

MARKET



Intelligence



TREATT

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BRAZIL

Orange Special



CITRUS OILS - ESSENTIAL OILS - CHEMICALS - HIC

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WELCOME



If last year was defined by unprecedented volatility across many markets, the first half of 2017 tells a seemingly different story. Processors across a number of the key growing regions are signalling cause for cautious optimism in the coming months. In this issue, we bring you the latest from those in the know.

Our Procurement Team have been travelling around the citrus groves and processing operations of Brazil to understand what's happening on the ground. In spite of political and economic uncertainty, a less challenging season for orange is hopefully on the horizon, with Brazil enjoying the first bumper orange crop in six years and processors forecasting strong uplifts on last year's crops. Discover the details on page 5.

Unpredictable weather fronts continue to be the primary catalyst for market changes. Cold periods, followed by dry weather and then sudden downpours have resulted in a challenging lemon market after months of stability. Whilst ongoing wet conditions being experienced in the Far East have not been kind to the summer harvests providing the raw materials for many of our essential oils and their chemical ingredient derivatives.



CITRUS *Oils*

ORANGE

The market is starting to show signs of easing as the Brazilian crop gets underway. Although we ask ourselves how will this offset the abysmal 2016 crop which resulted in global juice and oil inventories at all-time lows?

Orange prices remained very firm throughout the first quarter of 2017. It was only during the latter part of the second quarter that the market began to ease and indications of softening prices began to show themselves. D-Limonene has followed the same pattern as orange oil and expectations are that will continue. It's clear the remainder of 2016 juice and oil contracts will be first in line to be fulfilled from new crop production, certainly for the first quarter of the season, after which we will start to see new crop negotiated oil despatched September/October. It is after this backlog, and we look toward the fourth quarter (Oct - Dec) when we envisage the mist of uncertainty will start to clear.

Brazil June 2017: Trip to our Processing Alliances

Over 4,000km covered during a very exciting week

Brazil's political situation remains very volatile as both the current and previous presidents are under investigation for corruption. This has left a real feeling of doubt among the people and trepidation of what lies ahead for their economy. Commercial interest rates are also proving extremely challenging for the smaller processors in borrowings and payback terms to banks.

The latest projection suggests a 51% uplift on 2016 crop. Based on 175 million trees each yielding ~2-2.5 boxes of fruit, the crop estimate of 360 million boxes seems credible. Allowing for ~55 million boxes earmarked for the fresh fruit market we then expect 300 million boxes to be processed. It must also be remembered that pipelines need to be refilled before the full effect of this volume can be felt.

We are still conscious too that although HLB (Huanglongbing, Greening) is being much more proactively managed in Brazil there is still no cure. The region of Sao Paulo produces 80-90% of all Brazilian oranges but HLB is now present in 17-25% of the groves in the main citrus belt of the state. The smaller producing regions such as Castelo, a region in South Sao Paulo state, or those in the state of Rio Grande do Sul still have little to no infected groves (0-2%).

However it's very refreshing to see Brazil is taking the approach it is, in that as soon as an infected tree is identified, it's removed and a

new tree is planted almost immediately. There is continuous monitoring and identification procedures in place, and alongside the traditional remove-and-replace strategy there are other, more innovative projects underway to identify HLB at earlier stages like infra-red imaging taken from airborne drones and geo-tracking of plants. Denser tree population is another technique being used to combat HLB, which is also improving fruit yield per hectare. The number of farms is generally reducing, however total acreage remains about the same as the size of farms increases.

Drop rate has reduced year on year and the fruit looks to be a good size but there has been a delay of fresh fruit to some processors due heavy rain fall (May) where up to 200mm has fallen in certain regions. We also need to remember although we are expecting a bumper crop, it consists of a good number of young trees yet to mature and produce full commercial volumes, so the yield these trees will generate is unknown, as is the overall quality of the crop in general.

