</tr>
<tr>
<td>EU-27</td>
<td>64%</td>
<td>35%</td>
</tr>
<tr>
<td>Russia</td>
<td>23%</td>
<td>47%</td>
</tr>
<tr>
<td>Other countries from Eastern Europe</td>
<td>7%</td>
<td>-</td>
</tr>
<tr>
<td>Japan</td>
<td>PR</td>
<td>PR</td>
</tr>
</tbody>
</table>

**PR:** phytosanitary restrictions

*SH: southern hemisphere

---

**Production (aver. 2008-09):** 2 650 000 t

- **Rank in SH production:** 1st
- **% of SH production:** 39%
- **Areas:** 1 398 800 ha
- **Average yield:** 19.0 t/ha

5 300 producers
442 packing stations (112 for export)
19 juice production facilities
100 000 jobs in the sector

---

**Citrus — Argentina — Exports**

**Exports:** 610 000 t

- **Rank in SH exports:** 2nd
- **% of SH exports:** 25%

<table>
<thead>
<tr>
<th>Citrus</th>
<th>Exports in 2008-09</th>
<th>Percentage of SH exports</th>
<th>Trend since 2003-04</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy peelers</td>
<td>105 725</td>
<td>31%</td>
<td>+ 36 992</td>
</tr>
<tr>
<td>Orange</td>
<td>148 847</td>
<td>11%</td>
<td>- 2 345</td>
</tr>
<tr>
<td>Lemon</td>
<td>330 139</td>
<td>60%</td>
<td>- 19 192</td>
</tr>
<tr>
<td>Grapefruit</td>
<td>25 599</td>
<td>12%</td>
<td>- 7 987</td>
</tr>
</tbody>
</table>

---

**Citrus — Argentina — Production**

<table>
<thead>
<tr>
<th>Citrus</th>
<th>Production in 2008-09</th>
<th>Percentage of SH production</th>
<th>Trend since 2003-04</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy peelers</td>
<td>347 815</td>
<td>38%</td>
<td>- 80 875</td>
</tr>
<tr>
<td>Orange</td>
<td>801 271</td>
<td>24%</td>
<td>+ 85 501</td>
</tr>
<tr>
<td>Lemon</td>
<td>1 281 095</td>
<td>64%</td>
<td>- 7 141</td>
</tr>
<tr>
<td>Grapefruit</td>
<td>222 848</td>
<td>37%</td>
<td>+ 41 162</td>
</tr>
</tbody>
</table>

---

**Citrus — Argentina — Outlets**

- **Export:** 22%
- **Domestic:** 28%
- **Industry:** 43%
Citrus — Australia — Major markets

<table>
<thead>
<tr>
<th>Percentage of total citrus exports from Australia</th>
<th>Proportion of SH citrus supplied by Australia</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>17%</td>
</tr>
<tr>
<td>Japan</td>
<td>11%</td>
</tr>
<tr>
<td>Asia and Middle East</td>
<td>72%</td>
</tr>
</tbody>
</table>

** estimate

*SH: southern hemisphere
Citrus — Uruguay — Production

<table>
<thead>
<tr>
<th>Production (aver. 2008-09)</th>
<th>260 000 t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rank in SH* production</td>
<td>6th</td>
</tr>
<tr>
<td>% of SH production</td>
<td>4%</td>
</tr>
<tr>
<td>Areas</td>
<td>16 150 ha</td>
</tr>
<tr>
<td>Average yield</td>
<td>16.1 t/ha</td>
</tr>
</tbody>
</table>

Citrus — Uruguay — Exports

<table>
<thead>
<tr>
<th>Proportion of total citrus exports from Uruguay</th>
<th>Proportion of SH citrus supplied by Uruguay</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>PR</td>
</tr>
<tr>
<td>EU-27</td>
<td>80%</td>
</tr>
<tr>
<td>Russia</td>
<td>6%</td>
</tr>
<tr>
<td>Japan</td>
<td>PR</td>
</tr>
<tr>
<td>Canada</td>
<td>6%</td>
</tr>
<tr>
<td>Middle East</td>
<td>4%</td>
</tr>
<tr>
<td>Asia</td>
<td>1%</td>
</tr>
</tbody>
</table>

