CLOSE-UP:
MANGO

Black Sigatoka disease of banana: St Lucia infected after St Vincent

Monthly review citrus and exotics
Your partner for West African mangoes

- Ivory Coast
- Mali
- Senegal

Varieties: Amelie, Kent, Keitt.

Organic Mangoes: available (Ecocert Certification).

Mangoes by Air: Tree-ripened, selected and transported by air.

Production certified GlobalGAP and audited for ETI (Ethical Trade Initiative).

SIIM - RUNGIS
110, rue de Châteaurenard
Fruileg 268 - Bât. E2 et D2
94582 Rungis Cedex
Tel.: 33 (0)1 45 12 29 60
Fax: 33 (0)1 45 60 01 29
E-mail: info@siim.net

SIIM - MARSEILLE
MIN des Arnaux
Box 530
13323 Marseille Cedex 14
Tel.: 33 (0)4 95 05 05 05
Fax: 33 (0)4 91 02 32 76
E-mail: marseille@siim.net

SIIM - PERPIGNAN
Mag. 13, Allée Paul Marquillanes
BP 15418 MIN St Charles
66034 Perpignan Cedex
Tel.: 33 (0)4 68 95 26 30
Fax: 33 (0)4 68 95 27 12
E-mail: perpignan@siim.net

SIIM - MALAGA
Ctra. de Málaga 45
29120 Alhaurin el Grande
Málaga, España
Tel.: +34 952 49 05 74
Fax: +34 952 59 61 90
E-mail: analysiim.net
**Fruit Logistica is to fruit and vegetables** what Macworld San Francisco is to new technology enthusiasts or the Paris Air Show to Charles Lindberghs of all kinds. As it seems to be a trade imperative, exhibitors are obliged to show innovations to an international public (50 000 visitors). But have no fear, like Apple and its iPad, something new is often made with something old. Not all the creations displayed have a taste of novelty, of freshness or, in short, innovation. This is the case, for example of the social responsibility of businesses. Immense full-colour panels vaunted the involvement and preoccupation of all businesses in the social and economic well-being of their environment (employees, suppliers, etc.). A kind of extension of environmental responsibility to the economic and social spheres. We await the results of this outpouring of noble sentiments coated with hard-hitting marketing.

The real innovation was hidden elsewhere. The winner this year was indubitably Brazil, the land of ‘everything is possible’, with a new grape variety. Brazilian producers have crossed a new frontier this time. There will be a before and an after. The variety must be considered as the missing link between the horticultural industry and that of artificial aromas. Yes indeed! A cross between the bad taste'.

Denis Loeillet

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**Close-up by Pierre Gerbaud**

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**Wholesale market prices in Europe**
It's H L HALL'S INTERNATIONAL who opens a new office in FRANCE
Francois@hlhall.co.uk
Tel. +33 1 82 39 00 30
Fax +33 1 45 12 95 04
**Avocado**

**January 2010**

The market was difficult. First, demand remained fairly slow, especially as unusually cold weather affected consumption. Second, supply was particularly abundant. The volumes of green varieties delivered to the EU were very moderate because of a production deficit in Spain and the limiting of volumes of 'Pinkerton' and 'Fuerte' from Israel by bad weather during the second half of the month. However, supplies of 'Hass' were extremely large. Mexican produce was little present but the Chilean season was extended and shipments only started to decrease at the end of the month. In addition, shipments of 'Hass' from Spain increased at a fairly brisk rate. Prices were well below average, especially for 'Hass'.

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**Avocado - France - Import price**

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**Varieties**

- **Green**: 5.25-5.75, -19%
- **Hass**: 5.50-6.00, -31%

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**Volume**

- **Green**: \(\downarrow\)\(\uparrow\) - 17%
- **Hass**: \(\downarrow\)\(\uparrow\) + 51%

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**Source**

- **Chile**: \(\downarrow\)\(\uparrow\) + 298%
- **Mexico**: \(\downarrow\)\(\uparrow\) -28%
- **Spain**: = \(=\) \(=\)
- **Israel**: \(\downarrow\)\(\uparrow\) + 2%

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**Fresh fruit & vegetables — Kenya — European imports**

<table>
<thead>
<tr>
<th>Varieties</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>French beans</td>
<td>29 452</td>
<td>30 442</td>
<td>34 620</td>
<td>37 548</td>
<td>38 340</td>
</tr>
<tr>
<td>Mangetout peas</td>
<td>7 986</td>
<td>10 528</td>
<td>11 176</td>
<td>12 152</td>
<td>12 606</td>
</tr>
<tr>
<td>Avocado</td>
<td>16 236</td>
<td>15 458</td>
<td>13 641</td>
<td>12 000</td>
<td>11 868</td>
</tr>
<tr>
<td>Other vegetables</td>
<td>9 804</td>
<td>6 328</td>
<td>5 249</td>
<td>4 674</td>
<td>4 229</td>
</tr>
<tr>
<td>Pepper</td>
<td>195</td>
<td>473</td>
<td>581</td>
<td>1 128</td>
<td>1 976</td>
</tr>
<tr>
<td>Aubergine</td>
<td>542</td>
<td>857</td>
<td>1 039</td>
<td>1 209</td>
<td>1 052</td>
</tr>
<tr>
<td>Cabbage</td>
<td>195</td>
<td>372</td>
<td>408</td>
<td>605</td>
<td>875</td>
</tr>
<tr>
<td>Passion fruit</td>
<td>1 171</td>
<td>4 620</td>
<td>947</td>
<td>1 349</td>
<td>845</td>
</tr>
</tbody>
</table>

**Observations**

- Arriving shipments in the EU decreasing much later than in preceding seasons. Volumes much greater than average.
- Stable, moderate arrivals of 'Hass' throughout the month.
- Exports returned to a normal level. Continued marked deficit in shipments of green varieties but the 'Hass' season gained momentum quickly.
- Arrivals of green varieties average in the first half of the month and then very small. Limited increase in arrivals of 'Hass'.

**Cumulated total / cumulated average for last 2 years**

- + 119%
- - 23%
- - 12%
- + 7%

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**Summer avocado attacked by pirates?** The increase in acts of piracy in the Gulf of Aden and the sharp rise in extra premiums for the insurance of merchant ships sailing in the region have led to strong increases in the freight rates charged by shipping companies. Avocado and other fruits and vegetables exported from Kenya by sea are seriously hit by this. The cost of transport for a container from Nairobi to Europe has increased by USD 2,500 according to the Fresh Produce Exporters Association of Kenya (FPEAK). These extra costs have been reported to have cost the sector more than USD12 million since October. The zone is so unsafe that sailing around the west coast of Africa is even envisaged.

**Mexico: hail and frost in Michoacán.** A period of frost and hail at the beginning of February hit avocado orchards in Michoacán, where more than 90% of Mexican avocado production is centred. A large proportion of the main production localities (Uruapan, Ario, Nuevo Parangaricutiro) was affected and the damage is now being assessed. A significant proportion of the 2010-11 harvest may have been lost as the trees were in flower.

**Halls sets up in France.** HL Hall & Sons, the avocado producer and exporter, is now present in Europe. A new installation with a cold store and ripening rooms was opened in early February at Rungis wholesale market. It is to be managed by François Bellivier. The objective announced by Paul Devlin, manager of HL Hall (International) Ltd. based in Kent (UK), is to move near to customers in France and the continent.

Sources: The Packer, CIRAD
Banana

January 2010

The month’s results were fairly disappointing even though supply seems to have been fairly well contained. In fruits from dollar sources, arrivals from Costa Rica were larger than in the two preceding years but still smaller than normal, especially at the end of the month as rain had limited loading during the first third of the month. Supplies for other sources in Latin America were only average (Colombia) or short, as Ecuadorean exporters had sent larger quantities than in other years to the Mediterranean at the expense of other markets, including the EU. Likewise, volumes from the French West Indies were fairly short, like those from Africa as shipments from Côte d’Ivoire were medium and those from Cameroon and Ghana somewhat moderate.

However, demand was slow to gain momentum after the Christmas period. The intense cold in most of the EU for practically the whole month seems to have slowed consumption distinctly. In addition, logistic problems caused by snow strongly affected business, with some markets like the UK being totally paralysed. Sales did not really start to recover until mid-January. In this context, the seasonal rise in prices hung fire and did not start until the last part of the month.

The situation was just as difficult in southern Europe even though the weather was not as cold. Deland was very slow in Italy and large volumes of Canary Island bananas affected Spanish market balance.

### Record banana consumption in France in 2009.

In contrast with the trend in Europe (provisional figure of - 8%) and America (provisional figure of - 11%), the French banana market grew again in 2009. According to our sources, the market gained 5% in comparison with 2008, reaching 557 000 tonnes, an all-time record! The increase has been steady since 2007. The market gained 14% from 2006 to 2009. Annual per capita consumption is some 9 kg, still far from the average of 11 or 12 kg in the EU.

### Ecuadorean bananas: 2009 figures.

While awaiting customs figures, the Asociacion de Exportadores de Banano del Ecuador (A.E.B.E.) has provided preliminary figures for 2009. At 268 million boxes, total exports are reported to have increased by 7% in comparison with 2008. The serious recession in Russia and the production shortfall in Costa Rica changed the distribution of volumes. The quantities shipped to North America seem to have increased strongly (+ 34%). In contrast, exports to Russia fell by about 3%. The volumes for northern Europe and the Mediterranean gained 4 and 5% respectively.

### Europe — Aldi import price

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>EU-27 imports</td>
<td>4 028 196</td>
<td>4 328 351</td>
<td>4 517 530</td>
<td>4 137 382</td>
<td>- 8%</td>
</tr>
<tr>
<td>MFN</td>
<td>3 248 915</td>
<td>3 601 393</td>
<td>3 736 406</td>
<td>3 312 194</td>
<td>- 11%</td>
</tr>
<tr>
<td>ACP Caribbean &amp; others</td>
<td>325 343</td>
<td>319 743</td>
<td>283 635</td>
<td>353 904</td>
<td>+ 25%</td>
</tr>
<tr>
<td>ACP Africa</td>
<td>453 939</td>
<td>407 215</td>
<td>497 489</td>
<td>471 284</td>
<td>- 5%</td>
</tr>
<tr>
<td>United States imports</td>
<td>3 546 862</td>
<td>3 690 092</td>
<td>3 649 804</td>
<td>3 250 675</td>
<td>- 11%</td>
</tr>
</tbody>
</table>

Sources: USDA, EUROSTAT

### Europe — Retail price

<table>
<thead>
<tr>
<th>Country</th>
<th>January 2010</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>type</td>
<td>euro/kg</td>
</tr>
<tr>
<td>France</td>
<td>normal</td>
<td>1.30</td>
</tr>
<tr>
<td></td>
<td>special offer</td>
<td>1.12</td>
</tr>
<tr>
<td>Germany</td>
<td>normal</td>
<td>0.84</td>
</tr>
<tr>
<td></td>
<td>discount</td>
<td>0.68</td>
</tr>
<tr>
<td>UK (£/kg)</td>
<td>packed</td>
<td>0.94</td>
</tr>
<tr>
<td></td>
<td>loose</td>
<td>0.64</td>
</tr>
<tr>
<td>Spain</td>
<td>plátano</td>
<td>1.81</td>
</tr>
<tr>
<td></td>
<td>banano</td>
<td>1.38</td>
</tr>
</tbody>
</table>

Sources: douanes, Cirad
**Banana**

**USA — IMPORT PRICE**

<table>
<thead>
<tr>
<th>January 2010</th>
<th>Comparison</th>
<th>Previous month</th>
<th>Average for last 2 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>USD/box</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.76</td>
<td>0%</td>
<td>+ 10%</td>
<td></td>
</tr>
</tbody>
</table>

**Russia — IMPORT PRICE**

<table>
<thead>
<tr>
<th>January 2010</th>
<th>Comparison</th>
<th>Previous month</th>
<th>Average for last 2 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>USD/box</td>
<td></td>
<td>+ 2%</td>
<td>- 21%</td>
</tr>
</tbody>
</table>

**Spain — Green price - Platano**

<table>
<thead>
<tr>
<th>January 2010</th>
<th>Comparison</th>
<th>Previous month</th>
<th>Average for last 2 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>euro/box</td>
<td></td>
<td>- 17%</td>
<td>- 43%</td>
</tr>
</tbody>
</table>

**Black Sigatoka disease of banana: St Lucia infected after St Vincent.** Black Sigatoka has spread further in the West Indies in just a few weeks. After St Vincent in December 2009, St Lucia has now officially reported the presence of the disease on the island. It is now a direct threat to banana production in Martinique. Indeed, the distance between the place where the disease was discovered near the capital, Castries, and Martinique is only a little more than 40 kilometres. In addition, contacts with Martinique and also Guadeloupe are frequent in the area. Although the natural dissemination of spores by wind cannot be ruled out, the spread of the disease for long distances and from one island to another probably results from uncontrolled shipping of infected plant material.

