

MARKET Intelligence



AUGUST 2019

Citrus Oils • Essential Oils • Chemicals • HIC

IN THIS ISSUE

<u>U4</u>	Citrus Oils
08	Essential Oils
10	Chemical Ingredients
12	High Impact Chemicals



In this issue, following a tumultuous period of falling prices and market uncertainty, we reflect on the challenges we're facing as well as look to the opportunities ahead. The uncommonly fast softening of the cold processed orange oil market has made its mark on the citrus landscape, creating a sense of nervousness that can be felt throughout the industry. With many questions yet to be answered, the market is becoming more static as buyers wait to see what will happen next.

However, despite market challenges there are good news stories coming from a number of key growing regions. We're delighted to report Florida's orange projections are moving in a positive direction after an incredibly difficult year and Brazil's numbers are also looking higher than previous seasons. It remains to be seen what the impact hurricane season will have on these figures, but a promising start nonetheless.

As markets continue to fluctuate, it's never been more important to keep all lines of communication open. We work in partnership with our suppliers and work hard to bring you the latest from the world's key growing regions that can mitigate risk and drive business growth.

WELCOME





CITRUS

ORANGE

Brazil

Expected numbers for season 2019 - 2020 were confirmed on 10th May 2019 when Fundecitrus published their first forecast suggesting a bumper 388 million boxes (mbx). This represents an approximate increase of 30% from the previous season. At the same time, we witnessed a faster softening of cold pressed orange oil (CPOO) than ever seen before in a 12-week period leading up to the third guarter of 2019. This led to some buyers actively watching and waiting, seeking to call the bottom of the market, a risky approach in such a volatile marketplace.

However, despite CPOO falling rapidly, the cost of d-limonene and terpenes has continued to fall faster, and the minimum USD 2/kg gap between them remains consistent with what we have seen for numerous months. We must ask ourselves how much further will this market fall, and where is the bottom line? Will these prices attract buyers back from alternative products? For those concentrating orange oil, the pressure continues to remain competitive on folded oils and fractions, and it has become a balancing act in cost allocation.

Although it is perceived to be a bumper crop, there is still much speculation as traditional market indicators contradict one another. The latest news suggests the crop may not be as big as first predicted, but we will have to wait until September when the next Fundecitrus box count is published to see if this is an accurate prediction.

Overall the market appears to be in a static position as buyer's high-cost oil inventories restrict them from coming to the market in one sense, but on the other hand, it gives them more time to wait and hope the terpene and oil markets realign to a more sensible level for all. Many remain nervous about what will happen over the next few months and there are many questions still to be answered.

USA/Florida

Florida continued to move in a more positive direction this season through Q2 and into Q3, although the latest USDA update (July 2019) suggested a steady decline in box projection since March 2019's figures, 77 mbx to 71.6 mbx, a 7.5% reduction.

In the context of the challenges Florida has faced in recent years, one would think this represents a solid season. Hopefully the start of stabilisation, and the slow rebuild of a relentless and courageous industry. As we entered hurricane season again this year, all seems positively quiet.

However, we must remember that projections suggest there will be five to seven hurricanes this year, four of which are predicted to form into major storms. Alongside the 10-year battle, Florida has endured with Huanglongbing (HLB), the bacterial disease known as citrus greening, the mealybug has recently re-emerged in Lakeland, after a gap of 10 years. The mealybug larvae pierce the surface of the citrus fruit and settle to feed. The resulting damage caused to the fruit render it unusable for either the fresh fruit or the processing market. It is not yet known whether the mealybug is resistant to the pesticides used on the Asian citrus psyllids that carry HLB. Further investigations and research continue.

USA/California

This turned out to be an interesting season for California. As growers continued to recover from the 2018 season, they saw an increase in the disease known as Puff, particularly across lemons and the Navel variety. This condition is caused by excessive rainfall followed by rapid exposure to heat causing the pith (inner layer of the rind) to separate from the skin, swelling the fruit and inflating the skin to form a bumpy surface, and in some cases an indent or crease. This resulted in fruit deemed unsuitable for the fresh fruit market and it was redirected for processing. However, these fruits are proving difficult to process due to their shape, causing a negative effect on yield recovery.



