

ESSENTIAL OILS  
**MARKET REPORT**  
WINTER 2018

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**Ultra International B.V.**  
Essential Oils, Ingredients, F & F

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As another year draws to a close, I extend my heartfelt gratitude to all our friends and partners for their unwavering support.

Our journey over the past few months has been a fruitful one. Like all journeys, ours too has been dotted with ups and downs – more ups than downs, I am happy to add.

During the year, the Ultra Group of companies was a proud participant at several prestigious industry events and conferences. The Ultra Perfumers' Challenge created quite a buzz among patrons at the World Perfumery Congress (WPC) 2018. At International Federation of Essential Oils & Aroma Trades (IFEAT) Cartagena, we were kept on our toes with enquiries about products, operations, and partnerships. Enriching insights regarding essential oils in the global juice and beverage industry were shared and imbibed at the ICBC (International Citrus and Beverage Conference) in Florida. The NAHA World of Aromatherapy IX Conference in Utah was a milestone in reaching out to new audiences. All in all, it was a time to forge new friendships and rekindle old ones.

From the field frontiers, the year has been particularly difficult for Bulgarian lavender. Unfavourable weather conditions have impacted the crop, leading to an extreme shortage on the oil front. Brazil also has its set of problems with the 2018/19 orange crop forecast to plunge by almost 23% compared with the previous year.

On the other hand, the sun has been shining on some of the other products. Argentina and Spain witnessed a substantial increase in lemon crop production. The horizon looks somewhat brighter for Florida citrus after a long period of declining production. According to the USDA report released in November 2018, orange production in 2018-19 is forecast to rise by 71% compared with last season, and grapefruit production by 65%.

We consider Mother Nature our friend; but are rendered helpless when she unleashes her fury! This year an area of Sulawesi in Indonesia was hit by a tsunami. The Ultra and Van Aroma team, true to our grain, proactively led relief efforts in the area. The Kerala floods in southern India caused mass destruction and the Sanganeria Foundation actively supported relief operations. We did our utmost to reach out to all affected; and our prayers will always be with them.

Organic farming continues to arouse considerable interest. We, at Ultra, are proud to announce our newest conviction, 'Ultra Organics,' with a strong commitment to provide truly organic certified products to our customers. Turn the pages for the facts and more on organic oils included in this edition.

We nudge you to dive into the jolly holly season with the essential role of fragrances associated with it. We wish you all a very Merry Christmas, and hope it brings warmth, and good cheer.

We are hard at work to bring you new essential oils from Canada, Japan, South Africa, and other exotic origins. Stay tuned for more in our forthcoming reports.

Warm regards

**Priyamvada Sanganeria**  
Director, Ultra International BV



## LEMON OIL

*Citrus limon L. Burm. F.* 🌍 Argentina

According to the most recent USDA report, Argentina's lemon production in 2017/2018 is expected to reach 1.55 million metric tonnes (MMT). This is an increase of 100,000 MT compared with the last crop and partly arises from more favourable weather conditions. Exports of fresh lemons are expected to increase because of the larger production and also because of the reinstated new markets such as USA, Brazil, Mexico and the gradual expansion of non-traditional markets in Asia. Nevertheless, lemons destined for the processing industry are forecast to increase to 1.18 MMT from the 1.12 MMT processed from the previous crop.

However, Argentina's current economic situation is probably the worst facing any emerging economy, having the potential for a severe recession alongside social and political unrest. A currency crisis has meant the Argentine peso has fallen by more than half in 2018, which should put downward pressure on lemon oil prices. However, rapid inflation is predicted to reach 44% in 2018, and combined with an interest rate rise to 60% has increased production costs. Also, in early September, as an "emergency measure," a 12% export tax on FOB export prices was announced for all exports during 2019 and 2020. A cap was imposed so the tax cannot exceed 4 pesos per US dollar of the FOB export price (i.e. based on US\$ 35 per kg export price the tax would be US\$ 2.85). In late October the Macri Government agreed a US\$ 57.1 billion bailout package with the IMF, which has brought some stability - but for how long? The market was further complicated by the USA's imposition of a 3.8% duty on lemon oil imports from Argentina beginning November 1, 2018.

Highlights for Argentina:

- Supply and demand are in equilibrium
- Still an inventory of lemon oil to sell
- Price is lower than the last crop and has further decreased slightly in October 2018
- Exports of fresh lemons are expected to increase but the volume of lemons processed will also rise
- Argentina's deteriorating economic situation is creating major challenges for the lemon sector

📈 USD 31.00 /kilo

### MAJOR LEMON PRODUCERS - ESTIMATED PRODUCTION AND PROCESSING DATA ('000)

Countries	2015/16		2016/17		Forecast 2017/18	
	Production	Processing	Production	Processing	Production	Processing
Argentina	1350	1003	1270	950	1550	1180
European Union	1333	243	1536	284	1484	285
USA	822	190	804	159	791	155
South Africa	308	56	430	115	460	123
Total	3813	1492	4040	1508	4135	1743





### EUCALYPTUS HORISTES

*Eucalyptus kochii* 🌍 Australia

Coupled with short supply, and limited offers, demand continues to rise. Eucalyptus originated from Australia, and, at present, there are over 200 species of eucalyptus available. Due to rising prices of Chinese eucalyptus, the Australian eucalyptus distillers have adopted new distillation processes to harvest, distil, and process several other eucalyptus trees like globulus, horistes, and radiata. Recently, there has been a surge in demand for eucalyptus horistes oil, but supplies continue to remain limited. Current production for horistes is 30-50 MT a year.

🏠 AUD 38.00 /kilo

### EUCALYPTUS RADIATA

*Eucalyptus radiata* 🌍 Australia

Coupled with short supply and limited offers, demand continues to rise. Current production for radiata is 10-20 MT a year.

🏠 AUD 85.00 /kilo





### BUDDAWOOD OIL

*Eremophila mitchellii* 🌍 Australia

The emerging advanced, and improved distillation facilities have increased capacity with larger batch sizes now available in the market. Furthermore, the newly adopted distillation processes have resulted in a change of oil colour from a dark brown shade to a lighter brown. Under current conditions, sales and production figures reveal steady progress, and continue to rise at a healthy rate. Currently, more material is offered for sale than demanded.

🏠 AUD 525.00 /kilo

### LEMON MYRTLE OIL

*Backhousia citriodora* 🌍 Australia

The new crop has just been harvested in October and the current year's yield is noted to be good. The origin of Australia holds a top position in the aromatherapy sector because of the odour profile and high efficacy. Due to high demand and low production, the demand-supply figures remain inconsistent. In the past, most lemon myrtle trees were left unused without distilling. However, the growing interest for the oil in the aromatherapy market has led to demand touching new highs. Global demand has led to new producers entering the market. Prices have already risen dramatically, and are expected to increase further. New rejuvenation programmes are in place in order to increase supply over the next 3-5 years. We estimate 2018 production to be 1,500 kg, and in 2019, 2,000-3,000 kg. However, new areas are expected to make a significant contribution to the quantity of oil produced; future volume is expected to increase around 20-25 MT over the next five years.

🏠 AUD 550.00 /kilo

### ROSALINA OIL

*Melaleuca ericifolia* 🌍 Australia

The market continues to remain stable with an on-going production of rosalina oil. In Tasmania, processors have reported new potential production figures of 140 kg. In current market conditions, distillers are exploring ways of producing this oil in TuckiTucki. Aromatically, rosalina essential oil is a top note that has a fresh, lemony, and camphorous aroma.

🏠 AUD 390.00 /kilo



### CYPRESS OIL BLUE

*Callitris intratropica* 🌍 Australia

The growing demand from the aromatherapy sector has led oil requirements to reach a new high. The demand and supply for this essential oil are relatively stable. Currently, there is material available with stable prices.

🏠 AUD 550.00 /kilo

### MACADAMIA OIL

*Macadamia integrifolia* 🌍 Australia

Macadamia oil is popular in cosmetic manufacturing and, in combination with other carrier oils, is perfect for massage and aromatherapy. A thin and light oil, it is absorbed quickly, and leaves a non-greasy feeling that nurtures and restores clearer, smoother, younger-looking skin. It is high in mono-unsaturated fatty acids, and contains palmitoleic acid (promotes soft skin), as well as omega 3, and omega 6 fatty acids. In strong demand by consumers around the world, macadamia oil is known for its wonderful anti-ageing properties. Demand for this essential oil has increased significantly. However, supply is currently stable, with sufficient stock availability.

🏠 AUD 13.00 /kilo

### SANDALWOOD INDIAN OIL

*Santalum album* 🌍 Australia

Due to continuing financial instability, market activity has gone down, and producers continue to remain unsteady. However, the market appears fairly stable with production and supply at an even balance amidst demand stability.

🏠 USD 3000.00 /kilo



### SANDALWOOD QUEENSLAND OIL

*Santalum lanceolatum* 🌍 Australia

The market welcomes sandalwood oil as a new entrant from Queensland sandalwood species. Traditionally, oil was used for incense and carving. New partnerships coming up in 2019 are expected to improve the supply chain at source thus ensuring continued success of this product in years to come. Production from East Coast - Queensland is expected to touch around 400 kg a month.

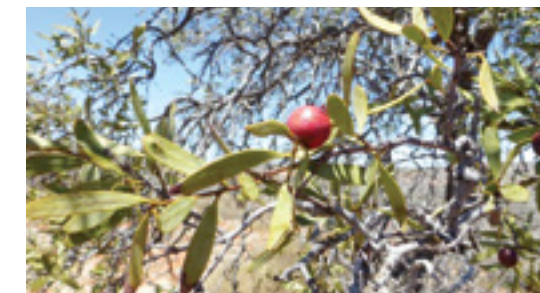
🏠 USD 1600.00 /kilo

### SMOKEY MYRTLE OIL

*Leptospermum glaucescens* 🌍 Australia

The trend in 2018 shows a high demand with low supply. As a result, prices are expected to rise in the near future to meet the increased demand.