**Source:** CIRAD

**Costa Rican bananas: things looking up in 2010 after a difficult 2009.** Last year was a difficult one for the Costa Rican banana sector after the floods that damaged 10 000 hectares of plantations at the end of 2008. The 88 million boxes exported is 25% down on known figures for the preceding year. The prospects for 2010 seem better. Floods at the beginning of the year affected 3 000 hectares for a short period (24 hours) but have not had a significant effect on production. Thus, at 44 500 ha, the total production area would seem to be as large as in 2008. Costa Rica should be able to export about 110 million boxes this year if weather conditions remain good.

**Source:** Corbana

**Europe — Imported Volumes — January 2010**

<table>
<thead>
<tr>
<th>Source</th>
<th>December 2009</th>
<th>January 2009</th>
<th>cumulated total January 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>French West Indies</td>
<td>-12%</td>
<td>-12%</td>
<td></td>
</tr>
<tr>
<td>Cameroon/Ghana</td>
<td>+ 6%</td>
<td>+ 6%</td>
<td></td>
</tr>
<tr>
<td>Surinam</td>
<td>+ 29%</td>
<td>+ 29%</td>
<td></td>
</tr>
<tr>
<td>Canaries</td>
<td>=+ 23%</td>
<td>+ 23%</td>
<td></td>
</tr>
<tr>
<td>Dollar:</td>
<td>na</td>
<td>na</td>
<td></td>
</tr>
<tr>
<td>Ecuador</td>
<td>- 19%</td>
<td>- 19%</td>
<td></td>
</tr>
<tr>
<td>Colombia</td>
<td>- 5%</td>
<td>- 5%</td>
<td></td>
</tr>
<tr>
<td>Costa Rica</td>
<td>=+ na</td>
<td>na</td>
<td></td>
</tr>
</tbody>
</table>

*18.5 kg box equivalent*
Direct from the markets

January 2010

The orange market remained lightly supplied and very satisfactory. The Spanish ‘Naveline’ season ended in the first half of the month for reasons of small production. Supply from Spain displayed a distinct deficit for the rest of the month as the harvests of the subsequent varieties (‘Navel’ and then the first ‘Navelate’ at the end of the month) were also distinctly smaller than usual.

In this context, the price of dessert oranges held at a very high level in spite of fairly slow demand at the end of the month and the uneven quality (overripeness) of some batches of ‘Naveline’ and then ‘Navel’. As a result, the presence of fruits from other sources completing supply was marked (‘Navel’ from Morocco and Egypt, ‘Washington’ blood orange from Morocco). The start of the ‘Maltese’ season was difficult as it featured too large a proportion of small fruits.

**Concentrated juice market: contradictory signs but prices still rising!**

The Agricultural Trade Office (ATO) in Brazil has ups God its 2009-10 orange harvest forecast for the São Paulo region by 20 million field boxes. At 330 million field boxes (about 13.5 million tonnes), production would nonetheless be 6% less than the average for the last four years. This news did not affect sales. Prices have continued to increase on the physical market, with concentrated juice quoted at USD1 800 CIF Rotterdam at the beginning of February against USD1 550 in January.

Significant production losses have been confirmed in Florida after the cold spell in January. With a new forecast of 129 million 90-lb field boxes (5.3 million tonnes), Florida production would be the same as in 2006-07, the smallest since the early 1990s.

**Greening eradication programme abandoned in the São Paulo region of Brazil.**

Fundecitrus, the association for the defence of citrus growing in Brazil, voted to abandon its programme for the eradication of citrus greening in the São Paulo region. The team handling sanitary control will be reduced from 1 400 inspectors to 150-200. The decision must now be taken up of financial aid to be used by local authority areas in the state.

**Cumulated total / cumulated average for last 2 years**

**Sources:** Foodnews, FDOC, CIRAD

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**Orange - France - Import price**

<table>
<thead>
<tr>
<th>Type</th>
<th>Average monthly price euro/box 15 kg</th>
<th>Comparison with average for last 2 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dessert oranges</td>
<td>11.10</td>
<td>+ 18%</td>
</tr>
<tr>
<td>Juice oranges</td>
<td>11.50</td>
<td>na</td>
</tr>
</tbody>
</table>

**Comparison**

<table>
<thead>
<tr>
<th>Type</th>
<th>Previous month</th>
<th>Average for last 2 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dessert oranges</td>
<td>=↑↑</td>
<td>- 32%</td>
</tr>
<tr>
<td>Juice oranges</td>
<td>=↑↑</td>
<td>na</td>
</tr>
</tbody>
</table>

**Varieties by source**

<table>
<thead>
<tr>
<th>Varieties by source</th>
<th>Comparison</th>
<th>Observations</th>
<th>Cumulated total / cumulated average for last 2 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naveline/Navel from Spain</td>
<td>=↑↑</td>
<td>Early slowing of the ‘Naveline’ season and start of the ‘Navel’ season. Shipments distinctly smaller than average.</td>
<td>- 22%</td>
</tr>
<tr>
<td>Maltese from Tunisia</td>
<td>=↑↑</td>
<td>Shipments smaller than average as the season started somewhat late.</td>
<td>- 39%</td>
</tr>
</tbody>
</table>

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**Budding environmentalists or the dangers of single thinking**

Defence of the environment is obviously a noble cause. But does it justify the methods in journalism that consist of compiling reports focused on a scoop?

Orange juice is the latest agricultural product in the long list of items suffering collateral damage caused by this sport. The television channel ARTE, deservedly reputed for the quality of its programmes, recently showed a short report in its magazine programme “Globalmag”. The journalist criticised the ‘1 000 litres of water wasted for the production of one litre of orange juice’ and concluded that ‘thirst for vitamin C is harmful for the environment’. It is true that water is precious but it is also a renewable resource in Florida and in São Paulo state in Brazil—where most of the orange juice in the world comes from. This kind of approximation accompanied by a terse and murderous conclusion has consequences for sectors that are both of capital economic and social importance in certain countries and also play a resolutely positive role in human health.

Would journalists who reach a large public please improve the quality of their analyses before trying to awaken our consciences.

Eric Imbert

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January 2010
The market continued to be very satisfactory although overall supply returned to close to an average level. However, the deficit increased in shipments from Spain, the main supplier country: ‘Clemenvilla’ volumes were normal but clementine supplies were very limited as a result of the early end of the ‘Nules’ crop. However, deliveries of ‘Nour’ clementine from Morocco were larger in spite of a production deficit as shipments were concentrated on the EU. A few batches of ‘Clementine de Corse’, ‘Minneola’ from Israel and Turkey and the first ‘Or’ from Israel and ‘Ortanique’ from Spain completed supply. The cold weather kept demand at a satisfactory level in spite of the sometimes uneven quality of some batches (fruits very mature, cold weather in Spain, rain in Morocco, etc.). Prices thus held at distinctly higher levels than usual.

Sales of certified plants in Spain: from bad to worse...
Economic performance has been excellent so far this season but it should not be forgotten that a large part of the Spanish citrus sector has problems. Analysis of the 2008-09 register of sales of certified plants held by the Community of Valencia’s agricultural board that covers about 80% of all plant material sold in Spain shows this clearly. In addition to confirming the downward trend, the scale of the decrease has been surprising. The 1.9 million plants sold in 2008-09 was hardly 40% of the known average during the early 2000s. All categories were affected. Nearly 1.3 million orange plants were sold in comparison with 2 to 3 million from 2003 to 2007. The most marked decrease was in easy peelers, the pride of Spanish citrus growing. Sales of plants had run at more than 2 million per year until 2005 but dipped below 500 000 in 2008-2009. The trend was even seen in late hybrids that nonetheless benefit from the incentives of the varietal reconversion plan.

'Cadorcott'.
This natural hybrid of ‘Murcott’ originated in Morocco. The fruits are medium-sized to small and easy to peel, like clementines. The shape is irregular and slightly flat, like ‘Murcott’. They ripen late (mid-February) and are seedless. The pulp is soft and melting with a large proportion of juice and acids, giving it a clearly characteristic taste. Export potential this season totals some 120 000 to 130 000 tonnes in Spain and 24 000 tonnes in Morocco. The variety is also planted in South Africa.

Sources: Soler, Saunt

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**Easy peelers - France - Import price**

<table>
<thead>
<tr>
<th>Month</th>
<th>09/10</th>
<th>08/09</th>
<th>07/08</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan</td>
<td>2.7</td>
<td>2.4</td>
<td>2.1</td>
</tr>
<tr>
<td>Feb</td>
<td>2.4</td>
<td>2.1</td>
<td>1.8</td>
</tr>
<tr>
<td>Mar</td>
<td>2.1</td>
<td>1.8</td>
<td>1.5</td>
</tr>
<tr>
<td>Apr</td>
<td>1.8</td>
<td>1.5</td>
<td>1.2</td>
</tr>
<tr>
<td>May</td>
<td>1.5</td>
<td>1.2</td>
<td>0.9</td>
</tr>
<tr>
<td>June</td>
<td>1.2</td>
<td>0.9</td>
<td>0.6</td>
</tr>
<tr>
<td>July</td>
<td>0.9</td>
<td>0.6</td>
<td>0.3</td>
</tr>
<tr>
<td>Aug</td>
<td>0.6</td>
<td>0.3</td>
<td>0.0</td>
</tr>
</tbody>
</table>

**Varieties by source**

<table>
<thead>
<tr>
<th>Variety</th>
<th>Comparison</th>
<th>Previous month</th>
<th>Average for last 2 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clementine</td>
<td>+ 10%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other easy peelers</td>
<td>- 3%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Cumulated total / cumulated average for last 2 years**

- 7%
- 14%
+ 55%
+ 27%

**Observations**

- Increasingly marked arrival deficit. Early decrease in supply of ‘Nules’ because production was limited. The first ‘Hernandina’ arrived in mid-January.
- Volumes practically normal. Uneven quality of some batches after the cold spell.
- Marked deficit in ‘Nour’ production but shipments were focused on the EU.
- Last shipments—larger than in preceding seasons—in the first half of the month.

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**Citrus - Spain - Certified plant sales in the Valencian Community**

<table>
<thead>
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</tr>
<tr>
<td>2007/08</td>
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</table>

Source: Conser. Agri. Valencia
Grapefruit

January 2010

The market remained dull. The situation improved for Florida. The wave of retail promotion operations in January stepped up sales while supply remained light, with stocks smaller than normal at the beginning of the month and moderate arriving shipments. The price of 40/48 size fruits firmed a little. In contrast, small fruits, sold mainly in Northern Europe (sizes 56/64) found the market hard going. Likewise, there was no improvement for Mediterranean grapefruit. Sales gained a little speed but pressure from supply was still strong. Volumes from Israel were no more than average but Turkish shipments were still massive, especially for the Netherlands and Germany (larger shipments to the EU this season at the expense of Eastern Europe).

- **Florida grapefruit:** harvest forecast revised downwards. Although it has been spared by frost, 2009-10 production of Florida grapefruit is down. At less than 19 million field boxes, the harvest is reaching its lowest post-hurricane level and is 25% smaller than the average for the last three years. The decrease is the result of insufficient fruit growth. Although the quantities of sizes 40 and 48 seem similar to those of the last season, the volumes of size 36 display a distinct deficit.

  Source: USDA

- **Greening continues to spread in Mexico.** Five trees infected by greening have been found in the extreme south-east of Mexico in the state of Quintana Roo. The disease had already been found in Yucatán and then Sinaloa and Nayarit in 2009.

  Source: agra-net.com

- **A praiseworthy initiative:** South African grapefruit growers are to run promotion campaigns again. South African producers have decided to mobilise to fight dwindling grapefruit consumption. A budget has been voted by the South African Citrus Growers Association for sales promotion operations in summer 2010 in the United Kingdom and Japan. The campaign will run from May to July and be based on tastings in shops and press advertisements. It will be funded by a 0.20 rand increase in the parafiscal tax on each box exported; the tax will thus increase to 0.60 rand in 2010 (approximately EUR0.06 per box).

  Source: summerrcitrus.com


---

<table>
<thead>
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<th>Type</th>
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<th>Comparison with average for last 2 years</th>
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<tr>
<td>Mediterranean type</td>
<td>10.00-10.50</td>
<td>- 7%</td>
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</table>

<table>
<thead>
<tr>
<th>Type</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tropical type</td>
<td>=</td>
</tr>
<tr>
<td>Mediterranean type</td>
<td>+ 9%</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Source</th>
<th>Comparison</th>
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</thead>
<tbody>
<tr>
<td>Florida</td>
<td>= - 25%</td>
</tr>
<tr>
<td>Israel</td>
<td>= + 41%</td>
</tr>
<tr>
<td>Turkey</td>
<td>= + 41%</td>
</tr>
</tbody>
</table>

**Observations**

- Shipments increasing again after the December decrease, but the trend is slower and less intense than in preceding seasons. - 17%
- Volumes remained small during the first half of the month and then increased gradually although they remained slightly smaller than average. + 3%
- EU deliveries recovered to a level markedly above the average (large harvest, more limited exports to Eastern Europe). + 31%
January 2010

The market was difficult for pineapple in the first fortnight of January as it was marked by decreasing demand. Indeed, exotic fruits do not generally sell well after the Christmas and New Year festivities. The fall in demand was followed by lower prices and the formation of several batches of stocks. In the second fortnight, supply of ‘Sweet’ from Costa Rica was smaller than forecast and heavy rainfall in the production regions had also affected the quality of some of the fruits exported. The decrease in supply enabled a rise in prices at the end of the month while demand remained limited.