PR: phytosanitary restrictions

*SH: southern hemisphere

Exports

- Rank in SH exports: 4th
- % of SH exports: 5%
- Production (aver. 2008-09): 122 000 t
- Trend since 2003-04: + 5 000

Citrus — Uruguay — Major markets

- United States: PR
- EU-27: 80%
- Russia: 6%
- Japan: PR
- Canada: 6%
- Middle East: 4%
- Asia: 1%

Outlets

- Export: 45%
- Domestic: 33%
- Industry: 22%

530 producers (70% of the harvest in the hands of 10 producers)
19 packing stations (13 for export)
4 juice production facilities
5 000 jobs in the sector
CLOSE-UP

Macao IPvHIDJUSVTJTOPUBNBKPSDSPQJO

MUIPVHIDJUSVTJTOPUBNBKPSDSPQJO


$IJMFIBTOPOFUIFMFTTHBJOFEJODSFBT

JOH JNQPSUBODF PO UIF DPVOUFS


SFDFOU PQFOJOH PG UIF 6OJUFE 4UBUFT NBSLFU

0SBOHFBOEMFNPOT
UIFUXPNBJODSPQT
BOE

FBTZ QFFMFST XIPTF EFWFMPQNFOU JT

NPSF SFDFOU BSF GPVOE JO UIF [POF


UXFFO UIF TPVUI PG 3FHJPO *7

$PRVJNCP
BOE UIF DFOUSF PG

3FHJPO 7* 	0`)JHHJOT
 /FBSMZ

PGUIFIBPGPSBOHF
HSPWFTBSFCFUXFFOUIFTPVUIPG
UIF .FUSPQPMJUBO SFHJPO 	.BJQP
WBMMFZ BSPVOE .FMJQJMMB.BJQP
BOE5BMBHBOUF
BOEUIFDFOUSFPG
3FHJPO7*"CPVUPGUIF
3FHJPO 7 BOE .FUSPQPMJUBO SFHJPO
BSPVOE .FMJQJMMB
1FUPSDB BOE 2VJMMPUB 5IF
FBTZQFFMFSQMBOUBUJPOT
UPUBMMJOHIB
BSF
DPODFOUSBUFE NBJOMZ JO UIF TPVUIFSO QBSU PG
3FHJPO*7	-JNBSJ&MRVJ

XJUIBGFXPUIFS
BSFBT JO UIF "DPODBHVB WBMMFZ JO 3F
QPMJUBOSFHJPO.PTUPGUIFDSPQJT
TPME PO UIF EPNFTUJD NBSLFU
)/PXFWFS
UIFSFNPWBMPGTBOJUBSZ
CBSSJFST QSFWFOUJOH BDDFTT PG
FBTZQFFMFSTBOEPSBOHFTUPUIF
64"
BQSPGJUBCMFOFBSCZNBSLFU
IBTFOBCMFEFYQPSUTUPHFUVO
EFSXBZ4IJQNFOUTXFSFQSFWJ
PVTMZ NPEFSBUF
 DPOTJTUJOH
NBJOMZ PG MFNPO GPS +BQBO BOE
/PSUI"NFSJDBBOENPEFTUWPMVNFT
PGPSBOHFTGPS+BQBOBOEUIF&6
CVU
TUSPOHMZ
SFBDIJOHUJO"OJO
DSFBTJOHBSFBJTCFJOHEFWPUFEUPHSPXJOHMBUF
DJUSVT	FBTZQFFMFSTBOE/BWFMPSBOHFT