🏠 AUD 350.00 /kilo



### SANDALWOOD OIL SPICATUM

*Santalum spicatum* 🌍 Australia

Current demand for sandalwood oil is active, and the market is expected to be stable with good availability of stock. The supply and production remain constant.

🏠 USD 1400.00 /kilo

### TASMANIAN MINT OIL

*Mentha piperita* 🌍 Australia

Demand for Tasmanian mint oil is soaring, especially in the aromatherapy sector. The good news is that new supply sources have been found in mainland Australia. New material should be entering the market shortly, as the harvest season will commence in January.

🏠 USD 55.00 /kilo

### TEA TREE OIL

*Melaleuca alternifolia* 🌍 Australia

Favourable weather conditions along with sufficient rainfall have led to positive forecasts, indicating a sizeable harvest in 2018. This season's harvest saw increased volumes of around 10-15% compared to last year resulting in good supply. Demand for this product continues to increase in the same manner. The market appears fairly stable with price and supply at an even balance, attracting more industry users to this natural essential oil. Besides quality, the oil yield per hectare has also improved. The chief producers have already finished producing and harvesting, unlike small farmers who are still continuing crop processing and harvesting. Golden Grove Naturals (GGN) has planted new varieties of tea tree, which could give a yield of 500 kg/hectare in the next two years, beating the industry average.

🏠 AUD 48.50 /kilo



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## IN CAPTAIN COOK'S FOOTSTEPS THE TRAVEL JOURNAL OF HIS DESCENDANT

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*Nathalie Sahut, Fragrance Influence, France*

Jack Cook's journey through a spicy trail in Australia.  
Navigate through the sandalwood exploration with him.

The 1768-1771 expedition by British navigator, explorer and cartographer James Cook took him to the East Coast of Australia, where he was the first European to set foot. During the adventure, his ship, the Endeavour, ran aground on the corals of the Great Barrier Reef. The famous three-mast vessel was seriously damaged. It took seven weeks of repairs on the beach to get it back afloat.

The explorers and botanists on the expedition took advantage of the unscheduled pause to walk around the immense land they had just discovered. They came across Australia's aboriginal inhabitants and observed its abundant and diverse flora.

Today, Jack, the descendant of the famous explorer of this time, walks in Captain Cook's footsteps to discover this exceptional Australian plant life, which is the source of numerous essential oils with countless virtues. Let's follow him on his journey...



Jack started his adventure by strolling through the wonderful forests of sandalwood. He discovered those magnificent trees and their delightful essence, which is sometimes referred to as "liquid gold". Effectively, its precious and olfactory qualities - it has a suave, balsamic, milky fragrance with remarkable smoothness and persistence - justify its high cost.

Jack had a chance to meet friendly aboriginal inhabitants with whom he got on. They spent a wonderful evening all together around the fire and shared their respective life experiences. He discovered that most of their families were working to produce sandalwood. Those people knew more than anybody else about this fragrant tree. They explained to Jack that the premium quality sandalwood was extracted from rare specimens over sixty years old, in which case the oil can be extremely expensive.

He also discovered that Australia was home to numerous species of sandalwood.

Originally from India, *Santalum album* has long been used to make perfume thanks to its smooth, creamy, woody notes. Today, this Indian species is cultivated on a wide scale in western Australia.

*Santalum spicatum*, commonly called "Australian sandalwood" is a tree that originated in the semi-arid regions of south and west Australia. Its raw, earthy notes make it an original and distinct ingredient for perfumers.

Not far away, *Santalum austrocaledonicum* grows endemically in New Caledonia and the Vanuatu archipelago.

Lastly, the most common of the "Australian sandalwoods" is *Santalum lanceolatum*.

In his turn, Jack told his new friends how, in the country where he came from, the essence of sandalwood was very much appreciated for its odour. He even revealed to them that sandalwood was used in the composition of the most delightful fragrances of the world.

That was an evening none of them would ever forget!



Jack continued his journey through the wild part of this huge continent island.

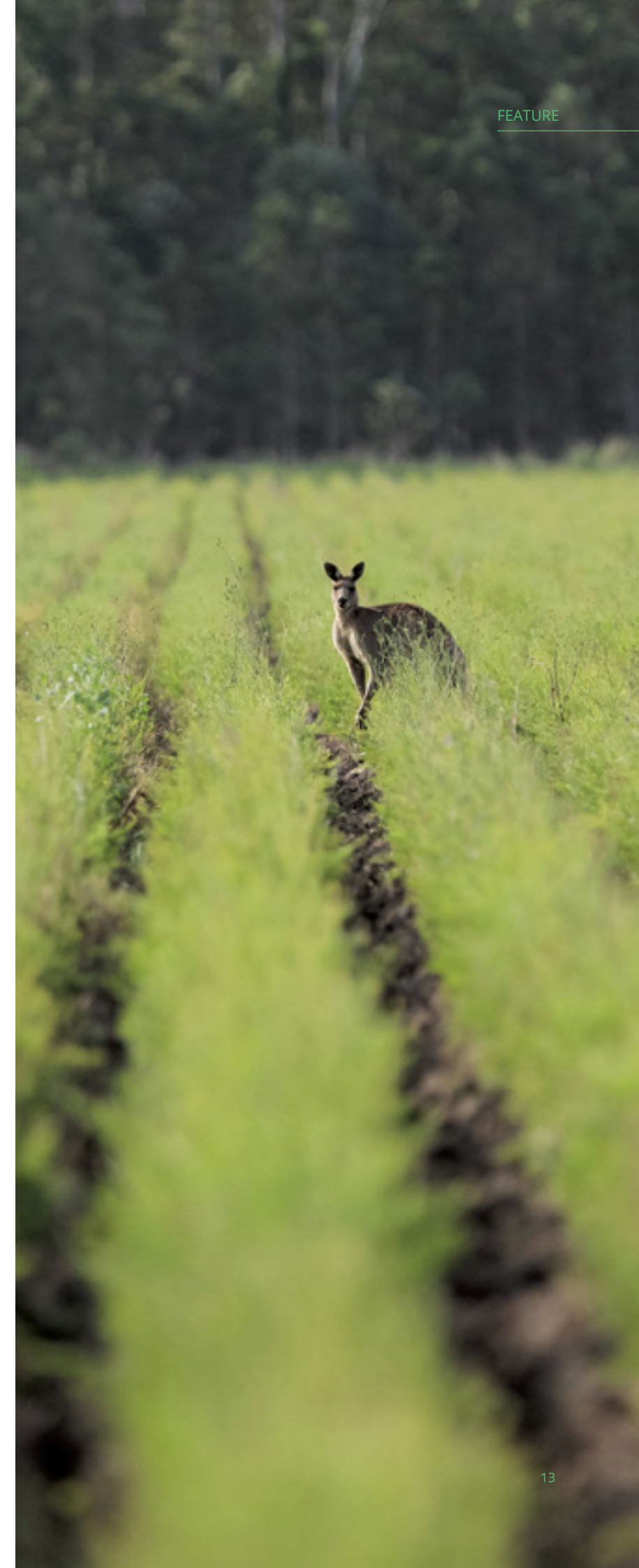
He discovered why the plant known under the botanical name *Melaleuca alternifolia* was commonly called tea tree and should not be confused with the tea plant (*Camellia sinensis*). Legend has it that his great, great, great grandfather, Captain Cook, came up with the name "tea tree" during his voyage around the world in 1768-1771, when sailors on his expedition used the leaves of a tree from the *Myrtaceae* family to substitute their favourite beverage!

He also learnt that Australian aborigines have been familiar with the medicinal properties of tea tree leaves for centuries. Traditionally, they used them to fight colds, fevers and congestions. They would crush the leaves and inhale the essence or infuse them to make a drink.

Jack was lucky enough to meet a generous local producer called Jarli who took time to share with him his passion for this amazing plant. Jarli taught Jack that it was not until the 20<sup>th</sup> century that essential tea tree oil was first produced in Australia from wild trees.

"The leaves are harvested in the summer, starting from December" explained Jarli. "The trees are pruned when they are at their most leafy, which is when the leaves contain the maximum amount of essential oil. Careful cutting ensures that the trees can recover their foliage in two years."

Then before leaving, Jarli made Jack smell the tea tree essential oil he produced. He discovered then a strong herbal, woody fragrance and kept in his pocket a small bottle containing this essential oil in memory of Jarli.







During his trip around Australia, Jack was surprised by this powerful scent, highly distinctive, combining camphoraceous notes with green and woody nuances. He quickly learned to recognise it, the smell of one of the most symbolic trees in the country - eucalyptus.

When he looked up, he was fascinated to see so many koalas in the branches of these nice-smelling trees!

Keira, a member of the Australian Koala Foundation - which works for the protection of these animals - explained to Jack that the essential oil extracted from eucalyptus leaves contains components that could be toxic. One exception is koalas, whose diet exclusively features these aromatic leaves!

*"This girl is so captivating"*, thought Jack. To be honest, she was not only interesting, she was also very pretty and charming. So, Jack decided to invite her for dinner. Keira was from an aborigine family. Her grandmother always taught her the faiths of these people to whom they both belong. During this enchanting evening, Jack discovered that aborigines have known about the antiseptic and disinfecting properties of the eucalyptus essence for a long time. They traditionally used the plant to treat respiratory infections and skin disorders. They also used eucalyptus as a natural insecticide.

Keira felt good with Jack and she told him a little more about her family and their traditions. She explained that her grandfather used to pick old eucalyptus trees hollowed out by termites to make didgeridoos, considered to be one of the oldest instruments in the world. The primitive sound of the didgeridoo could induce trances. For Keira and her family, it is a sacred creative object that was given to man to sing and create the earth, sky and stars...

Jack was definitely under the mesmerising charm of Keira...



*"Come with me Jack, I'd like to show you something..."* said the young lady the next morning. After a few minutes walking, they arrived in an incredible wild place. They decided to sit under a huge tree. *"The Blue Cypress is one of my favourite trees"* said Keira. *"We use it to refresh, calm and regenerate the skin, and to keep insects away"*.