The processors we are speaking to are positive about this year's crop and their thoughts were consistent. As is often the case early in the season there are varying numbers of boxes to yield 1kg of oil (ranging from 7-16) but this, like the tree fruit yield, is all important to the eventual amount of oil a season generates.

This year it is estimated 40,000mt of cold pressed orange oil (CPOO) will be produced with an optimistic aldehyde expectation. We expect it to follow the typical bell curve with Sao Paulo fruit processors already seeing fairly good oil quality.

It's clear the Brazilian juice market is still heavily weighted towards concentrate (FCOJ) which accounts for 80% of the volume produced vs 20% not from concentrate (NFC). This is interesting considering juice consumption is generally falling apart from certain emerging markets. Despite the headlines about increasing consumption of NFC there was little indication from the smaller processors of a change of course due to the requisite investment in logistics; movement of one drums of FCOJ is equivalent to seven of NFC. However, at least two of the larger plants are scaling up their production, investing in significant new tank space and vessels in order to compete more in the taste-preferred NFC markets. All bar one processor we met was juice focussed, however the co-products (CPOO, limonene, oil phase and water phase) remain extremely important revenue streams with

Continued on next page





CITRUS

Oils

some considering them the profit centre offsetting the juice cost centre. It was only a few short months ago, when the supply situation was tougher, that fruit box prices were Brazilian Real (R)26-28/box where now they are around R16-18/box. The completion of these contracts is another reason why oil price graphs will not follow the same gradient down as they did on the way up. All in all we remain optimistic for this season; however there are many macro factors that can influence this market very quickly.

South Africa

We are anticipating a recovery in the South African crop this year to around 100m boxes, 10% up from 2016, but being some 40% down from its typical averages. With only 5-10% of fruit being processed South Africa continues to exert only a small influence over the global juice and oil markets.

Florida

The latest USDA forecast released 12th July; the final of the 16/17 crop season suggests a slight increase of 0.2m boxes to 68.7m as HLB continues to spread devastatingly throughout the state and the recovery response of planting new crops has been insufficient.

Mexico

Mexico is becoming a larger player despite the majority of their oranges still going to the fresh fruit market. Processing volumes grow year on year and we estimate this year they will produce 5,000mt of CPOO.

LEMON

Lemon oil worldwide has been very stable for more than 18 months, but anyone who has been in this business for the last decade knows that steady citrus markets don't hang around for very long, and in this case there was no exception given.

Argentina

Flower drop from the cold snap in September 2016, a very dry January and February followed by an abundance of rain in Tucuman and surrounding areas in Argentina's main producing regions has caused a reduction in the total crop by about 25%. This coupled with very heavy fresh fruit demand has left processors vying for lemons to run in their factories pushing prices up 60-70% from a similar time last year. What this means for customers of oil, juice and peel is prices have to rise as the raw material has taken hits on both supply and price. Revenues from juice have been sluggish though, and prices for peel/pectin have softened considerably, so processors are looking to recover more from oil sales. To add to the difficulties in this

market, a very high quantity of new crop oil has been pre-sold with very little carryover stocks to augment it.

Europe

Spain and Italy both produced reasonable volumes late 2016/17, but heavy rains at the end of last year and into the first couple of months of 2017 in Sicily made harvesting slow so processing followed in similar fashion, helping to hold up already high fruit prices. Though Spain had a good recovery as far as volume produced, they are now mainly sold out until new crop very late 2017. The same holds true for Sicily.

We find that shortages of lemon oil co-products (terpenes, washed oils, etc.) are usually signs of a rising market. As such we have been expecting an increase for some time as we have seen availability for these materials shrink in the last 6 months, but the rise in price now is more extreme than originally suggested. Lemon in everything is all the rage now – for health, weight loss and in food and beverages, particularly in North America and parts of Europe. This is putting an increasing amount of pressure on processors, who already have to compete with the high fruit prices being paid as a result of the increase in worldwide demands.

Unless there is a considerable decline in demand from both fresh fruit and oil (which we do not expect), we feel that with Argentina controlling such a large portion of the oil market (54% on average), prices will remain firm, and are likely to increase in the coming months.