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Surface in hectares

<table>
<thead>
<tr>
<th>Region</th>
<th>Citrus</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL *</td>
<td>17 478</td>
</tr>
<tr>
<td>Coquimbo</td>
<td>3 173</td>
</tr>
<tr>
<td>Limari</td>
<td>2 064</td>
</tr>
<tr>
<td>Elqui</td>
<td>1 030</td>
</tr>
<tr>
<td>Valparaiso</td>
<td>3 446</td>
</tr>
<tr>
<td>Quillota</td>
<td>1 576</td>
</tr>
<tr>
<td>San Felipe</td>
<td>422</td>
</tr>
<tr>
<td>Metro</td>
<td>5 715</td>
</tr>
<tr>
<td>Melipilla</td>
<td>4 309</td>
</tr>
<tr>
<td>O'Higgins</td>
<td>5 144</td>
</tr>
<tr>
<td>Cachapoal</td>
<td>4 444</td>
</tr>
<tr>
<td>Colchagua</td>
<td>656</td>
</tr>
</tbody>
</table>

Note: * : major regions

June 2010 No. 179
Citrus — Chile — Production

<table>
<thead>
<tr>
<th></th>
<th>Production</th>
<th>Trend since 2003-04</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>tonnes</td>
<td>in 2008-09</td>
</tr>
<tr>
<td>Easy peelers</td>
<td>60 000</td>
<td>6%</td>
</tr>
<tr>
<td>Orange</td>
<td>160 000</td>
<td>5%</td>
</tr>
<tr>
<td>Lemon</td>
<td>180 000</td>
<td>9%</td>
</tr>
<tr>
<td>Grapefruit</td>
<td>nd</td>
<td>na</td>
</tr>
</tbody>
</table>

Citrus — Chile — Exports

<table>
<thead>
<tr>
<th></th>
<th>Exports</th>
<th>Trend since 2003-04</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>tonnes</td>
<td>in 2008-09</td>
</tr>
<tr>
<td>Easy peelers</td>
<td>28 269</td>
<td>8%</td>
</tr>
<tr>
<td>Orange</td>
<td>37 967</td>
<td>3%</td>
</tr>
<tr>
<td>Lemon</td>
<td>39 107</td>
<td>7%</td>
</tr>
<tr>
<td>Grapefruit</td>
<td>1 644</td>
<td>1%</td>
</tr>
</tbody>
</table>

Citrus — Chile — Major markets

<table>
<thead>
<tr>
<th></th>
<th>Percentage of total citrus exports from Chile</th>
<th>Proportion of SH citrus supplied by Chile</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>56%</td>
<td>35%</td>
</tr>
<tr>
<td>EU-27</td>
<td>18%</td>
<td>2%</td>
</tr>
<tr>
<td>Russia</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Japan</td>
<td>21%</td>
<td>17%</td>
</tr>
<tr>
<td>Others</td>
<td>5%</td>
<td>na</td>
</tr>
</tbody>
</table>

*SH: southern hemisphere
**Citrus — Peru — Production**

<table>
<thead>
<tr>
<th>Tons</th>
<th>Production in 2008-09</th>
<th>Percentage of SH production</th>
<th>Trend since 2003-04</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy peelers</td>
<td>194 794</td>
<td>21%</td>
<td>+ 26 472</td>
</tr>
<tr>
<td>Orange</td>
<td>384 789</td>
<td>11%</td>
<td>+ 66 734</td>
</tr>
<tr>
<td>Lemon</td>
<td>236 945</td>
<td>12%</td>
<td>+ 14 809</td>
</tr>
<tr>
<td>Grapefruit</td>
<td>4 239</td>
<td>1%</td>
<td>nd</td>
</tr>
</tbody>
</table>

**Citrus — Peru — Exports**

- **Trend since 2008-09 in 2008-09**
- **Percentage of SH exports**
- **Export outlets**
  - Export: 7%
  - Domestic: 93%
  - Industry: 0%