*"... and I know that today, essential oil of blue cypress is widely used in cosmetics for its anti-age virtues."*

Jack was so impressed by the knowledge of this young lady.



The next day, Jack was invited for lunch with Keira's family. To welcome them, her mum offered them a nice refreshing beverage. Jack was surprised by this new taste he did not know previously. Keira explained to him that traditionally Australian aborigines appreciate the essential oil of lemon myrtle for its invigorating properties and use it frequently in cooking.

*"Lemon myrtle only grows in the Australian rain forests. Its Latin name, Backhousia citriodora, comes from the English botanist who discovered it, James Backhouse, and its delicate citrus scent"* said Keira.

*"The oil is a rich source of antimicrobial and antifungal active substances and was historically employed as an ingredient in deodorants and in creams to soothe and cleanse problem skin. We also considered lemon myrtle essential oil as ideal to purify the air"*.

Jack was really thrilled to discover Australia in such good company.







Finally, Keira told a last story to Jack...

*"When the Maoris landed in New Zealand after leaving their native Polynesia, the local environment was totally new to them. It was not long before they discovered the highly fragrant flowers and leaves of the manuka shrub and its numerous virtues. The manuka confirmed its irrefutable powers when Maori warriors back from bloody battles were treated with its leaves, flowers and bark. Many years later, the scientists accompanying James Cook confirmed that the manuka plant was an indispensable ally that can alleviate all kinds of everyday ailments..."*



Jack will keep a touching memory of his journey in Australia mainly thanks to the people he met. He thought it would be important to pay tribute to the culture of Australian aborigines, based on the spirituality residing in the earth, landscape, fauna and flora that date from the dawn of the world's creation. He understood that the aboriginal people realised that the riches of nature could bring us benefits a long time ago. And he realised that it is up to us to take care of this sacred land and the many essences it harbours.



# A FRIEND TO YOUR IMMUNITY



*Tea Tree*  
AROMATHERAPY

Little drops of goodness brought to life.





## ORANGE OIL CP

*Citrus sinensis* 🌍 Brazil

The 2018-2019 orange crop forecast update for São Paulo and West Southwest Minas Gerais citrus belt, published on September 10, 2018 by Fundecitrus, is 273 million boxes. This figure corresponds to a decrease of 5.19% in relation to the estimate published in May 2018.

The primary reason behind this year's low prediction is that the trees are stressed after surprisingly good yields from last season. Consequently, the groves are expected to produce less fruit. Also, the arid weather and high temperatures in São Paulo and Minas Gerais states damaged blossoms, and were big impediments to the fruit setting. Local sources cite insufficient rainfall as another cause of worry and reason for a further crop reduction. There have been considerable delays in fruit picking due to the desired quality not being achieved, so this has caused processing activities to be slow.

In spite of such clear warnings of a lower 2018-19 crop forecast, orange oil prices have not really increased over the past few months. Though citrus markets are particularly difficult to analyse this could be for a few reasons. Buyers are waiting to fulfill their demand in the hope that prices may fall further. Furthermore, weakness in the US d'limonene market could also have an effect on price. The best strategy for customers with low volume requirements seems to be to buy on a spot basis. Those who have continuous demand throughout the year are advised to have annual contracts at fixed prices to fulfill most of their requirements.

🏠 USD 9.50 /kilo

## LAVENDER OIL

*Lavandula angustifolia* 🌍 Bulgaria

In recent years there has been a sizeable growth in lavender cultivation in Bulgaria, and a substantial increase in oil production was predicted in 2018. Unfortunately, Mother Nature had other plans and destroyed around 50% of the crop, bringing current harvest estimates crashing down to only 100-120 MT. 2018 witnessed nil opening stock as last year's crop was sold completely with no carry forward. Prices from origin are dependent on the supplier.

🏠 Euro 145.00 /kilo

## ROSE OIL

*Rosa damascena* 🌍 Bulgaria

Rose oil is recognised as one of the most traditional and premium essential oils in aromatherapy today. Bulgaria has been the land of rose oil production and remains the world's major rose oil producer. Roses begin to bloom in Bulgaria around the third week of May, and continue for 3-4 weeks depending upon weather conditions. However, this season experienced a severely compressed rose harvest period along with lower yields, labour shortages, and some distilleries even turning away already harvested rose flowers.

Last year's weather conditions resulted in a simultaneous blossom in all production regions, making it incredibly hard for the farmers to harvest and process the crop in a timely manner. This meant that rose flowers had to be processed within a 2-3 week harvesting period in contrast to the normal harvesting period of 4-6 weeks. This issue created complications for all the distilleries, especially for ones with insufficient processing capacity. Some got compelled to set daily limits on rose deliveries as well as turn away roses from non-contracted suppliers.

There was a lower yield with this year's harvest. Fortunately, the area under rose production has been increasing in recent years, growing by an estimated quarter in the past two years. The larger production area helped compensate for the lower yields. Additionally, this situation affected labour availability, as hand picking rose flowers requires great patience. Labour costs increased in an effort to attract and maintain labour supply, and the situation was not helped by legislative issues relating to labour employment.

However, organic production has been decreasing and the area under certified organic roses has declined by approximately 15% over the past two years, due to higher organic production costs, lower yields, and the ending of EU subsidies. 2018 witnessed downward pressure on rose oil prices.

Currently, rose oil is offered at different prices. The purity and authenticity of this product cannot always be determined with certainty. Despite the fact that the international fragrance community is now more alert to adulteration issues, there is still a significant production of adulterated "rose oil" in Bulgaria. It is strongly recommended that the standard GC-MC analysis be undertaken on all offers, along with other tests to prove authenticity and origin. Products can be labeled as "Bulgarian rose oil" only if they possess a PGI certificate and mark. A PGI certificate and special mark is symbolic of a guarantee.

🏠 Euro 6700.00 /kilo







### ANGELICA ROOT OIL

*Angelica archangelica* 🇨🇳 China

This year's output is expected to be higher than last year's. But due to GMP reforms in China, pharmaceutical companies are treading cautiously. As a result, demand is weak. However, there is a decent demand from angelica medicines and beverages. Prices of raw material are fairly stable, and therefore, so are market prices.

🏠 USD 403.00 /kilo



### CASSIA OIL

*Cinnamomum cassia* 🇨🇳 China

The cassia crop is a smaller size; and so prices have soared. Considering the weak demand, factories lowered prices in the hopes of recovering investments. However, this trend cannot continue since there is still one third of the crop remaining, and factories are already selling at a loss. The autumn crop is already harvested, and commands lower prices. Most factories have paused production in preparation for the next crop. Considering that demand is at an all-time low, it is a good time to book offers.

🏠 USD 36.00 /kilo



### CHINESE GERANIUM OIL

*Pelargonium graveolens* 🇨🇳 China

The crop season is over. Though torrential rains affected the crop, the output is still higher than expectations. Most oils have been collected by the locals. Assessing the current situation, it seems that supply can meet the demand, prices will stabilise after the initial fluctuations.

🏠 USD 220.00 /kilo



### CITRONELLA OIL

*Cymbopogon winterlanus* 🇨🇳 China

The production of Chinese citronella oil in the peak years was around 1,000 MT. This year, the volumes have plummeted to around 300 to 400 MT, mainly due to too much rain. The crop season is nearing completion, yet availability is limited. Some farmers are holding carryover stocks; though their offers are high. Chinese citronella prices are increasing at a fast rate and currently are at almost the same levels as Indonesian prices.

🏠 USD 30.00 /kilo



### CLARY SAGE OIL

*Salvia sclarea* 🇨🇳 China

Close to 12 MT of essential oil were obtained from 4,700 hectares of clary sage plantations in 2017. In 2018 1,700 hectares were cultivated. The crop is a healthy one, and so is the demand. Some of the distillers invested heavily in upgrading and steam distillation equipment. However, negligible margins on clary sage and huge investment on environmental protection have deterred some small farmers from continuing.

🏠 USD 155.00 /kilo

### GARLIC OIL

*Allium sativum L.* 🇨🇳 China

The season for garlic is over. Prices are at stable levels, and enthusiasm is running high because the outlook is forecast at 100MT. This is because the price was lower during August to October and supply too was constrained. There is also a demand for garlic as a fresh spice in preparation for Chinese New Year. Prices began to inch up at the end of September and hold the potential to rise further. Current pricing is on the lower side; and plantings have also decreased due to lower returns and environmental pressures. The output in 2019 is considered to be drastically reduced. It is recommended that customers who have demand must book material at the earliest.

🏠 USD 159.00 /kilo

### LITSEA CUBEBA OIL

*Litsea cubeba* 🇨🇳 China

The crop season is nearly over and quantity of seeds is small because of frequent rains in the main planting areas. There is also a shortage of labour. The increase in prices pushed up the cost of the oil. Most factories are refraining from buying large quantities of raw materials for processing. Considering the signs, this year's output is expected to be lower than last year.

🏠 USD 35.00 /kilo



### EUCALYPTUS OIL

*Eucalyptus globulus* 🇨🇳 China

The price of eucalyptus oil from the Jiangsxi Province has seen little fluctuation because it is produced all year around. The fire ban from government is still in place while most of the workforce is away in the cities. There is some apprehension of over-cutting of leaves, but we shall have to wait and watch. The price for this product can be extremely volatile. Customers are advised to have short term contracts to reduce the risk of unfulfilled longer term contracts.

🏠 USD 28.00 /kilo

### GINGER OIL

*Zingiber officinale* 🇨🇳 China

Severe flooding in the major producing area has had a major impact on the crop. As environmental norms are enforced more stringently, some crude oil processing factories have been asked to stop or limit their production. Supplies are becoming restrained; and market prices have stabilised at a higher level. However, depending upon several unfavourable factors pertaining to the raw material market, it is anticipated that prices will recover once demand becomes stronger. Therefore, it is strongly recommended that you cover any ginger oil needs for the next few months.