Sales of ‘Smooth Cayenne’ were very slow throughout the month. Most of the very small quantities was shipped to the Russian market in anticipation of the Orthodox New Year celebrations.

Demand on the market for pineapple shipped by air was strongly affected by the bad weather at the beginning of January. Cameroon was the most regular source in terms of both quantity and quality. Fruits from Benin and Ghana were more irregular and often lacked colour. Although limited in quantity, batches of ‘Sugarloaf’ pineapples sold at EUR1.90 to 2.00 per kg throughout January. Cameroon was the most regular producer in the world after India.

China leads the main exporting countries, controlling two-thirds of the world ginger trade, far ahead of Nepal and Thailand. Weather conditions have been difficult in China at a time when the areas cultivated had decreased because of poor financial results in preceding seasons. A late harvest in India also played a role. Operators consider that the entry on the market of this leading player at the end of February/beginning of March should not change the situation.

Source: Financialexpress.com

Pomegranate production to increase in Tunisia. The governorate of Gabès has launched a programme to develop pomegranate plantations. Production there was some 27 000 t in 2009 and it is aimed to increase this by 20%. Gabès is in southern Tunisia and, ahead of Béja and Kairouan, dominates national production estimated at some 75 000 t. Tunisia exported a little more than 4 400 t of pomegranates in 2008, mainly to Libya (3 400 t) and the EU (650 t).

Source: Gifrut

The Japanese market soon to be open to Peruvian mangoes. The Japanese authorities validated hot water disinfestation treatment at the beginning of 2009. According to Senasa, the Peruvian national body in charge of the safety of agricultural produce, the opening of the Japanese market is imminent. This is a new victory for Peruvian exporters after gaining authorisation to export avocados to the United States at the beginning of the year.

Source: livinginperu.com

Pineapple — Import price in France — Main origins

<table>
<thead>
<tr>
<th>Weeks 2010</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<tr>
<td>By air (euro/kg)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smooth Cayenne</td>
<td>1.80-1.90</td>
<td>1.80-1.90</td>
<td>1.80-1.90</td>
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<tr>
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<td>3.10-3.30</td>
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</tr>
<tr>
<td>By sea (euro/box)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smooth Cayenne</td>
<td>6.00-7.50</td>
<td>6.50-7.50</td>
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<td>Victoria (euro/kg)</td>
<td>6.00-7.00</td>
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Source: Financialexpress.com
**January 2010**

2010 started with a crisis on the European mango market. Still substantial in December, supply from Brazil hit its annual low point in January, amply compensated by particularly substantial deliveries from Peru throughout the month. Arrivals from Peru considerably exceeded European market capacity and stocks formed. Demand shrank markedly at the beginning of the month, making it more difficult to shift the fruits available. Numerous batches changed hands at between EUR1.50 and 2.00 per box in northern European ports. The situation was all the more serious as produce quality was satisfactory on arrival in Europe. Prolonged storage sometimes resulted in the degradation of fruit quality and this made market conditions even worse. In addition, the predominance of small fruits in Peruvian shipments also weighed on transactions. At the end of the month, a decrease in arrivals from Peru and a slight improvement in demand halted the fall in prices and a few signs of recovery could be glimpsed. However, the improvement seemed slight nonetheless. In this context, in the shade of supplies from Peru, fruits from Brazil and Ecuador ran into serious trouble. Only the very small quantities of ‘Tommy Atkins’ from Brazil fetched higher price levels.

The air market was also dull in January, with shipments from Peru larger than demand. Storage resulted in the degradation of fruit quality, requiring rapid sales and generating a downward trend in prices. This market was also affected by the arrival of Peruvian fruits of air quality but shipped by sea. Offered at EUR2.00 to 2.50 per kg, this produce made stronger by the fine quality of fruits shipped by air. Offered at EUR2.00 to 2.50 per kg, this produce was better and they had often arrived more recently. However, prices lost ground as well and lack of interest by buyers affected fruits from this source as well. A few batches from South Africa did not keep well and in particular suffered from spreading mould, affecting sales returns.

**South African fruits sold better as size was better and they had often arrived more recently. However, prices lost ground as well and lack of interest by buyers affected fruits from this source as well.**

In January, only Réunion continued to ship fresh litchis by air. The very small quantities received allowed a very strong recovery in selling prices. Poor shelf life led to a quick end to the season.

The situation worsened very distinctly and very quickly for litchis shipped in sea containers from Madagascar. Consumption traditionally dips in the first half of January and the phenomenon was particularly marked this year. Retail channels quickly lost interest in the fruit, limiting orders or even ceasing purchases. In spite of the lower and lower prices proposed and the setting up of promotion operations, demand remained practically nonexistent throughout the month. In parallel, fruit quality worsened, aggravating the poor market conditions. Export markets closed one after the other and saturated wholesale markets no longer formed outlets for the quantities still available. Operators had to resort batches systematically, with increasing quantities of fruits discarded. Sorting rejects thus weighed on sales averages.

**Litchi**

**January 2010**

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**Litchi — Arrival Estimates**

*Weeks 2010* | 1 | 2 | 3 | 4
--- | --- | --- | --- | ---
**By air**
Réunion | 5 | 2 | - | -
South Africa | 520 | 1 240 | 160 | -
Madagascar | 2 000 | 3 000 | 2 000 | -

**Litchi — Import Price on the French Market — Euro/kg**

*Weeks 2010* | 1 | 2 | 3 | 4 | January 2010 average | January 2009 average
--- | --- | --- | --- | --- | --- | ---
**By air**
Réunion | br | 10-12 | 10-12 | - | - | 10-12 | 5.50-6.75
South Africa | 1.80-2.40 | 1.50-2.00 | 1.50-1.80 | 1.60-2.05 | 1.90-2.20
Madagascar | 1.20-1.30 | 0.70-1.10 | 0.50-1.00 | 0.50-0.80 | 0.70-1.05 | 0.75-0.85

**By sea**

**Litchi — Arrival Estimates**

*Weeks 2010* | 1 | 2 | 3 | 4
--- | --- | --- | --- | ---
**By air**
Brazil | 10 | 5 | 5 | 6
Peru | 70 | 90 | 80 | 50
**By sea**
Brazil | 500 | 310 | 460 | 460
Peru | 4 400 | 4 900 | 3 200 | 4 100
Ecuador | 60 | 80 | 60 | -

**Litchi — Import Price on the French Market — Euro**

*Weeks 2010* | 1 | 2 | 3 | 4 | January 2010 average | January 2009 average
--- | --- | --- | --- | --- | --- | ---
**By air (kg)**
Brazil | 2.50-3.00 | 2.00-2.50 | - | - | 2.25-2.75 | 3.25-3.75
Peru | 3.50-4.00 | 3.50-3.70 | 3.30-3.50 | 3.30-3.70 | 3.40-3.70 | 4.40-4.90
**By sea (box)**
Brazil | 2.00-3.50 | 2.00-3.50 | 2.00-3.50 | 2.00-3.50 | 2.10-3.25 | 4.50-5.25
Peru | 2.50-3.50 | 2.00-3.00 | 2.00-3.00 | 2.00-3.50 | 2.10-3.25 | 4.50-5.25

**Mango**

**January 2010**

2010 started with a crisis on the European mango market. Still substantial in December, supply from Brazil hit its annual low point in January, amply compensated by particularly substantial deliveries from Peru throughout the month. Arrivals from Peru considerably exceeded European market capacity and stocks formed. Demand shrank markedly at the beginning of the month, making it more difficult to shift the fruits available. Numerous batches changed hands at between EUR1.50 and 2.00 per box in northern European ports. The situation was all the more serious as produce quality was satisfactory on arrival in Europe. Prolonged storage sometimes resulted in the degradation of fruit quality and this made market conditions even worse. In addition, the predominance of small fruits in Peruvian shipments also weighed on transactions. At the end of the month, a decrease in arrivals from Peru and a slight improvement in demand halted the fall in prices and a few signs of recovery could be glimpsed. However, the improvement seemed slight nonetheless. In this context, in the shade of supplies from Peru, fruits from Brazil and Ecuador ran into serious trouble. Only the very small quantities of ‘Tommy Atkins’ from Brazil fetched higher price levels.

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**Mango — Arrival Estimates**

*Weeks 2010* | 1 | 2 | 3 | 4
--- | --- | --- | --- | ---
**By air**
Brazil | 10 | 5 | 5 | 6
Peru | 70 | 90 | 80 | 50
**By sea**
Brazil | 500 | 310 | 460 | 460
Peru | 4 400 | 4 900 | 3 200 | 4 100
Ecuador | 60 | 80 | 60 | -

**Mango — Import Price on the French Market — Euro**

*Weeks 2010* | 1 | 2 | 3 | 4 | January 2010 average | January 2009 average
--- | --- | --- | --- | --- | --- | ---
**By air (kg)**
Brazil | 2.50-3.00 | 2.00-2.50 | - | - | 2.25-2.75 | 3.25-3.75
Peru | 3.50-4.00 | 3.50-3.70 | 3.30-3.50 | 3.30-3.70 | 3.40-3.70 | 4.40-4.90
**By sea (box)**
Brazil | 2.00-3.50 | 2.00-3.50 | 2.00-3.50 | 2.00-3.50 | 2.10-3.25 | 4.50-5.25
Peru | 2.50-3.50 | 2.00-3.00 | 2.00-3.00 | 2.00-3.50 | 2.10-3.25 | 4.50-5.25
January 2010

While owners and operators may be disappointed in the performance of the charter market for the first five weeks of the year, there is another perspective from which developments can be viewed. The TCE average for January 2010 may be 10-12% lower than it was for January 2009 but bunker prices have been running at 70-80% higher over the same period. Unlike last year when activity was scarce and box rates tumbled through to mid February, the charter market was generally busy and yields flat or inching higher, albeit imperceptibly slowly, despite a capacity surplus.

That there are more Spot traded Ecuadorian bananas this year should, ironically, favour both charterers and operators: the charterer because the Spot banana market in Ecuador is less transparent this year with so much TC tonnage redelivered to the Spot market – the operator because an upturn in banana trading has coincided with a rationalization in the number of players, now that Eastwind is no longer involved. If a peak season does materialize it is reasonable to assume that a time will come when the demolition of so many older units over the past 24 months will play a significant role. A smaller number of operators will want to engineer a peak and then prolong a rates plateau – if they can prevent a post Easter freefall the prospects for the first half of the year may actually be pretty good.

But, as has been said on many an occasion, the banana trade alone cannot create a peak: demand needs to be driven from a number of sources. And preliminary trade data for seasonal exports from the southern hemisphere does not make encouraging reading: net grape exports are forecast to fall 56K MT from 1.245m MT last season to 1.189m MT in 2009/10. Brazilian exports are forecast to dip 33% from 60K MT in 2008/09 to 54K MT this year. Peru on the other hand will grow 50% from 40K MT to 60K MT. Despite production problems South African grape exports are also tipped to increase - from 218K MT to 230K MT, and Argentina from 54K MT to 65.5K MT. Chilean grape exports on the other hand are likely to fall – from last year’s 853K MT to 780K MT this season.

Total exports of apples may rise only marginally (from 1.636m MT to 1.645m MT) because an upturn in banana trading has coincided with a rationalization in the number of players, now that Eastwind is no longer involved. If a peak season does materialize it is reasonable to assume that a time will come when the demolition of so many older units over the past 24 months will play a significant role. A smaller number of operators will want to engineer a peak and then prolong a rates plateau – if they can prevent a post Easter freefall the prospects for the first half of the year may actually be pretty good.