**Citrus — Peru — Exports**

- **Exports**: 55 087 t
- **Rank in SH exports**: 6th

**Citrus — Peru — Major markets**

- **Percentage of total citrus exports from Peru**
- **Proportion of SH citrus supplied by Peru**
  - United States: 31% (10%)
  - EU-27: 63% (3%)
  - Others: 7% (—)

*SH: southern hemisphere

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Evolution of production and areas

<table>
<thead>
<tr>
<th>Year</th>
<th>EU-27</th>
<th>South Africa</th>
<th>Argentina</th>
<th>Chile</th>
<th>Uruguay</th>
<th>Australia</th>
<th>Peru</th>
<th>Asia</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>565</td>
<td>53,098</td>
<td>26,379</td>
<td>26,914</td>
<td>35,050</td>
<td>26,784</td>
<td>986</td>
<td>47,000</td>
<td>20,000</td>
<td>318,957</td>
</tr>
<tr>
<td>2001</td>
<td>518</td>
<td>47,722</td>
<td>29,279</td>
<td>21,522</td>
<td>35,050</td>
<td>25,532</td>
<td>964</td>
<td>46,000</td>
<td>15,000</td>
<td>301,834</td>
</tr>
<tr>
<td>2002</td>
<td>485</td>
<td>43,902</td>
<td>27,398</td>
<td>19,875</td>
<td>30,681</td>
<td>22,953</td>
<td>962</td>
<td>44,000</td>
<td>8,000</td>
<td>284,153</td>
</tr>
<tr>
<td>2003</td>
<td>553</td>
<td>47,722</td>
<td>29,279</td>
<td>21,522</td>
<td>35,050</td>
<td>22,953</td>
<td>964</td>
<td>46,000</td>
<td>15,000</td>
<td>301,834</td>
</tr>
<tr>
<td>2004</td>
<td>518</td>
<td>47,722</td>
<td>29,279</td>
<td>21,522</td>
<td>35,050</td>
<td>25,532</td>
<td>964</td>
<td>46,000</td>
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</tr>
<tr>
<td>2005</td>
<td>553</td>
<td>47,722</td>
<td>29,279</td>
<td>21,522</td>
<td>35,050</td>
<td>25,532</td>
<td>964</td>
<td>46,000</td>
<td>15,000</td>
<td>301,834</td>
</tr>
<tr>
<td>2006</td>
<td>518</td>
<td>47,722</td>
<td>29,279</td>
<td>21,522</td>
<td>35,050</td>
<td>25,532</td>
<td>964</td>
<td>46,000</td>
<td>15,000</td>
<td>301,834</td>
</tr>
<tr>
<td>2007</td>
<td>518</td>
<td>47,722</td>
<td>29,279</td>
<td>21,522</td>
<td>35,050</td>
<td>25,532</td>
<td>964</td>
<td>46,000</td>
<td>15,000</td>
<td>301,834</td>
</tr>
<tr>
<td>2008</td>
<td>553</td>
<td>47,722</td>
<td>29,279</td>
<td>21,522</td>
<td>35,050</td>
<td>25,532</td>
<td>964</td>
<td>46,000</td>
<td>15,000</td>
<td>301,834</td>
</tr>
</tbody>
</table>

Professional sources

- National customs authorities
- Producers' associations
- Plant sanitary control services