🏠 USD 71.00 /kilo





CHINA

### OSMANTHUS OIL

*Osmanthus fragrans* 🌍 China

Usually the flower season is completed and concentrated in the first and second seasons. This year has seen a deviation due to climate change. There are now three flower seasons with production approximately equal in each season. Most of the raw materials were snapped up by perfumers, pharmaceutical companies, and tea and dessert companies during the first and second seasons. Naturally, prices of flowers skyrocketed by almost 20-25%. Output is similar to that of last year. Production will begin again by the end of November and new materials will be available by December. The prices of osmanthus are higher due to increased raw material costs.

🏠 NA

### STAR ANISE OIL

*Illicium verum* 🌍 China

The new crop has started, and the new oil is available. However, the output from the main growing areas is somewhat meagre and supply is tight. This is because some farmers have gone out for city work and there is insufficient manual labour available to pick the fruits. Prices are predicted to firm up.

🏠 USD 20.00 /kilo

### TEA TREE OIL

*Melaleuca alternifolia* 🌍 China

The season for tea tree starts in August and continues till October. The growing areas have had copious rainfall and this has affected the plants. The production of raw material has been meagre, and supplies have been tightened.

🏠 USD 28.00 /kilo

### VALERIAN ROOT OIL

*Valeriana wallichii* 🌍 China

Production of valerian root oil is expected to rise to 3.5 – 4 MT, an increase of one third on the previous year's output. A limited carryover combined with the high demand from the medical and health care sectors is anticipated to put upward pressure on prices.

🏠 NA



DOMINICAN  
REPUBLIC (DR)

### AMYRIS OIL

*Amyris balsamifera* 🌍 Dominican Republic

The DR shares the Caribbean island of Hispaniola with Haiti. The economic and cultural differences between the two countries are immense. For example, on the Haitian side of the 200-mile border there is an eroded landscape, where charcoal production and land degradation have destroyed the forests. In contrast, the Dominican Bahoruco Forest on the southern border with Haiti, measures some 10,000 km<sup>2</sup>, approximately half of which is covered with small amyris trees. This tree dies back after approximately 10 years leaving large quantities of decayed flammable oil-rich amyris wood on the forest floor. While Haiti suffers deforestation and a severe lack of amyris oil raw material the DR has immense underutilised quantities. According to a recent NRSC Report, each year an estimated 2,250 MT of amyris wood collected from 450 ha of forest (well below 1% of the potential collection area) is needed to produce the 90 MT of amyris oil to supply global market needs. Approximately half the wood is smuggled to Haiti, while three distilleries in the DR process the remainder. Amyris oil production began in DR in 2002, but over 50 years earlier in Haiti. Misguided DR government restrictions on accessing and transporting the dead amyris wood has reduced availability and created current supply shortages and price instability. Moreover, the chemical composition of amyris wood can vary considerably thus affecting oil quality.

🏠 USD 75.00 /kilo



**BASIL OIL***Ocimum basilicum* 🇪🇬 Egypt

There appears to be good availability of stock in the market. The emerging demand will most likely lead to a price increase in the near future. Though the oil is available at source, there are reports of large cultivated areas, and, therefore, a sizeable crop is anticipated. During the coming months, stability in prices is expected.

🏠 USD 160.00 /kilo

**CUMIN SEED OIL***Cuminum cyminum L.* 🇪🇬 Egypt

Currently, demand and supply of cumin seed oil continue to remain stable. Prices are expected to remain stable for a while, but emerging demand will most likely lead to an increase in the near future.

🏠 USD 120.00 /kilo

**MARJORAM OIL***Origanum majorana* 🇪🇬 Egypt

Demand for this oil remains strong. The market seems to have stabilised as prices return to last season's levels. The new crop production has almost ended with expectations of reasonable volumes. Prices are expected to remain steady at the end of season.

🏠 USD 75.00 /kilo

**TAGETE OIL***Tagetes minuta* 🇪🇬 Egypt

The coming crop production started in June, and appears healthy with favourable weather conditions. The 2017-2018 season has resulted in a good quality crop that is perfect for oil production. Availability has kept pace with the growing demand. With balanced demand and supply, the situation is most likely to remain stable during the coming weeks.

🏠 NA

**BLUE CHAMOMILE OIL***Matricaria chamomilla* 🇪🇬 Egypt

This year had a very successful crop. Favourable weather conditions and new production have resulted in an attractive market. The crop, from recently planted seeds, has provided a good harvest for the upcoming season. Both supply and demand are in a steady state. The market is currently stable for this oil, and prices are expected to remain at current levels.

🏠 USD 550.00 /kilo

**GERANIUM OIL***Pelargonium graveolens* 🇪🇬 Egypt

Demand continues to remain very strong with sufficient availability of geranium oil at this point. Adequate availability of stock at origin keeps the market stable and price fluctuation of 2-3% is anticipated in the near future. Crop production has overshot the previous year.

🏠 USD 88.00 /kilo

**NEROLI OIL***Citrus aurantium* 🇪🇬 Egypt

Unfortunately, the market is currently under a lot of pressure. 2018 saw an overall decrease in neroli oil production even as the demand for this oil continued to increase. Prior to this year's harvest, quantities were booked in advance, ultimately leading to a constrained supply. For 2018, there is very little carryover stock, and there will be immediate pressure on whatever is available. Prices are expected to rise in the near future.

🏠 USD 5700.00 /kilo

**VIOLET ABSOLUTE OIL***Viola odorata* 🇪🇬 Egypt

2018 production of violet leaf absolute has been negatively impacted due to a decline in plantation area compared to last season. Prices have been rising steadily month-on-month, and are expected to keep in that direction as the raw material necessary for production, and the oil itself, are in short supply.

🏠 USD 1200.00 /kilo

**CORIANDER HERB OIL***Coriandrum sativum L.* 🇪🇬 Egypt

The market is currently stable for this oil and supply continues to remain active. Sources reassure that supplies are improving, and moving towards a healthier situation. There is material currently available on the market. This year's harvest is expected to be larger in size compared to last season's crop. Prices are expected to remain stable to the end of season.

🏠 USD 150.00 /kilo

**JASMINE ABSOLUTE OIL***Jasminum grandiflorum L.* 🇪🇬 Egypt

The jasmine absolute growing regions experienced a good bloom this year after favourable weather conditions. It is expected to be a good harvest in the near future. The demand and supply situation continues to remain steady. As a result of a good crop, expect stability in prices in the coming months.

🏠 USD 2850.00 /kilo

**PARSLEY LEAF OIL***Petroselinum crispum* 🇪🇬 Egypt

Due to stocks being low, and farmers not showing an interest, the market continues to remain flat. Current oil availability is limited, as oil production in Egypt has reached its limit, although there is just enough material available to keep the market satisfied. The price is predicted to firm up at end of season.

🏠 NA





## CERTIFIED ORGANIC ESSENTIAL OILS MYTH OR REALITY?

*Dorene Petersen, ND (NZ), DIP.AC.U, RH (AHG)*

The United States Department (USD) Agricultural Marketing Service (AMS) implemented the organic regulations in 2002. The US organic sector has tripled in size since then. Retail sales now exceed \$43 billion and there are over 22,000 certified organic operations. Strong consumer demand outruns supply providing market opportunities within the organic sector. <sup>1</sup>



Certified organic essential oils are not just free of pesticides. Organic production enhances biodiversity, biological cycles, and microbe-rich soil.<sup>2</sup>

Organic soil can also influence climate change. Carbon-rich soils are like sponges, absorbing water during floods and releasing it during drought. Damaged soils release carbon dioxide. Plant-covered soil, crop diversity, composting, and planned grazing puts carbon back into soils.<sup>3</sup>

Certified organic essential oils need the entire production chain to be free of pesticides. The USDA provides a list of permitted chemicals.<sup>4</sup> Fertilizers made with synthetic ingredients, or sewage sludge are not permitted. Genetically modified organisms (GMOs) are prohibited in organic production. Likewise, any post-harvest, ionizing or radiation before processing is not allowed.

Organic farms producing organic essential oils are inspected by a USDA-accredited certifier to enforce organic standards. Only authorized certified organic handlers may distill, extract, process, import or export certified organic essential oils. Organic handlers, processors, and retailers all adhere to these standards.

“Silent Spring” by Rachel Carson, founder of the environmental movement in the 1960s, appealed to readers to use pesticides with care, and act as stewards of a living earth. Her message of sharing responsibilities of stewardship is still at the heart of the organic philosophy. This includes the protection of natural resources, biodiversity, and the entire ecosystem.<sup>5</sup> Pesticide-free is a powerful commitment and a great starting point for an essential oil producer.

Fast forward to organic on steroids. Biodynamic farming was founded on the celestial interconnectivity theories and beliefs of visionary Rudolf Steiner. His approach to the importance of stewardship in agriculture was like Carson’s. A biodynamic farm is a unique living biosphere. Water conservation and biodiversity are key.<sup>6</sup>







Biodynamics, in the background since the 1920s, has recently gained popularity and market share. Companies like Eminence, producers of certified organic, biodynamic skin care products are leaders. Demeter, a global organization manages biodynamic certification.

Despite evidence that certified organic and pesticide free are optimal for the planet there is still doubt about organic validity and value. Balancing the bottom line and committing to producing certified organic essential oils is a challenge.

Essential oil companies that offer certified organic are focusing on data trends. Consumers are driving the upswing with their wallets. In 2017 China had a 19% growth in organic market offerings. American consumers favor holistic approaches, organic, simple ingredients, no artificial additives, non-GMO and pesticide free.<sup>7</sup> They want flavor and fragrance to be another source of wellness, along with the organic food they eat.

Even mainstream fragrance houses are going back to their roots using organic plant-sourced aroma materials. Guerlain's image provides a story of transparent natural ingredients sourced from "field to flacon".<sup>8</sup>

Transparent sustainability, environmentalism, the certified organic movement, the rise of veganism<sup>9</sup> and workforce welfare; these social forces are driving buying decisions in the flavor, fragrance, and aromatherapy markets.