DISTILLED LIME

Peru had some severe flooding in late March/early April, and went from a dangerous drought with levies running dry to huge worries that the levies (which hold irrigation water) could actually break and wash roads away. This caused some initial panic with prices spiking up a few dollars per kilo but have since calmed. The Mexican crop was delayed for more than five weeks from their usual start but they are still ahead of where they were at this time in 2016.

Key lime sales are based on a combination of three profit centres – oil, pectin and juice. As with lemon two of the revenue streams (juice and pectin) are significantly down. As such we are anticipating an increase in the price of oil to compensate. It seems for the time being this market is yet to respond though of any of the citrus markets lime has the ability to very quickly turn. We are also finding there is a large range of pricing currently being offered in the marketplace.





ESSENTIAL

Oils

The annual floods which began in China in early June have been much more severe than in previous years and have now affected almost 15 million people across many provinces and regions in the south of the country. Reports suggest that so far more than 1 million people have been evacuated, over 40,000 homes destroyed and almost 1 million hectares of crops damaged. Many major rivers and lakes broke their banks with waters rising in most cases to dangerous levels. Those areas feeling the greatest impact are considered the major growing areas for many of our essential oil bearing crops. Our thoughts go out to those affected and we urge buyers of oils from this region not to panic but stay in close contact with their Treatt representative for updates, especially for the following ingredients.

GINGER (CHINESE)



The slight softening in price seen earlier this year has been short lived. Availability of root for processing has improved but this has not helped the supply position of oil. Further more the Environmental Protection Order (EPO) in Shandong, which enforced the use of gas for production at a much greater cost than that of the coal originally used, saw more production taking place in neighbouring Anhui province. It has taken a few months, but once the authorities cottoned on to this they began to phase in the EPO in this area too. So, although production using coal is not yet completely forbidden in the area, it is very limited during the period of transition from coal to gas. With supply reduced and competition increasing for what is available, prices continue to increase.

CORIANDER SEED



Prices are now at their lowest level in ten years. With this being the case the expected pattern is emerging with farmers turning to more profitable crops to support their income. Sources suggest a 40-50% reduction in planting area for the 2017 crop compared to last year. Seed export figures for 2016/17 are less than half compared with figures for the previous season and oil producers do not have any carryover of stock. It is thought that the market is being supplied by oil traders who are holding substantial volumes which were purchased at much higher prices. Expectations are that as normal demand resumes supply deficiencies will become exposed causing prices to increase.

NUTMEG (INDONESIAN)



The situation in the market is still precarious. The sudden drop in price last year causing many plantations to be abandoned along with the continuous rain at origin have resulted in a severe shortage of this oil and a steady rise in price for many months now. The excessively wet weather and the fact that farmers/distillers were blending the young fruits (usually used for oil) with the mature fruits (usually used for the spice market) have also caused the levels of key components to vary. The dry season usually runs from October

to April/May but this year has extended into July. Ramadan holidays also saw the country come to a standstill during the last week of June. The hope is that supply will ease once the dry season takes hold when raw materials have had the chance to dry out enough to be processed.

CASSIA (CHINESE)



We are told that the collection period is complete with much of the raw material found mouldy and rotten from the prolonged rains in the area. The price of the raw material has increased by approximately 10%, also driven by the continued rise in labour costs. The market has been experiencing a lull whilst buyers waited to see whether there would be any price improvement after the spring collection but it does not appear that the result of any hesitation is going to be positive.

LITSEA CUBEBA AND CITRAL



The market is stable despite low availability with many factories having very little to offer. New season oil should become available by early August. Expectations are that the raw material crop will be good as the berries appear to be plentiful and if current prices are maintained labourers will be enticed to collect meaning the situation should remain stable.