The entire planted area is increasing, with particular focus on hybrids. Chile and South Africa are large clementine producers are now diversifying and developing late cultivars. The same is true of Peru, where easy peelers are a favourite of the large commercial groups seeking to diversify. ‘Nadocott’ is being planted actively alongside the traditional ‘Satsuma’. This activity upstream just seems to be a response to demand, which has grown so briskly that it has even exceeded supply in recent years. Demand is also practically universal. Consumption has doubled in the EU in ten years and is now approaching 200,000 t. Likewise, the Russian and American markets—non-existent in the early 2000s—each import some 50,000 t. Only Japan, the other Asian markets and the Middle East seem to be somewhat stagnant. The growth trend does not show signs of stopping. Consumption levels in the United States and Russia seem to indicate further room for development. Likewise, although some EU markets are already large consumers, such as the United Kingdom whose imports account for more than 50% of European imports, others are practically nonexistent, such as France and the southern European countries. Substantial promotion is needed to establish a position, given the firm presence of seasonal fruits. Caution is necessary at the beginning of the season, especially as regards ‘Satsuma’, with a view to developing a new range of high-quality varieties for the spring in the Mediterranean.
Southern hemisphere production has increased strongly in recent years, mainly as a result of the development of orchards in South Africa and Argentina. The normal world harvest volume would be close to 3.6 million tonnes even if the 3.2 million tonnes recorded in 2009—a reflection of the meteorological problems in Argentina and Australia in recent years. Production will continue to grow in the coming years but at a slower rate. The planted area is still increasing in modest exporting countries such as Peru, Chile and Uruguay. However, the area in Argentina decreased slightly from 2006 to 2008. Growth of South African production should slow as although "Valencia" was planted heavily until 2007, the boom for planting "Navel" seems to be over since 2006. Where will this additional production go? Russia has considerable potential, given the population (40 million, excepting the very closed Yemen) and its imports. The Chinese market still has strong potential, given its dynamics before the economic downturn and consumption levels. In contrast, the Middle Eastern markets have formed one of the driving forces in recent years but would seem close to maturity, 2006. Where will this additional production go? Russia has considerable potential, given its dynamics before the economic downturn and consumption levels. In contrast, the Middle Eastern markets have formed one of the driving forces in recent years but would seem close to maturity, considering again on the development of the US market, where consumption is small, and of the EU market where pressure from Mediterranean production is increasing.

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>615 661</td>
<td>579 639</td>
<td>682 900</td>
<td>690 852</td>
<td>854 544</td>
<td>737 146</td>
<td>746 963</td>
<td>765 245</td>
<td>933 913</td>
<td>971 483</td>
<td>857 917</td>
</tr>
<tr>
<td>Argentina</td>
<td>72 727</td>
<td>39 218</td>
<td>100 463</td>
<td>82 048</td>
<td>78 721</td>
<td>129 897</td>
<td>172 485</td>
<td>177 877</td>
<td>196 351</td>
<td>155 677</td>
<td>142 016</td>
</tr>
<tr>
<td>Australia</td>
<td>143 000</td>
<td>146 000</td>
<td>136 000</td>
<td>94 000</td>
<td>106 000</td>
<td>131 000</td>
<td>128 000</td>
<td>125 000</td>
<td>108 000</td>
<td>130 000</td>
<td>127 000</td>
</tr>
<tr>
<td>Uruguay</td>
<td>74 446</td>
<td>42 852</td>
<td>65 036</td>
<td>49 175</td>
<td>68 960</td>
<td>76 939</td>
<td>96 411</td>
<td>78 863</td>
<td>86 800</td>
<td>69 124</td>
<td>64 000</td>
</tr>
<tr>
<td>Chile</td>
<td>1 217</td>
<td>3 377</td>
<td>5 192</td>
<td>6 121</td>
<td>9 420</td>
<td>18 202</td>
<td>20 802</td>
<td>25 721</td>
<td>19 885</td>
<td>37 833</td>
<td>38 102</td>
</tr>
<tr>
<td>Russia</td>
<td>145 278</td>
<td>272 912</td>
<td>327 272</td>
<td>91 232</td>
<td>300 882</td>
<td>882 785</td>
<td>7 851</td>
<td>14 571</td>
<td>3 851</td>
<td>145 278</td>
<td>272 912</td>
</tr>
</tbody>
</table>

Sources: national customs authorities, producers' associations, plant sanitary control services