If the charter market receives no help from seasonal deciduous fruit exports there will be more pressure on the poultry, fish and squid trades to take up the slack. And if the poultry dispute between the US and Russia remains unresolved and South Atlantic squid volumes are similar to or less than last year the prognosis for operators in the short term is a lot less optimistic! It is no matter that the preliminary April to August southern hemisphere citrus and kiwifruit export programmes are looking more positive. By then the damage will have been done!
THE SELECTION OF THE MANGO

"We search for you the best sources, brands and varieties to ensure you the best sales all year-round"

Gabriel Burunat
The main concern of operators at the beginning of the 2010 mango trading season is to forget 2009, a nasty year, as quickly as possible. Indeed, it was more difficult than others for most of the production sources supplying the European market. The influence of exogenous factors over and above the usual ebb and flow of the mango market can be seen here. The international economic crisis of the last quarter of 2008 and its influence on the markets has often been mentioned and the visible results dotted 2009. The argument might seem easy and obvious during this difficult period. In fact, precise quantitative data are lacking to back up the reasoning. However, the variations and the frequent low prices in 2009 are difficult to explain by causes concerning mangoes alone, such as irregular supply and quality defects. The successive waves of over and under-supply throughout the year were aggravated by the context. The traditional annual pattern was therefore upset, revealing numerous paradoxical phases. Far from being reserved for mangoes, the trend was seen with the same seriousness in other tropical and subtropical fruits (pineapple, litchi, avocado, etc.).
Supplies of mangoes to the European market in 2009 were not adjusted to allow for the international economic context. As usual, meteorological and logistic factors generally affected supply, beyond the control of planned strategies. As a result, there were waves of large or small supply according to source and time of year, with phases of over or under-supply governing price variations. The massive quantities of Brazilian mangoes that arrived at the end of the year were part of this regularly observed trend. In contrast, a few fits and starts in supply seem to have had more serious effects on the European market.

**Disturbances in supply from Peru**

The decrease in the volumes shipped from Peru at the beginning of the year was a major, lasting cause of market disruption. Simple comparison of supply and demand could have won the day during this phase of marked under-supply. However, although this was the case at first (until the beginning of February), succeeding events countered the idea that the scarcity of goods causes prices to rise. Not only did prices stabilise when supply from Peru peaked, but they fell when supply decreased. This movement was of course blamed on retailers who were reluctant to buy expensive produce that shaved a slice from their retail margins. The combination of these features seemed to give birth to a decrease in overall demand that lasted after the end of the Peruvian season and lasted for most of 2009. The peak in exports from West African countries in May, like that of Brazil in November/December, suffered from this.

One cannot help but think that the decrease in buying by retailers just reflected that of consumers, indicating a basic trend and not just a simple occasional change related to variations in supply. Confirmation of the trend will require careful examination of total European imports in the medium term.

**Mediocre quality**

2009 was also a poor season for the matching of the produce supplied to market requirements. Two features appear here—fruit size and colour. The dominance of small fruits in supply as a whole was not limited to the start of the season for one source or another but remained fairly steady throughout the year. The phenomenon was doubtless the result of unfavourable production conditions for the various sources supplying the European market. There are good and bad seasons, as for other produce. Was there an accumulation of problems in 2009? Likewise, fruits from all sources were poorly coloured. This might seem to be a secondary factor but it was observed both in sea shipments, whose colour is very variable, and also in batches sent by air from numerous sources.

Might these aspects have changed demand in comparison with preceding years? The trend is being confirmed, for reasons linked with production conditions that can change from one year to the next. However, beyond the question of natural conditions, the lack of colour in fruits...
imported by air results from understandable caution by exporters with regard to the risk of fruitfly infestation. It is thus not rare to see ‘air’ mangoes whose colour and stage of ripeness tend to approach ‘sea’ mango quality. However, this justified preventive action as regards fruitfly is such as to increase the confusion of buyers and consumers in an already complex sector.

The market for 'intermediate' fruits

The presence of increasing volumes of intermediate fruits already identified in previous seasons also seems to be growing stronger. These are mangoes from Spain and Israel that benefit from logistic proximity to consumer markets or produce from more distant sources. However, this range disturbs sales. Fruit quality approaches the standards required for shipments by air but transport costs are lower as they are carried by sea or by road and they have difficulty in establishing a commercial position with overall traditional supply. The European markets are probably not yet ready to acknowledge the new range. The quantities available do not form the critical mass required to gain entry to the usual mango supply scene. Furthermore, periods of availability are short. The development of such produce may finally call into question the nature of traditional supply by air and sea. Although exporters’ strategy of creating a new section of the market seems logical, it does not take into account the possible effects on the destination markets.

Dangerous starts and stops

The need to call on numerous sources with more or less marked seasons to ensure continuous supply for the European market also creates periods of uncertainty. The switch from one source to another always leads to periods of under-supply that are difficult to master according to the earliness or lateness of beginnings and ends of seasons. Here, the most sensitive periods are March-April with the gradual halting of supply from Peru and the start of the West African seasons, June with the end of the African season and September-October with the decrease in supply from summer sources and the strong return of exports from Brazil.

Although Spain has succeeded in gradually taking a position in September-October, the beginning and end of the West African season are still fragile. The late start and increasing concentration of exports from West Africa and especially from Côte d’Ivoire in recent years has attracted secondary sources that apply greater pressure each year. The produce we now see includes fruits from Costa Rica, Guatemala, the Dominican Republic and others. Although this contributes a host of varieties, qualities, produce and operators, it can cause disturbance to more solidly established sources while covering periods during which supply seems to be less secure. Is this a temporary trend that will just cover transition periods or is it gaining weight—the result of competition by new sources that wish to confirm market shares gradually gained from the dominant sources? South Africa was overtaken a few years ago by the tremendous development of Peru. Are the Latin American sources now becoming established at the expense of West African exporting countries? Competitiveness is more important than many other factors in an open market configuration. This trend should be a permanent preoccupation for operators in traditional sources so that they can consolidate their positions.

The key points of the 2009 season, with distortions in volumes and quality, provide interesting information for planning future seasons. Will studying them enable the various sources to refocus their capacities in the light of the reality of today’s European mango market?

Pierre Gerbaud, Consultant
pierregerbaud@hotmail.com
The year 2009 started after two difficult months for the mango market. The upward movement was hardly visible in January in spite of the rapid decrease in shipments from Brazil and the slow increase in those from Peru; disparity between the batches sold was excessive. It is true that the market was undergoing a ‘cleansing’ phase but the situation was still confused. The profile did not become more normal until the end of the month.

January - February
The perverse effects of under-supply

The small arrivals from Peru and Brazil kept the European market distinctly under-supplied, enhancing strong prices. The substantial price increase observed on all the European markets clearly resulted from the marked shortage of produce while demand was not particularly dynamic. The situation had a number of perverse effects. Rocketing prices weighed on demand, especially from supermarket chains; these tended to reduce their orders. The shortage of fruits encouraged operators to seek alternatives and this resulted in the arrival of goods of various origins and varieties and of disparate quality. Sales were also affected by the reduction of orders or de-referencing of mangoes by retailers, while those with long-term programmes with importers purchased fruits at lower prices. A degree of balance was recovered as a result of the reduction in demand.

March
Return of the traditional supply and demand cycle

The profile of the European market changed gradually at the end of February/beginning of March. Although arrivals from Peru and Brazil were not substantial, they were enough to cover the usual market demand and so the trade situation regained its balance. Demand then weakened significantly, sending prices downwards. This marked the return to a traditional cycle in which a strong price increase resulting from the scarcity of fruits finally causes shrinking demand followed by a rebalancing of supply and demand that in turn affects prices.

The pattern of the mango market changed gradually in March, with an overall price decrease for fruits shipped by sea—whatever the variety or source. Indeed, high prices had put off clients and many supermarkets reduced their orders drastically or even suspended supplies. This caused a very marked decrease in demand. The school holidays aggravated the dip on several European markets. The decrease in the quality of fruits from Peru (poor colour, spreading spots, more limited shelf life) meant that operators had to resort every batch received; this caused a slowing of sales and loss of price structure. This was a general phenomenon that affected the various European markets, while demand increased slightly, but without becoming substantial. Buyers loss of confidence in the produce made sales more difficult. However, under-supply of the European market meant that prices remained high for good quality fruits.
April
Change of source:
a long disturbance

The market was still undersupplied at the end of March but the relative weights of the various sources was tending to change. Deliveries from Peru decreased gradually while those from Brazil increased a little. Supply remained the same overall, but with a varietal distinction between 'Kent' from Peru and 'Tommy Atkins' from Brazil. The Northern European markets displayed greater readiness to purchase 'Tommy Atkins’. Demand picked up a little but sales were still difficult as a result of the uneven quality of fruits from both Brazil and Peru. The first arrivals of 'Amélie' by sea from Côte d’Ivoire and Burkina Faso contributed to making market conditions fairly indistinct.

This period of changes of source at the approach to Easter levelled prices. The diversification of supply tended to broaden the range, with prices depending on appearance, sanitary quality and fruit size. Sales were concluded at national market rather than European level.

Overall supply tended to increase in April with shipments from Brazil and the start of the Côte d'Ivoire season. These sources gradually made up for the decrease in shipments from Peru. However, supply still did not match demand just before Easter. Indeed, recurrent quality problems in fruits from Peru caused marked lack of confidence among buyers.

The pattern of the European mango market was chaotic at the end of April/beginning of May. Supply was dominated by fruits from Brazil and West Africa, with a tendency for the former to be shipped to the Northern European markets and the latter spread more widely. The other sources contributed to clogging the market with produce less firmly anchored in consumption habits. The diversification of sources and uneven fruit quality made the market situation fairly difficult to grasp. Furthermore, the large proportion of small fruits in the shipments created a break in the market, with large fruits (size 6 to 8) fetching high prices while the small ones—the majority—were more difficult to sell.

Fruit quality was also uneven according to source and brand. This factor also contributed to the price differences observed on most European markets. Furthermore, the succession of public holidays that dotted May reduced the number of trading days.
May
A dip

In mid-May, the poor market trend resulted in slower, complex sales. Prices sank overall but were very varied according to the batch.

The large number of shipping sources and varieties and the broad quality range doubtless affected sales during a period of very mediocre demand. Although Brazil and West Africa shipped the greater proportion of goods, the market was adversely affected by batches of varying sizes from sources that are not very representative (Honduras, Guatemala, Nicaragua, Puerto Rico, etc.). The market seemed to be suffering from the consequences of the poor Peruvian season which, with small deliveries and high prices, put retailers off mango in a lasting manner. It is added that the frequently mediocre fruit quality (poor colour, uneven ripeness and uncertain shelf life) served to amplify the trend. The dominance of small fruits kept the market in a fairly low price range. This was the case for 'Tommy Atkins' from Brazil (variable quality, small fruits) whose price weighed heavily on transactions and prevented better sales of competing ‘Kent’ mangoes, especially from West Africa.

However, this dip in the mango market should be seen in a more general context of poor sales of fruits of all kinds.

June
A short-lived improvement

The situation gradually improved in June, with decreasing arrivals accompanying the trend. However, the European market continued to be mediocre and complicated, still clogged with fruits of defective quality that slowed the trend for prices to improve. The improvement was more noticeable in Northern Europe. The decrease in shipments from Brazil and West Africa made it possible to shift the stocks that had accumulated and to lead the market into a fresh phase of under-supply, even though it was still cluttered from time to time with poor quality fruits that were difficult to sell. Conversely, fruits of satisfactory quality benefited from market cleansing at last and their prices recovered considerably but in varying proportions according to the market.

The trend changed completely at the end of June/beginning of July as a result of marked under-supply. Shipments from Brazil decreased and those from West Africa were marginal. The modest arrivals from the Dominican Republic and Puerto Rico did not make up for the resulting sudden deficit. The first containers from Senegal arrived but quantities were limited. The decrease in supply caused a strong increase in prices of good quality fruits, with some batches fetching as much as EUR7.00 per box. However, the market pattern was erratic as fruit quality was often mediocre and sizes unsuitable.

The West African export seasons ended with the shipment of marginal quantities, as did the Puerto Rico season. These dwindling volumes were compensated by the starting of seasons in other countries but with overall tonnages smaller than normal market demand. The major event during the period was the start of the Israeli season.

July - August
A complicated summer phase

The market was strengthened in July by the small volumes received, but the strong increase noted previously tended to run out of steam. It was now the summer phase, with a distinct slowing of demand for tropical fruits as competition was strong from the season's produce in large quantities and at low prices. In addition, the substantial increase in the price of mangoes resulted in lack of interest from retailers.

As a result, the market headed downwards again after the brief improvement. The main reasons were the slight increase in arrivals and above all the serious slowing of demand in the summer. It also seems that the high prices discouraged certain retail chains that preferred to highlight abundant and cheaper summer fruits. The main sources of mango were still Brazil and Senegal.

In August, conditions were difficult on all the markets. The season's fruits did further damage to already poor demand for mangoes. To this was added increasingly unbalanced supply with a high percentage of small fruits. The European mango market was still complicated. Supply tended to decrease, with limited shipments from Brazil and Israel. Deliveries from Senegal seemed steady but uneven fruit quality was bad for sales. Regular shipments continued from Puerto Rico and the Dominican Republic but volumes were modest.

Demand remained dull on the European market and this in no way favoured sales of mangoes at profitable prices. The large number of sources and varieties and the quality of the fruits shipped explained the sometimes considerable differences in prices.
**September**

**Variable balance**

The market was morose overall in early September although prices did become firmer, above all as a result of small supply. In spite of the end of the summer holidays and a return to work for most traders, demand remained limited for tropical fruits and especially for mango.