But does an organic certificate guarantee a pesticide-free product? Pesticide residue is a global wall-to-wall carpet. Pesticides have been around since the late 1930s. Many take a long time to degrade in the environment resulting in global saturation. Every living organism has a DDT body burden, mainly stored in fat. Evidence reveals that DDT has endocrine-disrupting potential; carcinogenic action; and exposure in-utero leads to a host of development problems.<sup>10</sup>

Despite organic practices used to reduce residues, environmental pesticide poisoning and use continues. Organic agriculture practices cannot ensure that products are completely free of pesticide residues. If a certified organic essential oil contains pesticides, we assume that the source was a result of unintentional contamination. Organic production requires the soil to have at least three years with no direct application of, or contact with, pesticides.

Ideally, all certified organic essential oil producers would provide a lot-specific pesticide analysis. In the US a pesticide test costs around \$360. This is a large expense for smaller aromatherapy, retail or product manufacturing companies.

Any pesticides identified in a certified organic essential oil creates an ethical and fiscal dilemma. While there are yet no maximum acceptable levels (MRLs) of pesticides for essential oils many products classed as food or medicinal products have MRLs based on the acceptable daily intake. Global organizations including the World Health Organization (WHO), The European Pharmacopoeia, The United Nations (UN), and the Food and Agriculture Organization (FAO) are all involved in setting MRLs. The Codex Alimentarius Commission was established in 1961 to develop a code of food quality standards.<sup>11</sup> The database is online but it is not easily accessed or intuitive. These MRLs impact the flavor, fragrance, aromatherapy trade as the figure below illustrates.

FIGURE 1. MRLS IN EDIBLE CITRUS OIL<sup>12</sup>

Pesticide	MRL	Year of Adoption
Boscalid	50 mg/kg	2011
Cyantraniliprole	4.5 mg/kg	2016
Cyflumetofen	36 mg/kg	2015
Fenbuconazole (except lemon and lime)	30 mg/kg	2014
Fenpropathrin	100 mg/kg	2015
Pyraclostrobin	10 mg/kg	2013

The USA has a similar database, the Global MRL database which is more intuitive than the Codex Alimentarius. The basic subscription level is free.<sup>13</sup>

Soil to oil is a trademark phrase used by many essential oil vendors.<sup>14</sup> Yet is soil necessary to categorize an aromatic plant as certified organic? Could aromatic plants be grown indoors, hydroponically or bioptonically, (the organic version of hydroponics), protected from pesticides and still carry the organic label? Certification of hydroponic, aquaponic, and aeroponic operations is allowed under USDA organic regulations. To be labeled as organic, the operation must be certified by a USDA-accredited certifying agent and maintain compliance with regulations. (L. W. Zhang, Public Affairs Office Agricultural Marketing Service U.S. Department of Agriculture, email, October 9th, 2018). Once certified, the product states that it "Meets USDA Organic Requirements." Would the end-product of this production method be an acceptable source of essential oils? Particularly if the crop is shielded from global pesticide contamination? That remains to be seen.

**INTEGRITY - IS ORGANIC JUST A FAKE CERTIFICATE?**

Certified organic oils fetch a higher price. It is illegal to use the word "organic" on any product, if it does not meet the standards set by law. Enforcement is strict. Fraudulent use of the term "certified organic" or "organic" results in a financial penalty for each incident, loss of credibility, and a listing in a revoked or suspended database published by the USDA.<sup>15</sup> The USDA maintains a downloadable list of fraudulent certificates.<sup>16</sup> There are 112 companies on the list. If an organic certificate appears fraudulent, it is prudent to reach out to the certifying agency. It is also possible to submit a complaint to the National Organic Program (NOP).<sup>17</sup>

**GLOBAL ORGANIC STANDARDS**

Global organic standards provide a more protective global environmental bubble and increase the ease of trade. The United States currently has organic equivalency agreements with the European Union, Korea, Switzerland, Taiwan, Canada, and Japan. Certified organic products can be imported and exported between the US and these countries.

Also, the US has recognition agreements with countries such as India. Recognition agreements allow a foreign government to accredit certifying agents in that country to the USDA organic standards. A list of those certifying agencies can be reviewed and products certified as organic by these agencies can be imported into the US as certified organic.<sup>18</sup>





The efforts to move towards a global standard continue and as part of their work towards organic equivalency, the United States and Mexico have formed a Joint U.S.-Mexico Organic Compliance Committee to monitor and enforce controls on organic products traded between the two countries.

**WHY BOTHER WITH ORGANIC?**

The question is still asked: “Is organic really better?” A 2014 study with vetiver *Vetiveria zizanioides* (L.) Nash certified organic essential oil concluded that the fresh root was denser and more appealing, and the yield and constituent profile were superior to the conventional vetiver.<sup>19</sup> While this is not true for all essential oils the positive impact of organic production is far-reaching. If dire environmental degradation is not persuasive enough, look at the positive financial impact of the organic trend. In June 2018, Zion Market Research published a report on the organic forecast through the year 2024. The global organic food and beverages market was valued at approximately USD 124.76 billion in 2017 and is expected to generate revenue of around USD 323.09 billion by the end of 2024, a compound annual growth rate of around 14.56% between 2017 and 2024.<sup>20</sup>

*About Dorene Petersen: Dorene Petersen is Founding President of the American College of Healthcare Sciences (ACHS). ACHS offers accredited online programs and is recognized as a leader in aromatherapy, herbal medicine, and holistic health education. Dorene is a New Zealand-trained naturopath who specializes in certified organic essential oils, and clinical research-based aromatherapy and botanical medicine. Dorene serves as Chair of the Aromatherapy Registration Council (ARC) which oversees the international Registered Aromatherapist RA™ exam. Dorene is also a Registered Herbalist, a professional member of the American Herbalists Guild, and was awarded the Professional Service Award from the International Herb Association for her outstanding contributions to the herb industry. dorenepetersen@achs.edu*

*About American College of Healthcare Sciences: Founded in 1978 in New Zealand, ACHS.edu is an accredited college offering integrative health education. ACHS makes holistic health and wellness education accessible to a global diverse community. Specializations include aromatherapy, herbal medicine, holistic nutrition, and wellness. ACHS is accredited by the Distance Education Accrediting Commission (DEAC), is a military friendly school, and has campuses in Portland, Oregon and Kona, Hawaii. Visit achs.edu.*

References available on request.

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PRESENTS

**FROM THE HEART OF NATURE**



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**CLARY SAGE OIL***Salvia sclarea* 🇫🇷 France

Recently, there has been a substantial expansion in production to keep up with the growing demand. Prices are expected to take a downward trend in the coming months.

🏠 Euro 110.00 /kilo

**LAVANDIN SUMIAN OIL***Lavandula hybrida* 🇫🇷 France

This species is more resistant to attack by the devastating insect. Lavandin sumian is commanding higher prices than lavandin grosso. The product holds a strong reputation compared to other oils. Therefore, over the last few years, the majority of buyers are switching from grosso to lavandin sumian. Few buyers have replaced the need for grosso altogether.

🏠 Euro 36.00 /kilo

**LAVENDER OIL***Lavandula angustifolia* 🇫🇷 France

Among the clonal lavenders, the most renowned lavender varieties are maillette, matherone, and diva. The best-known varieties of lavender are rapido, and carla. Due to below freezing temperatures in the cultivating regions, the lavender harvest faced a severe loss last year. There is a substantial decline in total yield.

🏠 Euro 140.00 - 170.00 /kilo

**LAVANDIN ABRIALIS OIL***Lavandula hybrida abrialis* 🇫🇷 France

The price is very high compared to the previous year due to the lack of availability of the Spanish material, which has traditionally been in larger volumes than the French material.

🏠 Euro 45.00 /kilo

**LAVANDIN SUPER OIL***Lavandula hybrida* 🇫🇷 France

The emergence of new producers has led to a higher production, which is in excess of demand. As a result, prices are expected to decline in the next few months.

🏠 Euro 47.00 /kilo

**MELISSA OIL***Melissa officinalis* 🇫🇷 France

Presently, French melissa oil prices remain high, with different fluctuations being seen in different regions. French quality is too expensive across global markets. Bulgarian growers are optimistic about the crop, and are steadily increasing volumes moving forward. This seems to have become an open challenge for French producers. The future prospects for this product in France are unlikely to improve under the prevailing conditions.

🏠 Euro 1650.00 /kilo

**LAVANDIN GROSSO OIL***Lavandula hybrida* 🇫🇷 France

There is material currently available in the market. However, the farmers are waiting for the right time to sell goods. The market is currently stable and expected to move slowly from October to the end of December. In early 2019 it is anticipated that farmers will again begin to sell some material. We expect that prices will remain stable in the next few months.

🏠 Euro 32.00 /kilo

**LAVANDER FINE OIL***Lavandula officinalis* 🇫🇷 France

There was a good crop this year. Nevertheless, prices increased because of the substantial shortfall of Bulgarian lavender oil. We anticipate that prices will remain stable over the next few months.

🏠 Euro 165.00 /kilo

**THYME OIL***Thymus vulgaris* 🇫🇷 France

There is usually high demand for this product. Besides aromatherapy, French producers have started exploring a wide range of options in the food industry.

🏠 Euro 135.00 /kilo

**TARRAGON, OREGANO, SARRIETTE, AND THYME OILS***Artemisia dracunculus, Origanum vulgare, Thymus vulgaris* 🇫🇷 France

These oils are observing a significant expansion in demand from the food industry. Some new crops will be introduced this year, and there will be more essential oils distilled from the fresh raw materials.

🏠 NA



## A CHRISTMAS CARE-ALL THE ESSENTIAL CHRISTMAS ESSENCES

Cool crisp air; candles, wreaths and garlands adorning every house along with merry splashes of reds, greens, whites and silver. The changes in the weather make households gear up not just for the cold, but prepare to face the season of sickness too.

While we think about the season of giving, let us give a thought to gifting ourselves, and our near and dear ones the gift of winter wellness with essential oils. A lot of times, jolly Christmas cheer can be marred by the discomfort of stuffy noses, and then some.