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No. 179 June 2010
Like oranges, the volumes harvested in the last two years do not reflect the size of the planted area, as Argentina has had meteorological problems. Production is more of the order of 2.2 million tonnes and should continue to increase in the coming seasons. Although the area under lemon seems to have stabilised in South Africa, it is still increasing markedly in Argentina, but there is no recent cadastral information available for the Valparaiso region, the main production area in Chile. The new EU member states and, more still, Russia, are probably the open markets with the greatest potential for development: each lacks some 60 000 to 70 000 t to match the EU-15 consumption level. However, their growth potential should not be over-estimated as lemon consumption is not elastic. Beyond this, scope for development seems limited. Will the southern hemisphere be able to continue to glean a little market share in EU-15 from Spain, where ‘Verna’ seems to be interesting certain producers again? As for oranges, the markets in the Arabian peninsula seem fairly close to saturation. The size of the markets in Asia, where acid fruits are little sought-after, will remain limited. There remains the currently profitable processing industry and the United States market, that is regularly about to open up.
After hopes were raised by the decline of Florida produce on the international market, southern hemisphere producers have received something of a blow. Their sales have tended to decrease in recent years rather than increase. Little retail shelf-space seems to be devoted to grapefruit in the winter, for lack of the substantial driving effect of high-quality Florida fruits on consumption. They no longer achieve their former sales in the summer. The Japanese market has shrunk by about 25 to 30%. Consumption has held up better in the EU, the world’s leading importer, but is nonetheless tending to lose a little ground. The promotion campaign launched by the Citrus Growers Association (CGA) of South Africa in the United Kingdom seems more than welcome. There are not many alternatives to these two heavyweight markets. There is still Russia, where the market is growing but consumption is still small. Southern hemisphere producers seem to have measured the limited prospects for the development of the grapefruit market. The planted area is tending to decrease in Argentina and planting is less intense in South Africa, where production seems to be stabilising.

**Grapefruit — Southern hemisphere — Major countries exports**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>132,196</td>
<td>158,297</td>
<td>138,356</td>
<td>166,404</td>
<td>169,035</td>
<td>184,451</td>
<td>251,345</td>
<td>157,792</td>
<td>214,620</td>
<td>186,400</td>
<td>199,504</td>
</tr>
<tr>
<td>Argentina</td>
<td>21,412</td>
<td>17,360</td>
<td>23,655</td>
<td>22,699</td>
<td>28,995</td>
<td>31,358</td>
<td>35,813</td>
<td>19,987</td>
<td>29,276</td>
<td>33,306</td>
<td>17,892</td>
</tr>
<tr>
<td>Uruguay</td>
<td>2,553</td>
<td>995</td>
<td>1,896</td>
<td>1,403</td>
<td>1,557</td>
<td>1,867</td>
<td>1,385</td>
<td>2,335</td>
<td>2,100</td>
<td>265</td>
<td>300</td>
</tr>
<tr>
<td>Chile</td>
<td>32</td>
<td>655</td>
<td>538</td>
<td>324</td>
<td>933</td>
<td>3,255</td>
<td>3,158</td>
<td>3,946</td>
<td>1,540</td>
<td>1,813</td>
<td>1,474</td>
</tr>
<tr>
<td>Peru</td>
<td>2,553</td>
<td>995</td>
<td>1,896</td>
<td>1,403</td>
<td>1,557</td>
<td>1,867</td>
<td>1,385</td>
<td>2,335</td>
<td>2,100</td>
<td>265</td>
<td>300</td>
</tr>
<tr>
<td>Mexico</td>
<td>314,987</td>
<td>2,243</td>
<td>7,808</td>
<td>3,169</td>
<td>6,569</td>
<td>10,674</td>
<td>8,167</td>
<td>10,000</td>
<td>9,950</td>
<td>14,338</td>
<td>10,656</td>
</tr>
</tbody>
</table>