The market see-sawed between marked undersupply and poor demand and was still encumbered with batches from various sources and of uneven quality that were difficult to sell. However, the limited shipments from the two main supplier countries Israel and Brazil encouraged firmer and even increasing prices. The price level remained less clear for the last, uneven quality batches from the Dominican Republic and Senegal.

Supply from Spain increased, with larger volumes and broader distribution. The disadvantage of this increase was the large number of operators and hence lack of clarity in distribution channels.

The European market was fairly well balanced in mid-September. Indeed, slow demand was matched by fairly limited supply. Deliveries from Israel decreased but those from Spain were still substantial. Brazilian exports were divided between North America and Europe.

**October - November**

**Autumn weather too fine in Europe**

Market conditions worsened at the end of September. An increase in arrivals from Brazil in a context of poor demand sent prices downwards. Demand was sluggish on all the European markets. The still strong presence of the season’s fruits doubtless contributed to retailers’ lack of interest in mango.

The strong price fall was caused by sluggish demand. The weather was fairly warm in much of Europe and this doubtless enhanced the continued production of the season’s fruits and this discouraged buyers from increasing their orders for mangoes.

The market was on a downward slope and gradually displayed slump conditions, especially for ‘Tommy Atkins’ from Brazil as the dominance of small fruits made sales particularly difficult. Brazilian exporters gradually changed the markets targeted. Hitherto the main destination, North America was sent less and less while increasing volumes were shipped to the European market. The start of the season for exports from Ecuador to the United States probably encouraged Brazilian shippers to direct more shipments to the European markets.

In November, the situation was very difficult for ‘Tommy Atkins’, for which prices were still low in spite of determination to improve them. Shipments of this variety dipped while arrivals of ‘Kent’ increased, causing a fall in prices.

**December**

**And Father Christmas didn’t arrive!**

The European mango market recovered slowly at the beginning of December with increased demand as Christmas approached. Brazil was still the main supplier. This increase in demand made it possible to sell the extra, but modest, volumes from Peru and Ecuador.

However, the situation was contrasted, with demand increasing slowly and volumes increasing fast. The transition from Brazil to Peru was complicated.

Market conditions worsened distinctly at the end of December. The Christmas effect wore off quickly and demand slowed markedly. Deliveries from Brazil slowed strongly while those from Peru increased noticeably. Supply was greater than demand and this resulted in a general down movement on the market.

Pierre Gerbaud, Consultant
pierregerbaud@hotmail.com
'EXÓTICOS' MADE IN MÁLAGA!
Peru
A disappearing act

Rumours of a decrease in mango exports from Peru spread in autumn 2008, when the season was to start in mid-November. Harvest forecast information is often right but rarely quantified and so it is impossible to make a real estimate of the export capacity of a source or to foresee the distribution of volumes during the season. Although the European market was not disturbed by the decrease in Peruvian exports in November and December 2008 as deliveries from Brazil were massive, it was hit by the decrease in supply in January 2009. The term ‘disappearing act’ refers to the large quantities of fruits awaited by the European market and that never came. After a cleansing phase to clear the remaining Brazilian exports, the market recovered in the second fortnight of January. The volumes available at that time were smaller than demand and caused the prices of fruits from Peru to jump from EUR 4.00 to 6.50 per box. With arrivals from Peru down by nearly 50%, the upward trend seemed to be a lasting one and such as to make up for the poor financial results of the preceding season. But this failed to allow for European market reactions. The profitable period did not last and was not as marked as in 2007 when prices went sky-high (reaching EUR 10.00 per box).

The price of Peruvian mangoes dipped again in mid-February, losing EUR 1.00 per box. This reversal of the trend was not explained by the traditional interplay of supply and demand. Indeed, the small shipments from Brazil—exports just tick over at this time of year—and the shortage of Peruvian produce kept the market chronically under-supplied. The continuation of the situation finally weighed on demand, which shrank strongly, as retail chains did not wish to pay high prices that would bite into their margins and also discourage their customers. A vicious circle started with smaller and smaller supply from mid-February leading to even faster decrease in demand and hence falling prices. This pattern is rarely seen on such a large scale and was also generated by the commercial strategy of Peruvian exporters. As volumes were not normal, several exporters proposed containers of mangoes to importers with the condition of payment with order at firm, high prices. It is true that this system ensured satisfactory returns for shippers during periods of small production and enabled them to make up for the previous year’s shortfall. However, it obliged importers to advance substantial sums at a time when market visibility was decreasing. The risk of purchasing fruits at prices higher than those of the market further slowed
import flows. In a context of economic downturn, these various factors resulted in distaste for mango in a large part of distribution channels during the Peruvian export season. Worse still, the effect continued and affected the West African season. It would seem that the shortage of volumes from Peru deeply affected the level of natural demand on the European market.

Shipment from Peru decreased from March onwards. Prices had generally recovered in previous years, especially in the run-up to Easter when demand increases. But in 2009 prices continued to weaken (EUR 4.00-5.00 per box). The quality worsened in the last batches to arrive and some goods changed hands at lower prices. Although the prices recorded during this period might seem satisfactory, it should be remembered that the volumes sold were half of those of the preceding season. Beyond the questions of prices and commercial performance, the scarcity of Peruvian fruits considerably affected the pattern of the season—not just from January to April but much later too.

Peru is the second-largest supplier of mangoes to the EU and tends to upset the profiles of seasons by over or under-supply. The drastic decrease observed in 2009 was no less of a hindrance than the plethoric shipments of recent years. The lack of prior communication about the state of production and hence exportable quantities clearly had an adverse effect on market conditions. Announcing a serious deficit would have doubtless made it possible to partially correct dips in supply by calling on other sources. It is easy to understand that Peruvian operators did not wish to advertise this conjunctural shortage as it might have sharpened the appetites of other sources that could intrude in their marketing period. This type of crisis will therefore remain a feature of the fruit sector and will happen again although perhaps at varying intensities as the 2009 season coincided with the worsening of the international economic crisis.

The Peruvian season came round again in December 2009 in a more normal context. The volumes increased rapidly and brought prices down. The levels gradually matched those of competing mangoes from Brazil, whose large shipments weighed heavily on the market. The return of Peru to normal levels in the 2009-10 season may disturb market conditions once again, especially as consumption, in a still morose economic situation, seems to have settled at a lower rate than in previous years.

Brazil
A yo-yo style season

After the avalanche of mangoes thundering on to the European markets in December 2008, Brazil started 2009 with deliveries that were still substantial but shrinking rapidly. At the end of January, the dip in Brazilian supply was compounded with particularly meagre volumes from Peru. Brazilian exporters grasped this opportunity to at least partially make up the deficit and benefit from good market conditions. They used all available means to supply the European market, calling on all orchards, however small. The resulting Brazilian supply was compounded with particularly meagre volumes from Peru. Brazilian exporters grasped this opportunity to at least partially make up the deficit and benefit from good market conditions. They used all available means to supply the European market, calling on all orchards, however small. The resulting

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opportunistic increase in exports meant that supply consisted mainly of small fruits, little sought after by retailers. The strategy also caused considerably unevenness in quality, and especially poor shelf behaviour of fruits, and this soon caused prices to weaken. The increase in Brazilian shipments of erratic quality from February to early April contributed to the deterioration of market conditions by the shortfall in shipments from Peru, causing a significant and lasting decrease in demand. Give this situation, Brazilian shipments decreased, bottoming out in the second half of June. The price of 'Tommy Atkins' plummeted from mid-February to the end of May from nearly EUR 7.00 to 2.75 per box. This decrease resulting from lack of demand and unsuitable supply was aggravated by the increase in shipments from West African shipments from the end of April onwards.

Prices of Brazilian mangoes recovered strongly in June and July as a result of limited shipments and the absence of competition from West Africa, where the season finished rapidly. But a fresh increase in supply in August dragged prices down from EUR 6.00 to 3.00 per box, with the fruits of fairly mediocre quality. This yo-yo pattern continued in September although the increase in prices was less marked (EUR 5.50 per box) because of under-supply resulting from the end of the Senegalese and Israeli export seasons.

In October, Brazil started its most important export period of the year. Deliveries increased strongly and rapidly to both Europe and North America. Shipments to the USA and Canada ended at the end of November but those to Europe continued, with quantities increasing steadily, causing a marked fall in prices. The 2009 export season for 'Kent' from Brazil was unexpectedly early, in contrast with the preceding years when it had started towards the end of October. 'Kent' shipments increased from the beginning of October onwards while those of 'Tommy Atkins' decreased, resulting in a more chaotic pattern of selling prices. 'Tommy Atkins' prices worsened rapidly, going below EUR 3.00 per box in mid-October, where they stayed until the end of November. They then recovered in December when the variety has a definitely minor position in Brazilian shipments; it regained nearly EUR 1.00 per box, mainly on the northern European markets. In contrast, prices of 'Kent' fell, except during the run-up to Christmas when demand gained momentum and caused a short-lived rise in prices. In the last quarter of 2009 they oscillated between EUR 3.50 and 4.50 per box, showing the weakness in demand in comparison with certain preceding years. These average prices for mid-sized fruits would doubtless appear over-estimated if all shipments from Brazil were taken into account. Most of the volumes of 'Kent' from Brazil released from October onwards consisted mainly of small fruits. In addition, quality was mediocre overall, with persistent lack of colour also observed in shipments travelling by air. The fruits also displayed a fairly uneven ripe stage, with sales of green fruits at an advanced stage of maturity and hence often sold cheaper.

The main supplier of mangoes to the European market suffered from the vicissitudes of a difficult year. The price variations observed highlight the lack of coordination between the various sources according to their export calendars and the varieties available. But at a deeper level, it is seen that Brazilian operators have

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**Guinea Complementary supply**

In 2009, Guinea used mainly sea transport to ship nearly 400 tonnes of mangoes to the European market. The fruits consisted of 80% 'Keitt' and 20% 'Kent'. The season started in early May and finished during the first ten days of July. The main destination markets were Spain and the United kingdom. Exports from Guinea are modest but increase every year. They form an interesting complement for the European market, with different distribution channels to the other West African sources.
Reyes Gutiérrez
frutas tropicales

SANOS X NATURALEZA

www.reyesgutierrez.com
Camino de Málaga s/n
Aptdo. de Correos nº 65
29700 Vélez-Málaga España
Tel: (+34) 952 505 606 Fax: (+34) 952 506 629
hardly changed their strategy with regard to the history of their exports. 2009 promised to be complex for reasons of the international economic context. In spite of a decrease of probably some 15% of total exports to Europe, selling conditions were hardly any different to those of previous years, revealing a structural decrease in mango consumption.

Spain
Confirming its position

Forecast as being more abundant than the previous year, the 2009 mango season was finally practically identical. Total shipments are estimated to have been some 6 000 to 7 000 tonnes, giving Spain a solid role in European market supply in the autumn. The good production level led to hopes for a substantial increase in shipments, but this was compromised by a very hot summer in Andalusia. Spanish production potential is growing and exportable volumes should increase in the coming seasons if weather conditions are favourable.

The season was fairly early, starting in the last week of August, but the volumes shipped remained modest until mid-September, when they increased strongly and caused prices to weaken on the various destination markets. However, market conditions were comparatively favourable as Brazil and Israel were shipping little, and prices then held until the end of the season.

'Osteen', a variety specific to Spain, sold steadily until mid-November. The variety has established a lasting commercial position after several years of presence on the market. It is generally strongly coloured with a pleasant taste and has gradually gained a faithful clientele, especially on the French market—the main destination for Spanish fruits. Varietal diversification started in preceding years has intensified this year, with a larger 'Kent' season from October to mid-November. Shipments finished with 'Keitt', the last batches of which were sold at the end of November. Prices were generally higher for the two later varieties. Batches of very fine quality fruits sometimes sold at more than EUR 10.00-11.00 per box. In contrast, problems of worsening quality appeared during the final weeks of the marketing season and consignees had to resort batches or make price concessions to shift them quickly. In addition to the three varieties above, there were a few marginal shipments of 'Irwin' mango; these were small but well-coloured and sold to retailers specialised in exotics.

Spanish mangoes are confirming their presence on the European markets at a time when the summer origins are dwindling and when Brazil is starting its winter season. The closeness of the production zones to consumption centres means that Spanish operators can supply fruits that have ripened on the trees and are closer to ‘air’ quality that fruits shipped by sea. This intermediate produce is gradually gaining a position on markets but many operators still hesitate as the prices are higher than those of ‘sea’ mango. The trend is observed in particular on the markets in northern Europe where Spanish prices do not always match imperatives, especially in supermarket and superstore sales. This year's affirmed position of Spanish produce on markets other than France is being gained slowly and is still patchy. More than elsewhere, progress depends on the pressure of competition during the season.
**Mexico**

**A stop-gap source**

As in 2008, Mexico displayed discreet involvement in the European market. With shipments totalling about 1 500 tonnes, it is a stop-gap supplier of the EU from June to August. Its modest shipments hide Mexico’s importance on other markets and especially North America, the main outlet for exporters. Mexico is also diversifying exports to Asia, with sales increasing in Japan.