Mexico

Moving towards the latter part of the 2018 -2019 season, positive momentum continued. The forecast figure of 4.6 million metric tonnes (mmt) of oranges remained on target and the estimated 55% (2.53 mmt) of the total crop being directed to the processing industry came to fruition. With this amount of fruit being processed, coupled with good quality and consistent yields. Mexico should have generated approximately 7,000 mt of CPOO and 2,500 mt of d-limonene. They continue to become a larger player within the orange world, and a very important part of the supply chain.

Looking ahead, the droughts currently being experienced could present a challenge next season, and if the situation does not improve, we could see a reduction up to 15 - 25% on the 2018 - 2019 season.



LEMON

Argentina

The global imbalance of supply and demand continued as Argentina's 2019 - 2020 season got under way. At the beginning of the year, some had expectations of a lower crop than the 2018 - 2019 season, but this was not the case. However, months of heavy rainfall had an impact on the size of fruit which affected fresh fruit exports. Although this increased the estimations of total tonnes growing, the yields for juice and oil had fallen. That aside, as we progressed through the season it became apparent less fruit would go for fresh fruit export but would be redirected to the processing industry. With prices continuing to soften, to a level perhaps close to what is sustainable for processors and an existing oversupply globally, more oil became available in the marketplace. This leaves us to contemplate two scenarios - is all fruit going to be processed or will the processing season potentially finish early?

Spain

This season was a rollercoaster ride for Spain, but things look set to finish on a positive note. Prior to the start of the season back in September 2018, Alimpo published a projected crop of 1.3 million tonnes, the biggest in 10 years, with a typical 200,000 mt destined for the processing industry. This continued to remain consistent with Alimpo's third publication on 24th January 2019. The loss of fresh fruit sales during the first quarter of the season (October -December 2018) to competing countries posed major challenges early on for the industry. however, we are delighted to report through Q2. Q3 and into Q4 that the nation bounced back with good volumes of fruit at competitive prices being directed to the industry. It is believed that a record total lemon crop processed reached 310,000 mt at the end of Q3. As we enter Q4, it is anticipated that by the end of the season, the total volume of lemons processed may well reach 350,000 mt. This certainly sends the message that Spain remains a competing lemon nation for industrial products. The peel market also seems to have awoken, along with solid demand for both juice and oil.

USA/California

California has traditionally been considered an almost exclusive grower for the fresh fruit market, with most of its fruit going directly to packing houses. In a standard year, around 20% of fruit will be redirected to processing where it doesn't meet the guality requirements for the fresh fruit market. However, we have witnessed a 360 degree turn in the market this year, as the processing industry has taken

approximately 60% of the season's fruit with the remainder going for fresh fruit. This presented processors with difficulties in keeping up with the volumes of fruit.

This significant shift in the market is a result of two major factors. One is Puff disease (discussed in detail in the orange section of our report) which has had a major impact across lemon varieties and Navel orange. The second is due to the reduction in demand from the US for California lemons, along with an increase in imports of lemons from other countries.

Italy/Sicily

Even though the crop was a typical 500,000 mt with approximately 100-150,000 mt sent to the processing industry, the season certainly started with challenges. Heavy rains in October 2018, particularly on the west side of the country, caused damage to the crop, and as a result the industry saw extremely high prices for fruit.

However, as the season progressed the price began to soften. This was a relief for processors who clawed their way back to being able to compete with others. This season's fruit was generally smaller than expected, but early indications are that next season is looking favourable. One area of concern is a fungal disease which is being closely monitored very early on with hopes of minimal impact to the new crop. From a sustainability perspective, Italy continues to identify and cultivate new areas of land which is positive and refreshing to see. This is a strong indication that Italy will remain a premium lemon oil producer.

EXPRESSED LIME

Mexico

Mexico started processing Persian lime in June and will finish in late August - early September. Crops are slightly depleted, approximately 25 - 30% down because of severe drought. The fruit harvested at the beginning of the season was very small due to the lack of rain. There was hope that the fruit due to be harvested and processed in August/September would be healthier, but there has still been no rain. As a result, the fruit has a thin, yellowish colour skin, rather than the dark green colour we normally expect to see. Along with the thin skin, and the juice extractors not being able to process such small fruit efficiently, the yields have been much lower.