**Professional sources**

- CGA, Federocitrus, DIEA, Citrus Australia, Procitrus, OPEDA-CIREN, SIAP
- S. hemisphere only
### Citrus diseases

<table>
<thead>
<tr>
<th>Disease</th>
<th>Description</th>
<th><strong>Distribution</strong></th>
<th><strong>Symptoms</strong></th>
<th><strong>Susceptible species</strong></th>
<th><strong>Transmission</strong></th>
<th><strong>Economic impact</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Black spot</strong></td>
<td>Fungus: Guignardia citricarpa (asexual form Phyllosticta citricarpa)</td>
<td>Asia, East Africa, Southern Africa, South America.</td>
<td>Small spots on leaves and above all on fruits. Necrotic spots surrounded by a brownish black ring and a yellow halo — variable on fruits.</td>
<td>Broad host spectrum. Affects lemon, grapefruit, lime, mandarin and late orange above all.</td>
<td>By air and water.</td>
<td>Early fruit fall in case of serious attack.</td>
</tr>
<tr>
<td><strong>Huanglongbing (greening)</strong></td>
<td>Phloem bacteria: Liberibacter africanum, L. asiaticum</td>
<td>Asia, subtropical and tropical Africa, Middle East.</td>
<td>Shoot yellowing, leaf mottling, small poorly coloured fruits.</td>
<td>Broad host spectrum. Affects orange and mandarin above all.</td>
<td>By air and water.</td>
<td>Tree dieback, shorter orchard life.</td>
</tr>
<tr>
<td><strong>Citrus canker</strong></td>
<td>Bacterium: Xanthomonas axonopodis pv. citri</td>
<td>Asia, South America, Florida, certain regions of Africa.</td>
<td>Corky pustules on leaves and fruits.</td>
<td>Broad host spectrum. Above all grapefruit, orange, lime and some mandarins.</td>
<td>By air and water.</td>
<td>Harvest loss.</td>
</tr>
</tbody>
</table>

### Citrus pests

<table>
<thead>
<tr>
<th>Pest</th>
<th>Description</th>
<th><strong>Distribution</strong></th>
<th><strong>Symptoms</strong></th>
<th><strong>Susceptible species</strong></th>
<th><strong>Economic impact</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Diaspine</strong></td>
<td>Hemiptera: Diaspididae. Genera Aonidiella, Unaspis, Chrysomphalus, Cornuaspis, etc.</td>
<td>Variable according to the species. Present in the Mediterranean area: Aonidiella aurantii, Cornuaspis beckii, etc.</td>
<td>Scale on leaves, shoots and/or fruits, trees weakened in case of large populations.</td>
<td>Broad host spectrum.</td>
<td>Deterioration of the outside appearance of fruits.</td>
</tr>
</tbody>
</table>
## Wholesale market prices in Europe

### May 2010

<table>
<thead>
<tr>
<th>Product</th>
<th>Air</th>
<th>Sea</th>
<th>Germany</th>
<th>Belgium</th>
<th>France</th>
<th>Holland</th>
<th>UK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avocado</td>
<td>TROPICAL</td>
<td>FUERTE</td>
<td>BRAZIL</td>
<td>14.00</td>
<td>3.75</td>
<td>6.63</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>KENYA</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>PERU</td>
<td>5.50</td>
<td>4.33</td>
<td>6.68</td>
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<td></td>
<td></td>
<td></td>
<td>SOUTH AFRICA</td>
<td>4.75</td>
<td>5.50</td>
<td>5.50</td>
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<td></td>
<td></td>
<td></td>
<td>KENYA</td>
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</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>MEXICO</td>
<td>8.63</td>
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<tr>
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<td>PERU</td>
<td>8.63</td>
<td>6.98</td>
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<td>6.81</td>
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<td>SOUTH AFRICA</td>
<td></td>
<td>5.75</td>
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<tr>
<td></td>
<td>PINKERTON</td>
<td>HASS</td>
<td>SPAIN</td>
<td>8.17</td>
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<tr>
<td>Banana</td>
<td>RED</td>
<td>SMALL</td>
<td>ECUADOR</td>
<td>4.88</td>
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<td></td>
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<td>COLOMBIA</td>
<td>6.59</td>
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<tr>
<td>Carambola</td>
<td>Air</td>
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No. 179 June 2010 59
### Wholesale Market Prices in Europe — May 2010