Sales of Mexican mangos on the European market begin in June and finish at the end of August and are in two consecutive phases. The first runs from June to the end of July and consists solely of consignments shipped by air. The second takes over from mid-July, with shipments in sea containers. After satisfactory market release at the start of the season, the prices of Mexican fruits shipped by air or sea were negotiated downwards. The price of air mangos lost ground rapidly, descending from nearly EUR 5.00 per kg to EUR 3.00-4.00 at the end of the period. A similar pattern was observed in the prices of sea mangos which fell from about EUR 6.00 per box at the start of the season to EUR 4.00 per box at the end of the period. Well coloured in general, Mexican mangos disappointed buyers this year as they lacked colour and sometimes ripeness at the beginning of the season. Fungal infection and poor behaviour in time caused the fall in prices. Production conditions were probably unfavourable for keeping quality, causing the decrease in prices and the halting of shipments.

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**Senegal**

**Back to better volumes but sales were difficult**

After a sharp decrease in 2007 (4 700 tonnes), Senegalese exports returned to more substantial supplies to the European Union in 2008 and 2009. Exports in each of the last two seasons totalled some 6 000 tonnes, mainly shipped by sea. The proportion shipped by air is tending to decrease in comparison with the early 2000s and consists of 200 to 300 tonnes per season. Although mangos shipped from Senegal by air at the beginning of the season are an alternative for buyers to the end-of-season fruits from West African sources (Mali and Burkina Faso), in July they soon come up against competition from sources like Mexico and Israel. The staggering of the calendars means that Senegal can ship to the European markets when the other West African sources are winding up their export seasons, allowing continuity from this production region.

The first batches of ‘Kent’ shipped by air arrived in Europe in mid-June at a time of short market supply. The air season continued until the end of August with rapidly decreasing quantities, especially for reasons of continued quality problems. Fungal attacks of the anthracnose type seem to be recurrent in Senegalese fruits, causing a parallel deterioration of market conditions. Mangos from Senegal become fragile from the end of July/beginning of August each year. Fruits shipped in satisfactory quality deteriorate rapidly, affecting the financial performance of the export season and generally leading exporters to halting their shipments. In addition to their fragility, the fruits were poorly coloured and often dull in appearance and hence not very attractive for consumers. These defects observed from the beginning of the season resulted in mediocre selling prices of EUR 3.00 to 3.50 per kg and even less than EUR 3.00 per kg at the end of the season.
July/beginning of August when the volumes received reached a maximum.

The profile of the sea mango season was different. In the absence of continuous ample supplies of ‘Kent’ on the European market at the end of June, the sale of the first mangoes shipped in containers from Senegal took place satisfactorily with prices often exceeding EUR 6.00 per box. However, the coinciding of decreased consumption during the summer, an increase in overall supply and the appearance of quality problems from mid-July resulted in a marked decrease in the price of Senegalese mangoes before it stabilised at around EUR 3.50 per box in August. It returned to EUR 4.00 to 5.00 per box at the end of August and in September, when deliveries slowed and demand recovered slightly in a market on which ‘Kent’ supplies were small. The end of the season was complicated for Senegal because of the increasing number of cases of quality problems. Prices were comparatively high for good quality fruits but clearance sales were run to clear those with poor keeping quality.

The fact that the Senegalese export season is during summer in Europe probably hinders the development of exports. But the latent problem of fruit quality remains the main negative point for operators. The continued lack of reliability of Senegalese shipments—year after year—is such as to put off a large proportion of buyers.

Burkina Faso mango exports were down on those of 2008. They have been dwindling for several years and totalled some 1 700 to 1 800 tonnes in 2009. The country is landlocked and so shipments by sea are difficult. However, the setting up of a logistic corridor to Abidjan in 2007 made it possible to increase exports to the European markets. But the higher costs of shipping in containers resulted in lack of competitiveness in comparison with rival produce and this doubtless accounts for the decrease in quantities. The total included 200 to 300 tonnes shipped by air and sold more on the French market while exports by sea were shared between the Netherlands and France.

Burkina Faso has fairly traditional plantations with a large proportion of ‘Amélie’, a variety that makes it possible to start the season a little earlier. It targets a traditional sales channel but also the organic market, logically more profitable. It is also used in the production of processed products such as dried fruits.

In 2009, exports of ‘Amélie’ and ‘Kent’ started together in mid-March. Deliveries were regular throughout the season, with a decrease in the second half of June. Shipments ceased at the beginning of July, with marginal quantities. Although Burkina Faso continued to ship fruits by air, difficulties in the organisation of logistics reduced the quantities exported by sea.

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Mali
A slight decrease
A smaller harvest in 2009 reduced Malian shipments to the European market. The fairly late start of the season accentuated the phenomenon, especially for shipments by sea. Shipments by air were slightly greater than in 2008, with an estimated total of nearly 900 tonnes. Shipments in sea containers totalled 2 500 to 3 000 t.

Only modest volumes were shipped by air during the early weeks of the season and so Mali
was unable to benefit from the good market conditions that prevailed before Easter. Supply consisted only of the early 'Amélie' variety and did not match demand during this period when buyers are more drawn to well-coloured fruits. A broader range of varieties soon appeared: 'Smith', 'Palmer', 'Haden', 'Irwin' and 'Valencia'. However, these varieties little known by the public, except for 'Valencia', were difficult to sell, especially as the batches received were small and fruit size was very uneven. In addition, fruit colour was not very pronounced and this did not favour sales. The 'Kent' season started at the beginning of April. Here again, the small volumes did not match demand in terms of either quantity or quality.

In April and May, sales of Malian mangoes faced strong competition from fruits from other West African sources while demand weakened once again. The pattern of previous years was repeated: gradual clogging of the market with increasing quantities of fruits from West Africa and competing volumes from Asian and Central American sources. Market absorption capacity was thus exceeded throughout, with demand decreasing when the season's fruits appeared. Prices headed downwards. Poor sales caused extended storage that in turn resulted in the worsening of fruit quality, accentuating the fall in prices. Operators finally sold produce at low prices to clear stocks.

In June, shipments had decreased considerably and the prices of Malian mangoes recovered slightly, although there was no change in fruit quality. The quantities delivered to the European market decreased strongly in the second half of June and the first half of July and so prices improved for the last deliveries.

The Malian season displayed several features that seem to have become established for a number of seasons. Exports of minor varieties do not give the hoped-for financial results. Indeed, they seem to be more a way of making up for a temporary shortage of volumes than the planned development of a broader varietal range. There is also an increasingly marked loss of interest by buyers in 'Valencia' that traditionally made up for the shortage of coloured varieties at the beginning of the West African season. This feature seems to be the result of the unreliable quality of this produce and especially sudden ripening that is difficult to control and the spread of dark spots on the skins of the fruits. Finally, air shipments of fruits that are hardly ripe enough and display limited colour to avoid infestation by fruitfly larvae is understandable but counter-productive. The technique leads to exporting fruits that do not match the quality criteria of the European markets.

Shipments by sea started in mid-April and were focused on the Dutch market until mid-July. Sales on the French market did not start until the second fortnight of May when supplies from Côte d'Ivoire decreased and quality became uneven. They continued until the end of July, with a price recovery after a difficult period at the end of May/beginning of June when large volumes and mediocre quality weighed on prices. Better keeping quality, especially at the end of the season, is one of Mali's advantages and these fruits are considered as an alternative to the other West African supplies.
Côte d'Ivoire
A concentrated season that ended badly

The 2008 season was that of the re-emergence of Côte d'Ivoire, with a distinctly better performance than in preceding years. Difficulties then returned in 2009 for this important source during the European spring and that draws behind it most of the mango production in West Africa.

However, the early end of shipments from Peru seemed to indicate that the season would be good for the West African countries and especially Côte d'Ivoire. But reactions and trends made the Ivorian season a difficult one. Instead of causing a lasting rise in prices, the small supplies from Peru from the second fortnight of March just gave them a short-lived boost before they worsened, highlighting retailers’ lack of interest in the fruit. The supply switch from Peru to Côte d’Ivoire was slow. Prices in the first half of April were artificially inflated by Easter and fell quickly with a further decrease in demand and the mediocre quality of the last batches from Peru. As its season starts late, only ‘Amélie’ mangoes can be shipped then. But ‘Amélie’ is a green variety, the fruits were only just ripe and were small, soon coming up against retailers’ preferences. Although exceptionally high prices were paid for the first batches of this variety, subsequent shipments fetched much less. At the end of April, the last ‘Amélie’ mangoes were immobilised by the first arrivals of ‘Kent’ and no longer found any outlets.

The ‘Kent’ season started at the end of April with subsequent but still limited tonnages. Sales were satisfactory for the first two or three weeks. The strong increase in deliveries over a short period of time caused prices—that had started at nearly EUR 6.00 per box—to fall rapidly to less than EUR 3.00 per box at the end of the season. The strong rate of deliveries from Côte d’Ivoire favoured the accumulation of large stocks while demand decreased gradually, with buyers preferring the season’s fruits. The failure of supply to match demand in terms of size, colour and also quality (fruits wrinkling as they ripened) aggravated the worsening prices. Competition from Central American sources during this period also limited scope for re-export. The succession of public holidays in May and transport strikes in France also contributed to poor sales. At the end of May/beginning of June, increasingly serious fungal attacks affected stored and arriving fruits, gradually closing outlets for this produce of uncertain quality and shelf life. Buyers turned to mangoes from other sources or gradually stopped buying this fruit. Prices perked up in June for good quality goods delivered in small quantities because the market was under-supplied once again. However, this recovery did not make up for the poor previous sales.

The pattern of the Ivorian season for exports by air also ran up against poor market demand. At the beginning of April, fruits from Côte d’Ivoire were sold at lower prices than in 2008. Lack of colour and sometimes insufficient ripeness made sales difficult. Arrivals were concentrated during a period of just a few weeks and, as for sea mangoes, slow sales caused worsening fruit quality. Numerous batches of very ripe fruits were sold at low prices to clear.
A late start, the concentration of supply and problems of fruit quality at the end of the season in a dull market context with abundant, inexpensive seasonal fruits seem to have formed the fairly unvaried limits of the Côte d’Ivoire season. These recurrent features also seem to have enhanced the stronger presence of Latin American production sources, with an increase in the pressure on this part of the market. It is true that the 11 500 tonnes exported by Côte d’Ivoire in 2009 saved the position of the source as leading supplier of the EU market, but for what economic results?

Israel
A linear season

The regularity of shipments from Israel has become a feature in the last three seasons. With total exports of between 12 000 and 13 000 tonnes per year, this source is confirming its third position among countries supplying the EU. It has a very special position in the supply calendar, shipping in the summer as the Israeli mango season generally runs from July to October and consists of a series of distinct sales phases.

Later than in 2008, the 2009 season started in mid-July with air shipments for a market that was still brisk as a result of small supply and demand that was still present although weakening. Israeli fruits consist mainly of the 'Maya' variety from mid-July to early September. Shunned in 2008 because of frequent lack of colour and mediocre keeping quality, Israeli mangoes attracted the attention of buyers in 2009. It is true that most of the fruits displayed attractive colour and had good taste qualities. The season for secondary varieties ('Haden', 'Shelly' and 'Kasturi') was shorter, starting late in mid-August and lasting for about a month. Sale of these varieties were more difficult, especially from September onwards when the Spanish mangoes arrived. The 'Kent' season was short too, running from the end of August to the beginning of October; these fruits sold steadily at falling prices, losing nearly one euro per kg during the season.

As regards shipments by sea, it seems that the traditional varietal sequence of 'Tommy Atkins' followed by 'Kent' and finally 'Keitt' was changed in 2009. Sales started only towards the end of August, especially on the French market. Batches of 'Tommy Atkins' were sold on other EU markets (the Netherlands and Germany) but ran into competition from Brazil from where increasing quantities were being shipped. 'Keitt' were strongly present, accounting for a large proportion of Israeli shipments continuing until the beginning of November but in strongly decreasing quantities. The 'Kent' season was much shorter, just covering September. Starting with mediocre prices at the end of August, sales improved in September with prices stable at about EUR 5.00 per box before decreasing in October under pressure from arrivals from Brazil. Some quality problems also occurred during this period. However, the decrease was measured, with prices not going below EUR 4.00 per box.

Israeli operators used a different strategy in 2009. Deliveries of fruits in equal quantities seem to have been better distributed among the various European markets. Accumulation that is always bad for prices was avoided. Programmes concluded directly with large retail chains probably helped the better spreading of supply in relation to demand, although the latter was down in 2009.