Another challenge is the downward trend in the overall percentage and volumes of fruit sent for processing of the total harvested. Looking back before 2015 it was common to see 40% and above of In addition, more fruit is going to the fresh market as demand for the fruit harvest going for processing. However, over the last few fresh fruit has grown over the summer months. This has pushed years that percentage has reduced to levels under 30% and it is prices up as supply and demand move further apart. Although cold still trending down. There are two main drivers for this spiralling pressed lime oil tends to follow the price of cold pressed lemon oil, movement: firstly the increased demand for fresh fruit export, it would seem the cost for cold pressed lime oil may be on the rise mainly into the USA, and secondly the reducing yields overall for whilst lemon remains flat. farmers derived from the rising average ages of their trees in harvest. The trees generally are older and the growth of younger trees coming through is relatively flat. Remember that six years after planting the trees, yields no longer increase but rather level DISTILLED LIME out, with decline kicking in from 10 - 12 years onwards. We hope the positive indication of peel demand continues to grow and helps to stabilise a supply chain that has been at breaking point for a good while

Mexico

The distilled Lime supply chain continues to be stressed. Current industrial fruit prices are averaging in excess of USD 113/mt, which when compared to the average mt price last year, represents a 16% increase for the year ahead.



Juice demand continues to be moderate with peel demand potentially starting to show early signs of a positive, if slow, turn around. It would appear there is more processing capacity for peel than supply chain demand at present and has been for some time now, forcing some processors to weigh up offsetting fixed costs while others have either stopped processing or chosen to operate at a significantly lower capacity to avoid stockpiling peel.

This presents a risk should demand come back online rapidly. Will processors be able to react quickly enough to service needs? And even then, they will be unlikely to recover processing capacities or volumes of previous years due to a decrease in total volumes of limes available for processing in the regions.





LITSEA CUBEBA (CHINESE)



We understand that the annual production of litsea cubeba is well Although we saw some softening over the last few months, under way, albeit after a slow start due to heavy rain. The lack of this appears to have been short lived as we are already seeing sunshine is causing a lower yield of oil, with a lower citral content. prices creep back up. This increase has been caused by farmers It is difficult to predict which way the price of these products will and producers, who had enjoyed the higher prices, losing some go as it seems prices never completely stabilised following the enthusiasm for harvesting in order to keep prices high. Another shortage of citral in 2018. factor being the harvest time for many other crops and the same farmers and labourers are focussing their attentions on other, more lucrative endeavours. The result is a shortage of raw material for new oil production and prices heading north. It is rumoured that no new oil will be produced before October.

ANISEED/ANETHOL (CHINESE)



There is still very little fruit oil available in the market as it continues to be snapped up for the fresh and pharmaceutical markets. The fruit oil, which has an unpleasant odour, is used primarily in the production of anethol. Considering that harvest season is over and there is still very little available, it is expected that the price may continue an upward trend until the next harvest.

GINGER (CHINESE)



The price of ginger oil is edging up slowly, but not as sharply as fresh ginger roots. The reason for this is that there was a lot of carryover oil from the previous season where roots were damaged and not suitable for the fresh market and were thus used for the processing of oil instead. However, once the carryover stocks are depleted, new oil will have to be produced from the higher-priced raw material, which could lead to a sharper rise in prices.



EUCALYPTUS GLOBULUS (CHINESE)





Since our last edition, the price of fresh garlic bulbs have risen further, and they are now selling at RMB 2/500gms. The lowest price recorded last year was RMB 0.35/500gms. We are hearing that although it is harvest time for garlic now, none of the factories have been producing oil, and have no plans to any time soon. The cost of producing oil using such expensive raw materials being prohibitive. Carryover oil is still available, but the price is rising steadily.



CHEMICAL Ingredients -10-

Prices remain high for this product due to the ongoing issue with Following the significant supply issues we saw in 2017 for a limited supply and the increased costs faced by the remaining benzyl alcohol (caused by a large Chinese manufacturer ceasing factories still producing. A new factory is now producing material production), various other factories increased their capacity to which has helped with supply, but prices remain firm due to the try and meet market demand. The large Chinese producer has strong demand. since reopened and flooded the market, creating an imbalance in supply and demand which has caused a surplus of material available. This has caused the price of benzyl alcohol to fall dramatically, along with numerous other factors such as the softening price of the raw material, toluene.