**Note:** according to grade

**EUROPEAN UNION — IN EUROS**

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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

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SERVICE PROCUREMENT NOTICE

1. Contract title:
Technical services to enable ACP producers and exporters to comply with new food safety regulations and standards as well as sustainability standards (environment, ethical, fair trade). PIP Programme Phase 2 (CRIS 2009/219-304) Financing: 10th EDF

2. Location:
ACP countries

3. CPV code:
03221200-8 / Vegetables – Fruits

4. Contracting Authority:
PIP-ColeACP, 5 rue de la Corderie, CENTRA 342, 94586 RUNGIS Cedex, France

5. Contact point:
Email: pip@coleACP.org
By phone: 00 32 2 508 10 90
Contact to the attention of: LUGROS Harry / THIEL Elena

6. Publication of the detailed Procurement Notice on the internet site of the Contracting Authority:
http://www.coleACP.org/pip

7. Procedure
Restricted international tender procedure

8. Contract description
This tender covers the supply of technical expertise to support the implementation of PIP phase 2.

9. Number, title and budget of lots
Lot 1: Training: budget lot 1: 3.200.000 €
Lot 2: Support to food safety compliance: budget lot 2: 3.550.000 €
Lot 3: Validation/certification: budget lot 3: 1.550.000 €
Lot 4: Market access: budget lot 4: 1.500.000 €
Lot 5: Analysts: budget lot 5: 750.000 €

10. Deadline for receipt of applications:
13/08/2010 at 17h (Brussels time)

AVIS DE MARCHÉ DE SERVICE

1. Intitulé du marché :
Appui à la mise en conformité des produits horticoles ACP avec les exigences réglementaires et les demandes du marché [standards privés]
Programme PIP Phase 2 (CRIS 2009/219-304)
Financement 10° EDF

2. Lieu(x) d’exécution :
Pays ACP

3. Objet Principal [code CPV]
03221200-8 / Légumes – Fruits

4. Pouvoir adjudicateur :
PIP-ColeACP, 5 rue de la Corderie, CENTRA 342, 94586 RUNGIS Cedex, France

5. Point de contact / Renseignements d’ordre administratif
Par email à l’adresse suivante : pip@coleACP.org
Par téléphone: 00 32 2 508 10 90
Contact à l’attention de : LUGROS Harry / THIEL Elena

6. Publication de l’Avis de Marché détaillé sur le site internet du pouvoir adjudicateur
http://www.coleACP.org/pip

7. Procédure
Procédure d’Appel d’Offres Restreint International

8. Description du Marché
Ce marché concerne la fourniture de services d’appui à la mise en œuvre technique du PIP phase 2 et de ce fait, les expertises recherchées couvrent toutes les compétences sectorielles utiles au programme.

9. Nombre, intitulé et budget des lots
Lot 1 : Formation : budget lot 1: 3.200.000 €
Lot 2 : Appui à la mise en conformité : budget lot 2: 3.550.000 €
Lot 3 : Validation/certification : budget lot 3: 1.550.000 €
Lot 4 : Accès au marché : budget lot 4: 1.500.000 €
Lot 5 : Analystes : budget lot 5: 750.000 €

10. Date limite de réception des candidatures :
13/08/2010 à 17h (heure de Bruxelles)
Katopé’s diversified production base allows to produce and to ship a huge variety of fresh produce throughout the year, including citrus fruit like easy peelers, grapefruit, oranges and lemons.

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

Katopé