As for Spain, the proximity of production zones to consumer centres (two or three days by sea) also enhanced the shipment of riper fruits, with high quality at prices midway between produce carried by sea and by air. The context was difficult in 2009 but Israel succeeded in conserving its market shares by segmenting the range of fruits and the destination markets.

Pierre Gerbaud, Consultant
pierregerbaud@hotmail.com
Mango growers and exporters in Côte d’Ivoire are very worried on the eve of the season. The 2009 season was particularly difficult and European market prices have been quite low in recent months. All these factors have left them nonplussed.

Much better ‘Kent’ production

The configuration of production of ‘Kent’ in 2010 is totally different to that of 2009. Consisting mainly of small fruits, the first mangoes harvested in 2009 were late and quantities were small. The situation this year is better in terms of volume, size and earliness. The harmattan was earlier, starting in mid-November and the trees flowered more abundantly from mid-December onwards. The second flowering started at the beginning of January and was also generous. The ‘Kent’ season should start at the end of March/beginning of April, leaving very little room for ‘Amélie’.

The niche for ‘Amélie’ will be very limited this year as Easter is right at the beginning of April. The problems of too large volumes and too small fruits experienced in 2009 should be avoided by limiting shipments of this variety.

There is little risk of fungal attacks of the first production of ‘Kent’, which should take place in April, but the second production phase has dangers for exports. If the rainy season starts in May, as was the case in 2009, damage to fruits is to be feared very early in the season.

Pitfalls are numerous when the harvest is large and one of the dangers is the exporting of too large volumes to Europe as the only other outlet is the sale of fresh mangoes on the domestic market. But advantages could be exploited: better choice of size, colour and fruit ripeness at the beginning of the season.

A probable reduction of export programmes

Exporters will certainly have reviewed the difficulties experienced in 2009 and preceding seasons to be able to make the most of continuously increasing Ivorian production and its better features for 2010.

Although good production is forecast this season, growers wonder how to sell their fruits properly. Producer prices could fall at the beginning of the season if the volumes of ‘Kent’ fruits from the first flowering are confirmed.

Exporters are in a cautious mood and export schedules should be reduced, in particular to avoid risks of anthracnose at the end of the season. Many exporters wish to repeat the strategy used in 2008 when shipments were stopped suddenly when the first rains arrived in order to prevent this problem for which a remedy is far from having been found.

A difficult context

Other features may disturb the satisfactory progress of the season. Côte d’Ivoire has suffered from power cuts since the beginning of February and this should continue until early May. For lack of investment in production infrastructure,
not enough power is generated in Côte d'Ivoire to supply the whole country at the same time. Packing stations will have to purchase powerful generator sets to be able to work without problem rather than depend on the periods of availability of electricity scheduled in advance.

More serious, these power problems may also cause box manufacture to run late. The cold chain should not be disturbed as container logistics is supplied entirely with the generators installed at the packing station at the loading port.

The political context is not favourable either. The postponing of the presidential elections in Côte d’Ivoire will not allow the suspending of the taxes paid by exporters to the Forces Nouvelles in the production zone in the north of the country. These high taxes have been paid since 2003 and increase cost prices.

Cost of inputs decreasing

However, the price of raw materials fell in 2009 and the cost of boxes is down by 5% this year. The increase in the price of paper paste in 2010 should be passed on to 2011. Orders for boxes are currently timid at the start of the season. Indeed, many exporters built up stocks at the end of the 2009 season when shipments stopped suddenly as a result of the blockage of the European markets in the second week of May.

The cost of container multimodal transport via Bolloré Africa Logistics is also significantly cheaper than in 2009. In spite of the general upward trend in freight prices, it was possible to reduce intermediate costs.

To remain competitive, exporters must now try to lower producer prices. These have not changed for years and in spite of the fall in selling prices on the European markets exporters have never been able to agree on a profitable price for all the stakeholders in the sector. The trend today is a search for joint solutions to avoid financial catastrophes like those of recent years, with producers not paid, import-related debts, difficulties in covering export costs, etc..

GLOBALGAP certification of companies exporting mangoes from Côte d’Ivoire is continuing. Local experts based in the country and in Burkina Faso perform certification audits at competitive prices. Exporters now master certification requirements and aim to continue to do so.

Ample access to sea freight services

Sea transport logistics should not cause any particular concern. The Ferkessédougou container terminal has proved its effectiveness and can handle fruit exports from Côte d’Ivoire and neighbouring countries (Mali and Burkina Faso) under good conditions.

The two companies Bolloré Africa Logistics and AEL share sea freight for mango shipped to Europe. The former uses the lines MSC, DELMAS, MAERKS and SIM/HAPAG that serve, depending on the company, Antwerp, Algeciras, Genoa, Felixstowe, Barcelona and Fos-sur-Mer. AEL uses its banana boats to provide a twice-weekly container service to Antwerp and Port Vendres.

The big question

The European market is the major unknown quantity. All the mango sector operators in Côte d’Ivoire thought that the 2009 season would be satisfactory. But here they were ignorant of the patterns of a fruit and a market whose parameters are not always all mastered.

Caution could prove to be the wisest approach for mango sector stakeholders throughout the 2010 season.

Alexis Moulin
Mango is a recent crop, dating from the 1980s. The development of plantations was encouraged to fight deforestation and then supported by IRFA with the introduction of grafted varieties—‘Kent’ in particular. The crop truly got under way in the 1990s as exports increased. Existing orchards were often multi-varietal (local mangoes, ‘Amélie’, ‘Palmer’, etc.) and were soon top-grafted and the planted area increased. Mango became a profitable cash crop and a way of diversifying in a region long devoted entirely to cotton. After the bankruptcy of the cotton sector, the large cotton zones thus became centres for mango. The socio-political crisis accentuated the phenomenon. The maintaining and increase in mango exports since 2002 encouraged growers to extend their mango plantations, with these generally ranging from 5 to 50 ha. Cultural methods are still rudimentary, with tillage, weeding, grafting and fencing being the main jobs on plantations. Pruning, irrigation and pest control spraying are still limited.

Yields are small. Production in Côte d’Ivoire today is estimated to be nearly 50 000 tonnes grown on more than 10 000 ha. However, there is no census of orchards and not really any reliable statistics concerning production. In 2007, exporting businesses obtained EUREPGAP certification for the plantations and then GLOBALGAP in 2008 under the pressure of major retailers in Europe. As there is a very large number of plantations, certification was awarded in the category Option 2: ‘Producer Group’. Today, more than 90% of exportable production has GLOBALGAP certification.

Production is concentrated mainly within a radius of 50 km of Korhogo, the main town in the Savanna region 600 km north of Abidjan. Conditions are propitious for mango there, with lower relative humidity than in the rest of the country. The long Harmattan period gives better flowering and the climatic conditions are healthier for fruit development. All export packing stations are in this region. Of varying size and capacity, (500 to 2 000 t of export fruits) they are located in Korhogo, Sinématali and Ferkessédougou. The scarcity of land in a zone with high farming density has led to the establishment of new, large plantations (from 50 to over 200 ha) in other more remote regions such as Boundiali in the east, Niakara in the south and Ouangolo in the north. Rail transport using refrigerated containers has developed since the beginning of the crisis in the Côte d’Ivoire that has cut the country in two and limited road access to the port of Abidjan; a container platform has been developed at Ferkessédougou on the railway line running from Abidjan to Ouagadougou. Direct access from the production zone to the main European ports has enabled exports to continue and has opened the sea route to Mali and Burkina Faso.

Mango — Côte d’Ivoire — Production calendar

<table>
<thead>
<tr>
<th>Mango</th>
<th>Côte d’Ivoire</th>
<th>Production calendar</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Amélie’</td>
<td>F</td>
<td>M</td>
</tr>
<tr>
<td>‘Zill’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘Kent’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>‘Keitt’</td>
<td></td>
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</tr>
</tbody>
</table>

Côte d’Ivoire is by far the leading producer and exporter of mangoes in West Africa. Its ‘Kent’ harvest and logistic advantages make it a major supplier of the European market. In third position in 2007 with exports of 14 000 tonnes, Côte d’Ivoire shipped 11 250 tonnes in 2008, losing two places and becoming the fifth largest supplier of Europe, after Israel. Exports have also doubled in a decade, as have planted areas. But the country has had many problems in recent years: competition from neighbouring countries (Mali and Burkina Faso) that have advantages in access to sea logistics, the continuous presence of Brazil, strong attacks of anthracnose at the end of the season and a drastic decrease in selling prices on the European markets.
Production in Côte d'Ivoire is mainly for export to the European markets. There is no processing factory as such. A few companies make juice for the domestic market but do not take large quantities of fruits. The domestic market is concentrated in Abidjan (population 1.5 million) and to a lesser degree in the main regional cities. Demand is for ‘Kent’. All non-exportable mangoes, whether factory rejects or wastes left in the plantations are sold on this market. However, even though people do eat mangoes the domestic market is not organised, losses are substantial and retail prices are high in comparison with purchasing power. Market diversification is a priority to handle production whose quantity will not be controllable in the future.

Mango exports from Côte d’Ivoire have rocketed, increasing five-fold in a decade from 2 500 t in 1992 to more than 11 000 t in 2002. They decreased strongly in 2003, with less than 8 000 t shipped as a result of the events in the country, but then recovered in 2004 with the improvement of the political situation. They peaked in 2006 with nearly 15 000 t. However, the increase in volumes resulted in substantial trade losses for the chain. The year 2007 was not one of the best. The maintaining of tonnages and increased shipments from Mali and Burkina Faso during the same period meant that recovery was not possible. The 2007 season marked a change in the continuing of exports in June, which is a difficult operation because of poor keeping quality, fungal attacks, etc. Exporters took these constraints into account and shortened the 2008 season by stopping shipments quickly after 15 May. Volumes decreased strongly (-15 %). In 2009, problems of anthracnose reappeared as the rainy season was earlier than in preceding years and shipments continued until the end of May. Today, this quality problem is the main obstacle to the development of Ivorian exports.

Outlets

Production in Côte d’Ivoire is mainly for export to the European markets. There is no processing factory as such. A few companies make juice for the domestic market but do not take large quantities of fruits. The domestic market is concentrated in Abidjan (population 1.5 million) and to a lesser degree in the main regional cities. Demand is for ‘Kent’. All non-exportable mangoes, whether factory rejects or wastes left in the plantations are sold on this market. However, even though people do eat mangoes the domestic market is not organised, losses are substantial and retail prices are high in comparison with purchasing power. Market diversification is a priority to handle production whose quantity will not be controllable in the future.

Exports

Mango - Côte d’Ivoire - Exports to Europe

- From Abidjan to...
  - Algeciras: 12 days
  - Antwerp: 13 days
  - Genoa: 14 days
  - Felixstowe: 10 days
  - Barcelona: 11 days
  - Fos sur Mer: 9 days
  - Port Vendres: 9 days

Mango — Côte d’Ivoire — Sea freight to the European Union

<table>
<thead>
<tr>
<th>Shipping line</th>
<th>From Abidjan to...</th>
</tr>
</thead>
<tbody>
<tr>
<td>DELMAS</td>
<td>Algeciras: 12 days</td>
</tr>
<tr>
<td></td>
<td>Antwerp: 13 days</td>
</tr>
<tr>
<td></td>
<td>Genoa: 14 days</td>
</tr>
<tr>
<td></td>
<td>Felixstowe: 10 days</td>
</tr>
<tr>
<td></td>
<td>Barcelona: 11 days</td>
</tr>
<tr>
<td></td>
<td>Fos sur Mer: 9 days</td>
</tr>
<tr>
<td></td>
<td>Port Vendres: 9 days</td>
</tr>
<tr>
<td>MCS</td>
<td>Algeciras: 13 days</td>
</tr>
<tr>
<td></td>
<td>Antwerp: 16 days</td>
</tr>
<tr>
<td></td>
<td>Genoa: 13 days</td>
</tr>
<tr>
<td></td>
<td>Felixstowe: 10 days</td>
</tr>
<tr>
<td></td>
<td>Barcelona: 11 days</td>
</tr>
<tr>
<td></td>
<td>Fos sur Mer: 9 days</td>
</tr>
<tr>
<td></td>
<td>Port Vendres: 9 days</td>
</tr>
<tr>
<td>SAFMARINE</td>
<td>Algeciras: 7 days</td>
</tr>
<tr>
<td></td>
<td>Antwerp: 13 days</td>
</tr>
<tr>
<td></td>
<td>Genoa: 13 days</td>
</tr>
<tr>
<td></td>
<td>Felixstowe: 10 days</td>
</tr>
<tr>
<td></td>
<td>Barcelona: 11 days</td>
</tr>
<tr>
<td></td>
<td>Fos sur Mer: 9 days</td>
</tr>
<tr>
<td></td>
<td>Port Vendres: 9 days</td>
</tr>
<tr>
<td>ZIM/HAPAG</td>
<td>Algeciras: 10 days</td>
</tr>
<tr>
<td></td>
<td>Antwerp: 13 days</td>
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<tr>
<td></td>
<td>Genoa: 13 days</td>
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<tr>
<td></td>
<td>Felixstowe: 10 days</td>
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<td></td>
<td>Barcelona: 11 days</td>
</tr>
<tr>
<td></td>
<td>Fos sur Mer: 9 days</td>
</tr>
<tr>
<td></td>
<td>Port Vendres: 9 days</td>
</tr>
</tbody>
</table>