Essential oils with the wondrous scents of pine, nutmeg, cinnamon, frankincense, and wild orange work as wonderful emotion enhancers to usher you into the true holiday mood, while shielding against seasonal infections. Along with cookies, and hot chocolate, make sure to beat the winter blues with some *es-scent-ial* oil goodness.

Most essential oils are naturally anti-bacterial and anti-viral. So instead of stopping by a pharmacy, you could look at pumping up your immune system and your homes with essential oils and natural fragrances.

The most popular oils associated with the season are those that have warm aromas and are quite the must-have mood lifters. Coniferous oils like fir and pine; the resinous overtones of frankincense and myrrh; minty oils like peppermint and spearmint; oils with spicy notes like cinnamon and nutmeg, and woody oils like cedarwood top the list of essential oils that make it to everyone's holiday list.





## THE CONIFEROUS CONNECTION

Who doesn't love the invigorating smell of freshly cut firs, spruces, cypresses, and pines? It is that sharp, full-bodied forest smell which brings in the feel of the outdoors at a time when you are stuck inside more than you like.

The essential oils obtained from most of the *Cupressaceae* and *Pinaceae* families are perfect go-to oils for upper respiratory support. Constituting a high content of alpha-pinene and beta-pinene, almost all the coniferous oils like pine oil, fir needle, and spruce oils are used in the treatment of lung problems. Spruce in particular is especially beneficial for clearing congestion, cure a cough, cut through clogged sinuses, and improve chronic bronchitis and asthma. Pine oil, derived from the needles of the *Pinus sylvestris* is effective in addressing swelling, tenderness of joints associated with inflammation. It is a perfect pick-me-up for tired muscles after those long hours of Christmas shopping or skiing down slopes! In addition to being a disinfectant, a few drops in your diffuser are a godsend for frazzled nerves during the hectic bustle of the holidays.

## THE RELAXING RESINS

Myrrh and frankincense essential oils are both obtained from the plant family known as *Burseraceae*. They are types of oleoresins, gum-like substances that are harvested after they harden; and eventually are steam-distilled for the oil. Though often mentioned together, the aroma of myrrh is earthy, with hints of bitter, spicy, and musty notes combined. Frankincense, the resin from *Boswellia Serrata*, has from time immemorial been used for treating wounds, bruises, scars and skin regeneration. When burned, it emanates a sweet pine-like smoke. In the context, interestingly, of the fumigation of churches by burning frankincense, it was as much a spiritual function as a physically cleansing one – for the immensely high anti-bacterial properties of frankincense. Definitely a must-have for that warm and inviting feel for home or guests. And for soothing over-excited children or perhaps even adults.



## THE SPICY SAGA

There is no mulled wine, eggnog, gingerbread, smoked ham, and a host of festive food without that hint of warm, comforting spiciness. Almost all the spice oils, especially nutmeg, cinnamon, and clove are potent flavouring agents for a variety of festive food. These are so powerful as anti-bacterial and anti-viral agents that a few whiffs regularly are enough to help ward off coughs and colds. Obtained from the plant *Myristica fragrans* nutmeg is used as a natural painkiller. In Eastern medicine, nutmeg oil is popular for its carminative, astringent, and deodorising properties; and is a classic aroma reminiscent of Yuletides of yore.



One of the most widely used spices in the world, cinnamon, (from the plant *Cinnamomum verum*) derives its distinct flavour and characteristics from its key ingredient, cinnamaldehyde. It works as an effective repellent for bacteria, promotes kidney health, aids digestion, and boosts immunity. The aromatic flower buds of the *Myrtaceae*, *Syzygium aromaticum*, cloves are a favourite spice the world over. Its high anti-microbial, anti-fungal, antiviral, antiseptic, and stimulating properties make it a popular and powerful expectorant. After partying hard, or even while struggling with the arrangements, the spice oils are an indispensable part of the jollies. Try them in a diffuser, as a candle or as part of a pot-pourri - and feel your exhaustion melting away and solace in the warm, and intensely uplifting fragrances of these essential spice oils.





### THE WINNING WOODY SCENTS

It is a no-brainer. With a woody, balsamic aroma the cedarwood connection with Christmas, and the Holy Bible as a symbol of abundance and used by kings and princes cannot be undermined. At an emotional level, it soothes away stress and improves concentration. Additionally, cedarwood is used as a widespread remedy as antiseptic, antispasmodic and astringent. It supports the respiratory system by alleviating coughs and colds. Improving the skin cells, tightening the muscles, and promoting restful sleep are just some of the reasons why cedarwood essential oil should make it to the top of your 'must have on hand' list.

However, in the polluted world of today, all of us are aware of the edge that organically grown fruits and vegetables have over normal produce. And all of us at some point of time decided in favour of the organic option over others. You could be doing the same for your favourite essential oils. In the world of flavourings, fragrances, and essential oils, this is a highly debated topic.

At Ultra it is our commitment to offer you products that are pure and safe. Because it is all about production; and the good news is that Christmas is on its way. So is our brand new range of organic essentials oils.

So while the stockings are up and you're mulling over the menus, don't forget to add a few bottles of organic essential oils to your Christmas shopping list. For these are the little drops of goodness that trigger our 'happy' feelings, and well, tis the season to be jolly!

# BERGAMOT OIL

## MORE THAN MEETS THE EYE

Prevents. Purifies. Alleviates.





**AMYRIS OIL***Amyris balsamifera* 🌍 Haiti

As difficult as it may seem, availability is now more restricted than last year, while demand remains strong, pushing prices to new levels. Unfortunately, this year's harvest is the lowest on record. The high fuel price has affected production, leading to a rise in prices over the last few months. The market continues to remain under pressure, as buyers get anxious about securing stock. Imposing a quota limit on raw material has ultimately led to restricted supply of amyris oil. In some regions, there is a quota limit of four drums per distiller per month. In total there are only five distillers at present. A sizeable proportion of amyris wood for distillation is smuggled from the neighbouring Dominican Republic and in recent months supplies from this source have been restricted (see Dominican Republic).

🏠 USD 75.00 / kilo

**VETIVER OIL***Vetiveria zizanioides* 🌍 Haiti

Production is small, mainly influenced by prevailing rains. However, the new season will commence in December. Currently, sufficient raw material is available. Sources assure that supplies are certain, while moving towards a healthier situation, to catch up with the on-going demand.

🏠 USD 380.00 / kilo



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## BASIL OIL

*Ocimum basilicum* 🇮🇳 India

Market trends are stable with little volatility. Demand for methyl chavicol and anethole is rather discouraging, but demand for linalool is constant. The market prices for Indian basil are on the downside. The new crop will be available in the coming months.

📈 USD 12.50 /kilo



## BLACK PEPPER OIL

*Piper nigrum L.* 🇮🇳 India

Global black pepper prices have seen a drastic plunge to reach multi-year rock-bottom prices in September. Since then the market has witnessed a 2-3% price rise, and there seems to be little scope for further downside movement. In addition, there is also a drop in the quantities of available oil, so low cost oil supplies are also running out. We recommend covering long-term requirements before supplies run out altogether.

📈 USD 49.75 /kilo



## CAPSICUM OIL

*Capsicum frutescens* 🇮🇳 India

The Indian monsoons have been normal with adequate rainfall. The sowing area for the 2019 chilli crop is larger. Prices for chillies are expected to remain stable over the coming six months. We recommend you cover only your short-term requirement; and look at long term requirements only by March.

📈 NA



## GINGER OIL

*Zingiber officinale* 🇮🇳 India

This year's copious rainfall in Kerala, has affected the ginger crop. Prices have escalated by over 20%. There is limited carry forward stock availability; though it is hoped that ginger prices should trade firmer in the 2019 season.

📈 USD 93.50 /kilo



## LEMONGRASS OIL

*Cymbopogon citratus* 🇮🇳 India

Lemongrass continues to command a steady price band. The first quarter of 2019 is expected to provide some relief once synthetic citral hits the stands.

📈 USD 27.25 /kilo



## PEPPERMINT OIL

*Mentha piperita* 🇮🇳 India

At present, the India peppermint oil market commands stable prices for pure material. Availability though is somewhat limited. With the current pricing levels, rates are at par with those of farm level peppermint oil prices in the USA. Naturally the export of Indian mint to the USA is rather discouraging. However, exports to China are robust due to duty differentials and moderate demand. Indian exports will be helped by the imposition Chinese duties on US imports as part of the on-going US-China tariff war. Europe still continues to be the biggest importer of Indian peppermint oil.

Current circumstances point towards a favourable crop for 2019. However, further clarity on root holding and new plantations will be available in December. There is an influx of synthetic peppermint in the market; an early booking for requirements makes sense. Carryover is expected to be good.

📈 USD 42.50 /kilo

## CARDAMOM OIL

*Elettaria cardamomum* 🇮🇳 India

Kerala is the main source of cardamom in India. The floods in the growing region have been of major concern and caused a 20% crop loss. In addition, the festive season in India has commenced so the demand for cardamom has risen considerably. Prices are not expected to ease until the end of November.

📈 USD 365.00 /kilo

## CELERY SEED OIL

*Apium graveolens* 🇮🇳 India

The next crop of celery seed is expected only in May of 2019. Market forecasts predict a slight price reduction. However, buyers are advised to book their orders for medium term requirements.

📈 NA

## CORNMINT OIL

*Mentha arvensis* 🇮🇳 India

The month of September saw a slight price correction; the rates fell despite a healthy demand from the American and European sectors. The demand for menthol powder from China was dismal. The April to July export figures reveal a significant fall of almost 30%. Though there was an improvement in demand the following August, it did not cover the shortfall. If there is no covering this year, there is a possibility of a sharp decline in demand – a fall of almost 3,000 MT in demand.

There is increased activity as a closed synthetic menthol plant has fully resumed its operations. There is an increase in supplies due to the advent of the festive season and additional crop from Madhya Pradesh.

Considering all these factors, the situation for this product is still uncertain and the prices have not fallen. In this context, it would be wise to wait out a couple of months before placing orders for fresh mentha arvensis products.