MALTOL AND ETHYL MALTOL

Maltol prices have softened in recent months, mainly due to a large new producer entering the market and delivering competitively priced material, encouraging other factories to follow suit, offering cheaper product. A similar trend can be seen for ethyl maltol, which is also due to a new producer entering the market, however not to the same extent This is because prices were already lower and supply is still not as readily available. However, it is important to note that during the summer months, some of the maltol and ethyl maltol factories in China may temporarily halt or reduce production until the hotter months pass. This could influence the price depending on inventory levels being held versus demand.

BENZALDEHYDE

Benzaldehyde has seen prices firm up of late, despite the toluene softening. This is predominantly because a large proportion was diverted to make benzyl alcohol, leaving little for the market. With demand remaining firm and factories no longer keeping up, availability has become more difficult and more expensive. With the benzyl alcohol market improving it's anticipated that this will allow the situation to reverse, replenishing the supply chain, but this is one to watch over the coming months.



BENZYL ALCOHOL

TURPENTINE

In our last issue, we spoke about the pricing of turpentine finally stabilising after the previous two years of continuous price increases and availability issues. We are now hearing of prices starting to fall. This is due to new factories opening earlier in the year, bringing fresh material to the market. The crop period is typically between May and September, so supply is currently at its peak which may allow some slight softening in prices for the raw material. Many Chinese factories do still have high priced stock of the downstream derivatives such as alpha and beta pinene so it will take some time to feel the full effect on these products, but this market could start to fall in the coming months.



HIGH IMPACT Chemicals

EXCEEDING EXPECTATIONS

Our range of high impact chemicals allow for the creation of unique products that provide consumers with a taste experience that rivals and often exceeds the original food they are based on. Keeping pace with the continually evolving palate of consumers requires knowledge of all molecules available for a given nuance, including the lesser-known molecules herein.

2(3),5-DIMETHYL-6,7-DIHYDRO-5H-**CYCLOPENTAPYRAZINE** (FEMA 4702) CAS: 38917-61-2

Rich almond / filbert nut characteristics that perform in nut, coffee and pork flavours are provided by this molecule when employed at levels ranging from 1 to 10ppm. In comparison to its less substituted, but more widespread relative 5-methyl-6,7-dihydro-5H-cyclopentapyrazine, deeper brown notes can be achieved with less vegetative nuances. Nature identical in almond and fermented wild rice.

3-MERCAPTOHEXYL HEXANOATE (FEMA 3853) CAS: 136954-22-8

A much less widely known 3-mercaptohexyl ester in comparison to the analogous acetate

and butyrate esters: 3-mercaptohexyl hexanoate affords a softer, sweeter sulphur note and is synonymous with grapefruit and passionfruit flavours. This longer chain ester provides smoother, fruitier notes and a longer lasting flavour impact. When combined with 3-mercaptohexyl acetate and/or butyrate a well-rounded grapefruit top note can be achieved. Dosage levels range from 0.01 to 0.5ppm for tropical / grapefruit flavours and 1 to 5ppm for cooked vegetable application. Nature identical in yellow passionfruit.

1-METHYLTHIO-2-PROPANONE (FEMA 3882) CAS: 14109-72-9

Intensely powerful fried leek, asafoetida plus roasted sesame notes are provided by this intriguing molecule. The perfect accompaniment to rich savoury flavours, transforming formulations and bringing them to life. Dosage levels ranging from 0.01 to 0.5ppm, resulting in a very low cost in use. Nature identical in roasted sesame oil.

2-HEXYLTHIOPHENE (FEMA 4137) CAS: 18794-77-9

Nature identical in a whole host of foods such as roast beef, cranberry and mushrooms - this versatile

molecule enhances a multitude of formulations. Excellent in cranberry due to its inherent green, floral sulphur notes but equally suited to seafood flavours where it enhances the sweet, fruity nuances of clam, scallops and white crab meat. Dosage levels range from 0.01 to 2ppm depending on the desired effect.

THIOPHENE-2-THIOL (FEMA 3062) CAS: 7774-74-5

Two very distinct sulphur functionalities result in an extremely powerful molecule that enhances formulations at levels as low as 1ppb but can be employed up to 0.1ppm for increased intensity. Its sweet, smoky nature accentuates the ashy notes of coffee as well as providing balance to smoke flavours. Thiophene-2-thiol also provides enhanced richness to roasted meat or vegetable based savoury creations. Nature identical in hazelnut.

















Copyright[©] 2019 Treatt plc.