* Boats transporting bananas / Source: Bollore Africa Logistics

Logistics

Outlets

Mango - Côte d’Ivoire - Distribution of arrivals in Europe in 2008

- Netherlands: 4 156 t
- France: 893 t
- Belgium: 5 567 t
- Spain: 267 t
- United Kingdom: 362 t

Source: EUROSTAT

After starting on palettes in refrigerated holds in banana boats in the 1990s, all shipments from Côte d’Ivoire are now in containers. The great majority of these are filled in the packing stations. Nearly 80% travels via Ferkessédougou by train to the port of Abidjan. The fruits are loaded by all the shipping companies providing a refrigerated container service to Europe. The shortest voyage takes nine or ten days. Although most of the fruits are landed at the port of Antwerp, French importers still handle the supplying of the various European markets.
CLOSE-UP

FRUITROP

Mango
Per capita consumption (g/year)

USA
EU-15
Japan
Russia
NMS: New Member States
Sources: FAO, customs & Grad

NMS: New Member States
Sources: FAO, customs & Grad

Mango
and (guava, mangosteen)
World production

2008

World
34 350 000
India
13 649 400
China
3 976 716
Indonesia
2 013 123
Mexico
1 855 395
Thailand
1 800 000
Pakistan
1 753 686
Brazil
1 272 180
Philippines
884 011
Bangladesh
802 750
Nigeria
734 000
Egypt
734 000
Yemen
387 906
Kenya
384 461
Vietnam
370 000
Cuba
355 200

Mango
and (guava, mangosteen)
World exports

2007-08

World
920 000
Mexico
222 954
Brazil
133 725
Pakistan
127 000
India
83 700
Peru
82 651
Ecuador
41 379
Philippines
27 068
Guatemala
20 490
Côte d'Ivoire
16 877
Israel
16 591
Yemen
11 404
Senegal
8 846
Haiti
8 408
Costa Rica
7 040
Mali
6 586

Source: FAO

Mango — Supply calendar of the EU — Main origins

Peru
Kent
Brazil
Tommy Atkins
Kent
West Africa
Kent
Keitt
Senegal
Kent
Israel
Tommy Atkins
Kent
Keitt
Spain
Osteen
Kent

Mango and (guava, mangosteen) — EU imports — Main supplying countries

Year
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008

Total extra-EU, of which
84 511
116 293
119 364
135 593
134 992
175 544
163 938
187 932
212 713
211 944
231 628

Brazil
24 473
38 408
39 636
60 338
63 804
89 942
69 838
82 293
84 858
83 025
98670

Peru
1 813
7 347
9 304
7 749
10 760
15 356
20 054
26 394
41 027
36 854
50756

Israel
7 463
8 932
8 454
6 595
4 117
8 646
8 285
12 916
11 349
15 006
12743

Côte d'Ivoire
5 984
10 265
10 306
10 842
11 147
7 176
11 428
9 856
14 428
14 706
11250

Pakistan
4 490
5 608
7 094
8 750
6 263
8 680
10 940
12 307
10 120
13 225
12941

United States
8 446
9 844
10 314
6 731
6 944
7 370
5 706
5 894
5 971
7 404
7 516

Spain
280
678
618
822
1 650
2 067
2 810
3 011
7 088
4 702
6034

Portugal
2 104
3 334
3 092
1 734
1 852
2 636
4 006
6 271
7 545
4 664
5360

Costa Rica
1 006
814
1 141
886
708
947
2 096
2 560
3 477
4 317
4902

Mali
1 548
3 981
3 258
6 217
2 605
5 706
5 586
5 930
5 681
3 718
2 313

Brazil

Philippines

Bangladesh

Mango and (guava, mangosteen)

World

Mango

United States

United Kingdom

Mali

Braz

Philippines

Bamladesh

Mango and (guava, mangosteen)

World imports

2007-08

World
920 000
United States
305 958
EU 25, incl.
244 256
Netherlands
124 925
United Kingdom
43 518
France
17 316
Belgium
16 843
Spain
16 355
Portugal
15 489
Unit. Arab Emir.
47 038
Saudi Arabia
45 660
Malaysia
23 087
Yemen
22 891
China
22 738
Singapore
19 405
Nepal
12 077

Source: Eurostat (code 080450 mango, guava, mangosteen)

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No. 175 February 2010
Mango quality defects

Photos © Pierre Gerbaud

Immaturity and spotting
Natural discoloration of the epidermis
Misshapen fruit
Scarred-over insect pricking
Mechanical wounds after picking
Mechanical wounds after picking
Stalk too long
Spotting on epidermis
Anthracnose type fungal infection
Fruitfly larvae
Sun scorch

Discoloration caused by scales

Postharvest sap burn

Stalk rot

Overripeness

Misshapen fruit

Wounding with wind-caused rubbing

Postharvest soiling by sap

Fungal infection

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Mango, *Mangifera indica*, probably originated in a region on the frontier between India and Burma. Today, there are certainly more than a thousand different varieties around the world. Distinction was originally made between two main families of mango with clearly different features that came from two diversification zones—the Indian sub-region and tropical Asia. A great many of the commercial varieties grown today were bred in Florida at the beginning of the twentieth century from multiple crosses between parents from these two families. Exported fruit are generally from budded plants.

### Characteristics of the two mango families

<table>
<thead>
<tr>
<th></th>
<th>India</th>
<th>Tropical Asia</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Diversification zone</strong></td>
<td>India, Pakistan</td>
<td>Burma, Malaysia, Philippines</td>
</tr>
<tr>
<td><strong>Seed</strong></td>
<td>Mono-embryonic</td>
<td>Polyembryonic</td>
</tr>
<tr>
<td><strong>Shape</strong></td>
<td>Round to ovoid</td>
<td>Elongated with cylindrical or flattened cross section</td>
</tr>
<tr>
<td><strong>Skin colour</strong></td>
<td>Yellow to orange, sometimes with purple flushes</td>
<td>Green to yellowish green, no purple</td>
</tr>
<tr>
<td><strong>Taste</strong></td>
<td>Marked, hint of turpentine</td>
<td>Less marked</td>
</tr>
<tr>
<td><strong>Observations</strong></td>
<td>Susceptible to anthracnose</td>
<td></td>
</tr>
</tbody>
</table>

### Requirements of mango

Mango is suited to a broad tropical climate range from humid to dry. It is found in regions with very different annual precipitation. In the tropics, the halting of vegetation caused by a dry or cool season lasting for a few weeks or months is a condition for good flowering intensity and hence high productivity. Production is often small and irregular in equatorial humid zones as a result of the absence of a halt to vegetation. The optimum temperature range for tree development and fruit growth is 24° to 30°C. Temperatures lower than 10°C can cause physiological damage. Water supply to the tree must be optimum throughout the fruit growth period and then during the growth of new shoots. Rainfall distribution over the year is more important than cumulated annual precipitation, especially for the production of high-quality fruits. The lower limit for precipitation for commercial mango growing seems to be 750 mm. Mango can grow in a very varied range of soil types if the underlying horizons are sufficiently loose and well-drained. However, the tree prefers deep, fairly light soils with average structure. It can suffer from shortage of water in sandy soil and produce small, insipid fruits. It is sensitive to salts in the soil and in irrigation water. Wind can cause damage of varying seriousness and cause imbalance in the water supply. Windbreaks should therefore be grown in windy areas before mango trees are planted.
**Tommy Atkins**

- **Shape**: ovoid, sometimes slightly oblong. Sloping dorsal shoulder. Ventral shoulder above the stalk zone. Round apex, small lateral beak.
- **Peel**: thick. Yellow orange and bright red. Dark purple bloom. Numerous large greenish-yellow lenticels.
- **Flesh**: strong orange colour. Good quality but slightly fibrous.
- **Average weight**: 450 to 710 g

Bred in Florida in 1922, it was soon chosen by growers for its productivity, robustness when handled and good resistance to anthracnose, in spite of its medium fibre content. Flesh quality deteriorates markedly if too much fertiliser or water is supplied. This is the most widespread variety in Brazil, where it forms the greater proportion of exports. It is particularly well-liked in northern Europe for its bright colour. Most exports consist of medium-sized fruits (8 to 10 fruits per 4 kg box); this matches the requirements of supermarket chains.

**Kent**

- **Shape**: ovoid, rounded dorsal shoulder and apex. Full ventral shoulder. No beak.
- **Peel**: thick and strong, light adherence. Main colour greenish-yellow with red or even crimson surface in the parts most exposed to light. Slight greyish bloom.
- **Flesh**: strong yellow to orangey yellow, rich flavour with melting, fibreless texture.
- **Stone**: 9% of total fruit weight.
- **Average weight**: 600 to 750 g

Bred in 1932 in Florida from sown 'Brooks', it bears comparatively large fruits, ranging from 440 g to more than 1 kg on young trees. Much appreciated by both the upstream and downstream ends of the sector, yields are medium but with a high proportion of export quality fruits. Fruit colour is attractive and the tasty flesh is firm and ripens very gradually. It is grown in most of the countries supplying Europe, where it is considered to be the yardstick for mango. However, considerable variations in colour and size according to the production zone can lead to sales problems.

**Keitt**

- **Shape**: oval, abruptly falling dorsal shoulder. Full and rounded ventral shoulder. Rounded, obtuse apex with no beak.
- **Peel**: thick and strong, fairly high adherence. Orangey yellow to crimson yellow on the side exposed to the sun, with numerous small pale yellow to russet lenticels. Fairly strong lavender-coloured bloom.
- **Flesh**: orange to deep yellow. Rich and fruity flavour. Melting texture with many fibres that are not particularly unpleasant as they are fine.
- **Stone**: 7 to 8% of total fruit weight.
- **Average weight**: 510 g to 2 kg

Bred in 1939 in Florida from sown 'Mulgoba', it has high, regular yields. The reddish colour appears very early before the fruit is ripe and can lead to problems of evaluation of maturity; the latter can be enhanced by time in a ripening chamber. An end-of-season variety in most provenances that makes it possible to prolong the export season. Less appreciated than 'Kent', it is nevertheless of increasing importance during periods of gaps between supply origins.
Shape: oblong with a rounded base. Rounded apex, sometimes with a small beak.

Peel: thick, not very clinging. Main colour violet/purple with some lavender lights. White lenticels.

Flesh: lemon yellow, firm and juicy. Very high quality and not fibrous.

Stone: long and flat.

Average weight: 500 to 800 g

‘Osteen’ is from Florida, where it was bred from sown ‘Haden’ in 1935. It is little grown at the world scale in spite of its good commercial features. It has become more common on the EU market since 2000 as it forms most of Spanish production.

Shape: elliptic. Rounded apex, large apical beak.

Peel: comparatively thin but detaches fairly well. Basic colour greenish-yellow with a large red to purple area. Yellow lenticels.

Flesh: deep yellow. Aromatic and practically fibreless.

Average weight: 600 to 900 g

Variety bred from sown ‘Haden’ in Florida in 1941. Very elongated, fairly large fruits with attractive colour and shape. Good productivity. Grown mainly in West Africa, it long enabled varietal diversification at the beginning of the season when shipments consisted mainly of ‘Amélie’. Its attractive colour formed an alternative. Gradually chosen by a proportion of consumers, it is now consolidating its market share in the range of fruits shipped by air.

Shape: oval to rounded cordate. The ventral shoulder is broader and slightly higher than the dorsal shoulder. Well-rounded apex.

Peel: mostly dark red with numerous whitish-yellow lenticels.

Flesh: orangey yellow, almost fibreless. Pleasant, slightly acidulated taste.

Average weight: 510 to 680 g

Variety bred from a sowing of ‘Mulgoba’ in 1902. Shipped almost only by air, this variety completes supplies of ‘Kent’ when these are too small to meet demand. The fruit has a fine appearance and a reputation for fragility, requiring rapid sale.
# Wholesale market prices in Europe

## January 2010

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Note: according to grade

These prices are based on monthly information from the Market News Service, International Trade Centre UNCTAD/WTO (ITC), Geneva.
MNS - International Trade Centre, UNCTAD/WTO (ITC), Palais des Nations, 1211 Geneva 10, Switzerland
T: 41 (22) 730 01 11 / F: 41 (22) 730 09 06
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First published in 2003, it provides a number of services for users along the reefer logistics chain: the Reefr Trends weekly charter market brief is the benchmark publication for the specialist reefer business – it tracks the charter market for reefer vessels, as well as fruit and banana production and market trends that influence charter market movement.

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