CARDAMOM (GUATEMALAN)



The last harvest in Guatemala was delayed due to the drought in the region which resulted in fuelling price speculation. The knock-on effect is that some of the seeds harvested were not mature enough which then affected the quality of the oil produced. It is believed that the final volumes were 20% less than those seen in previous years cementing the high price for seeds in turn driving up oil prices. The upcoming harvest, starting October, will not sufficiently restock supply lines to better availability or price conditions a great deal, with some believing that prices could simply continue to rise.



CHEMICAL

Ingredients

NATURAL CHEMICALS

BETA PINENE

We were expecting to see the market begin to stabilise at the end of 2016 and feed through to the beginning of 2017, but despite a few steady months prices have continued to rise with demand still strong. This is predominantly owing to increased manufacturing costs and restrictions put on production due to environmental concerns. With demand exceeding supply as a result we should continue to see prices rise.

EUGENOL

As is the situation with nutmeg the extended wet season in Indonesia this year has had an adverse effect on eugenol natural, with many experiencing price increases and issues with supply. The extra months of rain have affected the output of clove oil, the raw material for eugenol, as the leaves are not being allowed to dry sufficiently for large scale production to take place. Prices are expected to stabilise as the dry season starts and output of clove oil recovers, although it may take sometime to see the full effect this will have on prices.

DECANOIC ACID

The market remains firm for decanoic (C10) acid. With the cost of the raw material crude palm oil beginning to fall it was anticipated that this would have a positive effect on the C10 derivatives however this has not materialised. Demand remains just as firm keeping prices stable but high. It is expected that only when we see demand begin to settle in conjunction with the price of crude palm oil falling that the C10 acid and alcohol markets will follow suit and start to ease.

CITRONELLOL

Recent bad weather at both key origins has had a detrimental effect on citronella. The extended rain has led to a reduced output and a delay in harvesting the crop. This has caused prices to rise on the derivative products such as citronellol natural. As demand remains firm the market could continue that way until more typical conditions return.

SYNTHETIC CHEMICALS

MALTOL & ETHYL MALTOL

The market is stable now however, despite high prices, demand remains unyielding which will only serve to keep them there. Production is still being affected by inspections related to environmental protection but there are now three factories producing. One of which is expanding their capacity with a new production line that will become fully operational in September/October. We are hopeful these developments should provide some price relief in the near future.

BENZYL ALCOHOL

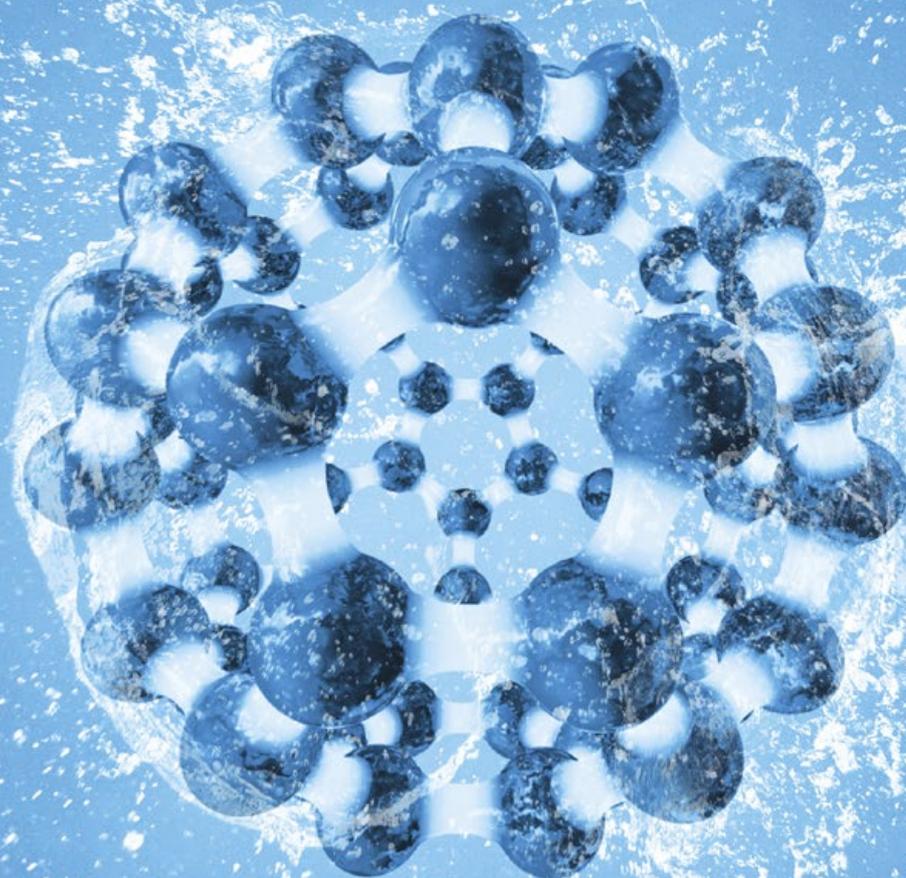
Production had been temporarily stopped at a large Chinese producer, another consequence of tightening regulations driven by environmental restrictions. They are now producing again, albeit in a limited capacity, and only servicing demand in the East meaning very little material is making its way into the European/US markets.