📈 USD 29.50 /kilo

## NUTMEG OIL

*Myristica fragrans* 🇮🇳 India

The key growing areas for nutmeg have witnessed floods this year. As a result almost 25% of the trees have been severely affected. 2019 is predicted to bring in lower production volumes, but higher prices. Buyers are advised to cover medium term requirements.

📈 USD 49.00 /kilo

## PALMAROSA OIL

*Cymbopogon martini* 🇮🇳 India

Palmarosa trading is witnessing an unsound market situation, the consequences of climatic factors in the southern parts of the country.

📈 USD 59.50 /kilo

## PAPRIKA OIL

*Capsicum annum L.* 🇮🇳 India

The monsoon season in India has brought sufficient rains; and the paprika planting area in India is expected to be larger this year. The China crop, on the other hand, is expected to be 10% lower as compared to last season. With large carry forward stocks available with manufacturers as well as customers, the market may witness some amount of volatility in paprika oleoresin prices over the next two to three months. We recommend you cover your medium term requirement until Q1 of 2019.

📈 NA

## SPEARMINT OIL

*Mentha spicata* 🇮🇳 India

The Indian spearmint market seems stable. With not much availability, demand also seems to be steady.

📈 USD 47.90 /kilo

## TURMERIC OIL

*Curcuma longa* 🇮🇳 India

The monsoon in India witnessed normal rainfall. The total area for planting and sowing turmeric is expected to be higher by almost 20% as compared to last season. Carry forward stocks are limited; prices are predicted to stabilise at these current levels.

📈 USD 28.70 /kilo





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### CAJEPUT OIL

*Melaleuca cajuputi* 🌍 Indonesia

For cajeput oil, the horizons finally look bright; the market is hopeful of getting out of crisis mode. Prices remain elevated, depending on cineol content. Production is set to go up and the situation is expected to stabilise in the coming months. This is a classic example of how the sudden short supply of some aroma molecules around the world (eucalyptol, citronellal etc.) can push low-lying products into the limelight. Overall things are looking up for cajeput oil, especially in the aromatherapy space. Of all the oils from Indonesia, cajeput is one that has been a critical part of the Indonesian aromatherapy story, and this continues to be so. It is about time that our global friends reaped the benefits of this beautiful oil from Indonesia.

📈 USD 29.00 /kilo

### CITRONELLA OIL

*Cymbopogon winterianus* 🌍 Indonesia

Contrary to predictions based on earlier reports and understanding, citronella prices have steadily gone up at source. Despite the additional sources and new regions of citronella, the demand continues to rise. In the current situation, citronella oil prices are certainly at a peak. It is important to note that our plantations in Sulawesi are faring quite well and are set to bolster production. With over 150 planted hectares, we are poised to offer sustainably sourced material. We are on the verge of having our plantations and produce certified as 'Organic.'

📈 USD 29.50 /kilo

### CLOVE BUD OIL

*Eugenia caryophyllata* 🌍 Indonesia

The recent clove bud harvest was a largely successful one in Indonesia. The biggest consumer of these spice grade buds is the cigarette/kretek producers. Most of the volume gets picked up by them and the traders exporting the spice worldwide. Van Aroma has the advantage of having its own distillation right at the source of the clove plantation and has stocked 600-700 tonnes of buds right at source to ensure a steady supply throughout the year. Given that we are close to the end of clove bud harvest, we expect the prices of clove bud oil to remain stable for another month, after which it may start rising in line with other clove derivatives.

📈 USD 25.50 /kilo

### CANANGA OIL

*Cananga odorata* 🌍 Indonesia

Cananga oil production is somewhat limited; but demand is steadily increasing. Cananga seems to be heading down the same path as patchouli in the coming weeks.

📈 USD 155.00 /kilo

### CLOVE LEAF OIL

*Eugenia caryophyllata* 🌍 Indonesia

Supplies of clove leaf are stable and the dry season is helping it remain as such. Farmers and distillers are focusing more on the leaves and stem for distillation as we are past the clove bud harvest. The prices have bottomed out for the most part and we do not anticipate them going down further. It is a good time to book quantities now as we expect prices to work their way up in the coming weeks.

📈 USD 16.00 -18.00 /kilo



### GINGER OIL FRESH

*Zingiber officinale* 🌍 Indonesia

The prices of fresh ginger have gone up and consequently those of the fresh oil. This product, like clove buds, is driven extensively by the local herbal drink industry. Preparations are underway at Van Aroma to launch ginger CO2 shortly.

📈 USD 140.00 /kilo

### MACE OIL

*Myristica fragrans* 🌍 Indonesia

The market for mace oil is noticeably smaller than nutmeg; and as such can withstand short-term interruptions in supply. Most distillers process nutmeg and mace together instead of separating them, since not too many buyers look for just mace oil. Van Aroma however ensures a steady supply and available stocks.

📈 USD 87.00 /kilo

### NUTMEG OIL

*Myristica fragrans Houtt.* 🌍 Indonesia

Nutmeg oil, unlike most other oils from Indonesia, is on a stable footing. There is a steadfast demand from two of the world's best known beverage brands; and complemented by a stable supply. There is not much activity on this front.

📈 USD 56.00 /kilo

### PATCHOULI OIL

*Pogostemon cablin* 🌍 Indonesia

**Sulawesi:** The arid season has had a considerable contribution in slowing down patchouli cultivation in the Sulawesi region. Located some distance away from reliable water sources, farmers are unable to continue planting since patchouli requires uninterrupted irrigation for healthy growth. News of the resultant crop damage has started trickling in. If current predictions are anything to go by, the dry weather is expected to continue. There are shifts happening from the old production areas to new areas; which creates shortages in the short term.

Supplies have also been somewhat affected by the recent spate of natural disasters. The earthquake and tsunami have affected certain areas, but fortunately the key growing areas were saved from the major brunt. Civic life has been impacted, and closed roads have affected transportation of goods. These were even followed by volcanic eruptions; and the consequent apprehension has created a ripple effect in the market.

Considering all these factors, a price rise seems to be on the cards over the next few months. It is advisable to recognise this and book orders for immediate requirements.

**Sumatra:** Sumatra patchouli production continues to dwindle. There is a relatively lower quantity available in the market; and the quality remains superior to Sulawesi. A stable demand for this quality has pushed up the prices significantly over the past few months. Many farmers and plantations have moved over from patchouli to other crops; a continuing trend even today. The Sumatra material is expected to command USD 5-7/kg higher than the material of a similar specification from Sulawesi. Anyone able to get material at a price lower than this is essentially buying products that are incorrectly labelled. Most likely, it is a blend of Sulawesi material in Sumatra. We pride ourselves on offering authentic product unless specified otherwise by clients; backed by the Van Aroma promise of purity.

📈 USD 42.00 - 50.00 /kilo

### MASSOIA BARK OIL

*Cryptocaria massoia* 🌍 Indonesia

The market is robust with strong and steady demand and competitive prices. There is an unremitting and improving supply of steam distilled massoia bark oil (50-60% C10 lactone) both from the source, and in Java. This has not necessarily resulted in a better product. However, it has definitely overtaken last year's figures of CO2 extracted volumes. Market dynamics have taken interesting twists and turns and 2019 promises to throw up exciting developments for massoia bark oil.

📈 USD 400.00 - 700.00 /kilo

### VETIVER OIL

*Vetiveria zizanioides* 🌍 Indonesia

The prices of this oil have seen a gradual decline; it is assumed to be attributed to an oversupply of vetiver oil from Java in the past month or so. Farmers and distillers are feeling the brunt of it. Demand continues to remain firm. On the brighter side, it is important to note that Haiti's increasing strength in vetiver oil has allowed for a balance in the pricing of this product. Otherwise pricing has been on an upward trend for the past few years. Van Aroma is now producing vetiver CO2 extract; a product that is far more exciting given the superior olfactory profile.

📈 USD 325.00 /kilo



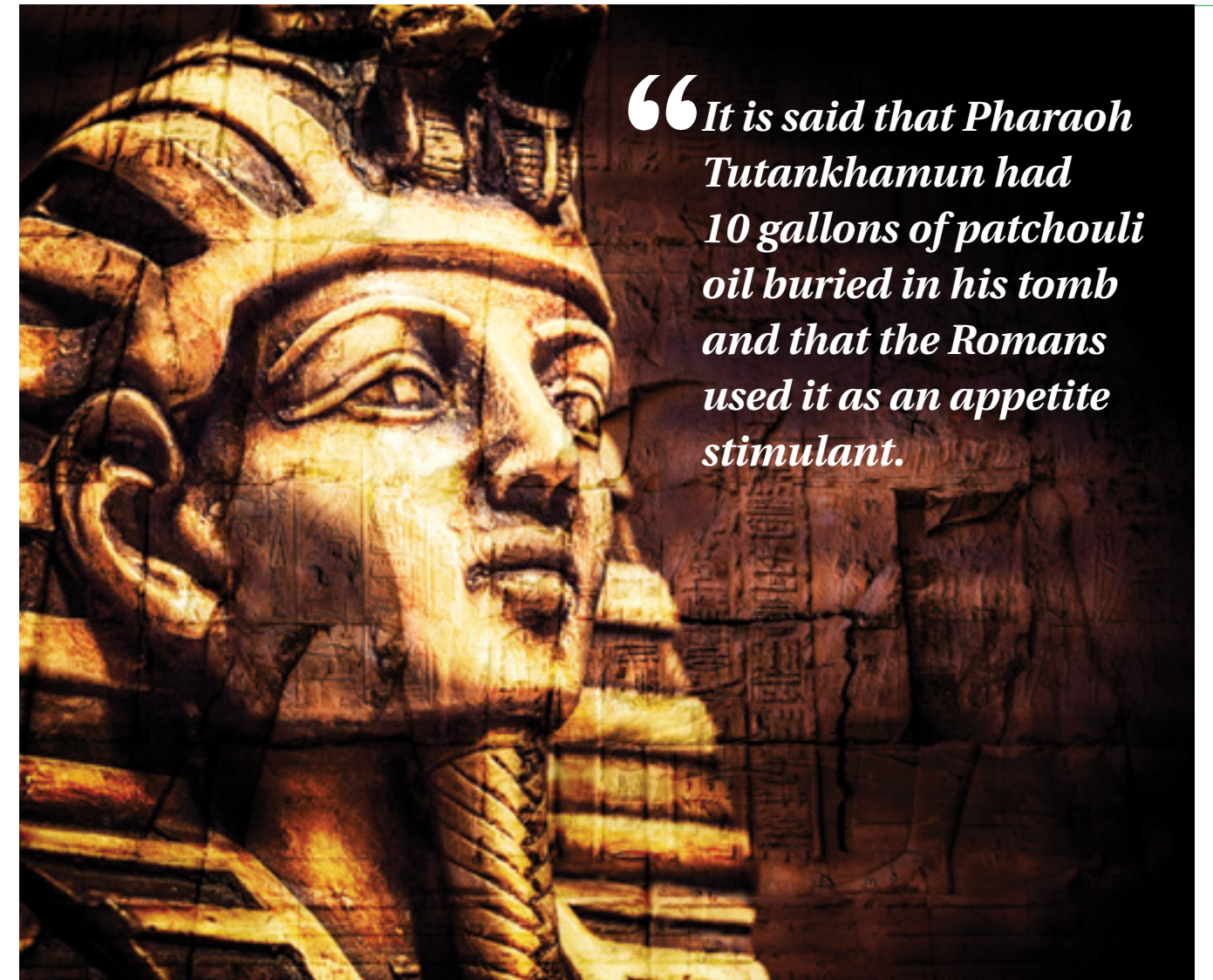
## OPTIMISING SOCIAL ECOSYSTEMS: HOW IMPROVING THE LIVES OF PATCHOULI FARMERS IMPROVES THE PATCHOULI PRODUCT