This limited supply is having a knock-on effect to the European producers, who are seeing increased demands. We are unaware at this time of when material will be readily available. It's also highly likely that the derivative benzyl acetate will be negatively impacted.

TERPINEOL

Producers are under pressure because of raw material price increases and due to the high investment costs associated with equipment required to work within the increasingly strict environmental protection rules. This coupled with consistency of world demands is driving prices higher.





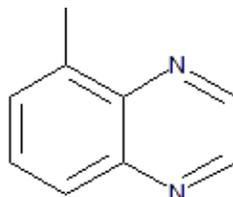
HIGH IMPACT *Chemicals*

COFFEE

Coffee is one of the most consumed beverages globally, and a very subjective one as everyone has their preferred flavour profile. The following are interesting suggestions for tweaking a coffee formulation to take the flavour profile in a different direction:

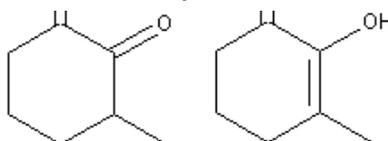
5-METHYLQUINOXALINE, FEMA 3203

With its roasted aroma it is used to bring out the nutty character of coffee.



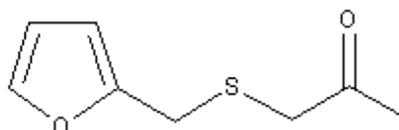
3-METHYL-1,2-CYCLOHEXANEDIONE, FEMA 3305

Has burnt sugar and caramel notes perfect for sweeter flavoured coffees.

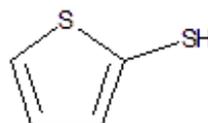


1-(2-FURFURYLTHIO)PROPANONE, FEMA 4676

It's hard to believe this material is not nature identical in coffee as its aroma is like freshly crushed coffee beans. Ideal for giving freshly ground notes.

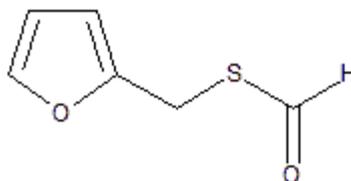


2-THIENYLMERCAPTAN, FEMA 3062



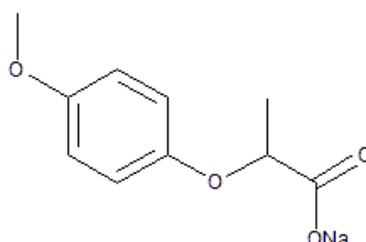
2-FURANMETHANETHIOL FORMATE, FEMA 3158

Both have powerful burnt coffee notes to give a more ashy character.



SODIUM 2-(4-METHOXYPHENOXY) PROPIONATE, FEMA 3773

Is nature identical in coffee but the odd one out here as it has negligible odour. Its use is in modulation of the flavour profile, especially for masking sweet notes of sugar while liberating some of the savoury character of coffee.





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