*Eddie Bulliqi*

The obstacles facing long-term patchouli sustainability in Indonesia should worry all players that make use of the plant's essential oil across any stage of the perfume supply chain. The solution lies in collaboration and comradery between colleagues and competitors alike, working together to refine understanding of patchouli's lifecycle, encourage best practices, and invest on the ground to help farmers cascade the quality of their work onto distillers, exporters, and fragrance houses, right until it reaches consumers' hands in store.

Patchouli is experiencing a rejuvenation in fine fragrance right now. Whilst Gen X consumers in the traditional perfumery markets of North America and Europe may associate its woody camphoraceous profile with 1960s hippie culture, patchouli is losing its previous marijuana-inflected nature-loving connotations in favour of a more refined gender-fluid representation of city life in modern feminine chypres such as *Miss Dior* by Dior and luxury niche offerings such as *Portrait Of A Lady* by Frédéric Malle. As ambers, ouds, orientals, and gourmands (in which patchouli is essential) continue to gain share in New Product Development, consumer trends indicate that patchouli essential oil demand will grow at a steady rate.

In the field, patchouli plants are suffering from a competitive crop marketplace, weather swings and, most importantly, over-farming. Up until recently, the unsustainable methods being used to farm patchouli have been ignored by the major international buyers and have left farmers uncertain of the health of their land and their future. A new mood of thinking suggests that no one wins unless the farmers are also winning, otherwise quality and productivity will wildly oscillate in the years to come affecting business relationships, deliverability, and profits.



“It is said that Pharaoh Tutankhamun had 10 gallons of patchouli oil buried in his tomb and that the Romans used it as an appetite stimulant.”

### LEGACY

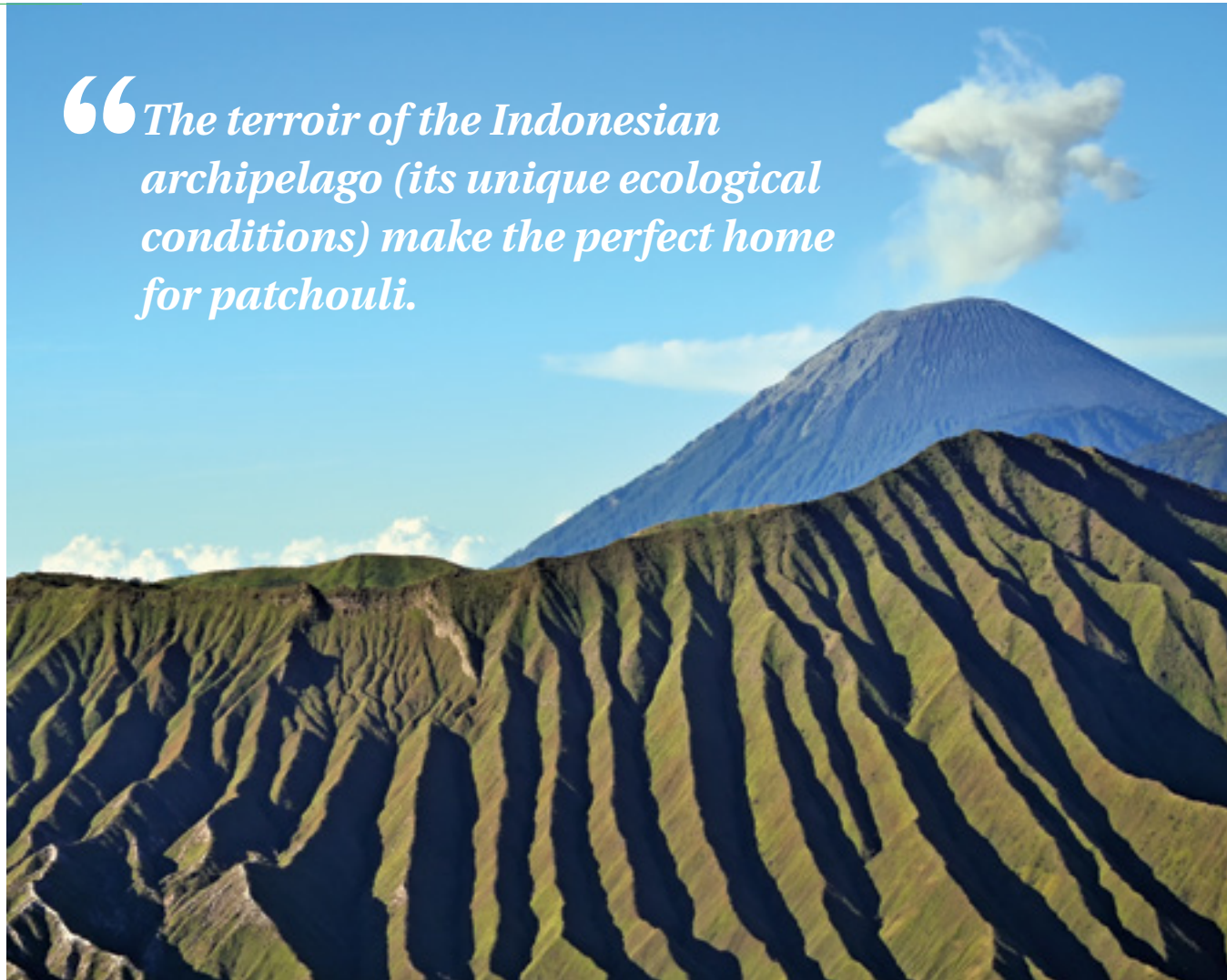
A species of plant in the mint family, patchouli (*Pogostemon cablin*) is native to the Asian tropics and holds an odour profile that is rich, earthy, and dry, with the finest examples possessing a bitter chocolate tone that is indicative of higher patchoulol content – the active that denotes the characteristic patchouli scent. Whilst rubbing patchouli leaves in one's hands will hint at its secrets, the aroma is only truly revealed after undergoing steam distillation. It is said that Pharaoh Tutankhamun had 10 gallons of patchouli oil buried in his tomb and that the Romans used it as an appetite stimulant. Its benefits have long been explored in traditional Asian medicinal practices, using patchouli to treat dandruff, skin irritations, acne, and eczema as well as for use in meditation.

It became more widely known in Europe in the 1800s through the fabric trade routes, particularly from India, as dried patchouli leaves would be stuffed into rolled carpets and rugs before export to function as an insecticide. The resultant scent was so linked to authentic merchandise that traders would doubt the validity of arriving goods if they did not smell of patchouli. Today, Indonesia contributes to just over 80% of the world's supply, representing on average 35% of Indonesia's total export revenues from natural essential oils with an excess of 1,500 metric tonnes. Significantly, one of the greatest challenges with patchouli at the moment is research and development – unlike coffee, cacao, and palm oil, which collectively have thousands of research studies produced for the food industry on the plants' metabolism, there exists almost no literature on patchouli, meaning decision-making has been largely experimental.

Today, Indonesia contributes **80%** of the world's supply, to just over **35%** of Indonesia's total export revenues from natural essential oils representing on average



“The terroir of the Indonesian archipelago (its unique ecological conditions) make the perfect home for patchouli.



**TERROIR**

The terroir of the Indonesian archipelago (its unique ecological conditions) make the perfect home for patchouli. Warm air currents, consistent rain, high volumes of sunshine, volcanic soil, and mid-altitude plains ensure year-round consistent growth that helps the plant develop to harvest quickly in only a two to three-month cycle. The chemical profile of patchouli also dramatically changes depending on soil environment. Hilly areas produce a much higher grade of oil than flat areas near the sea and, as patchouli crops drain the land of nutrients very quickly, soils rich in humus and a pH range between 5.5 to 7.5 are ideal to optimise production.

The challenge for today's industry is to discover what really matters when it comes to patchouli. For a long time, patchouli essential oil has been tested for acid value and refractive index to determine its suitability for end-product use. Whilst they have their importance later down the value chain with regulation and consistency, many argue that acid value and refractive index do not affect the smell of patchouli and therefore can be discounted from the specification process. Patchoulol, of course, is the single most important constituent for quality patchouli oil – the higher the patchoulol content, the higher the grade of product.

In a new R&D effort to aid crop reliability and aim for higher patchoulol values, Ultra's partner in Indonesia, Van Aroma, is currently testing various intercropping and bedding hypotheses including planting vetiver, banana, and citronella side-by-side with patchouli and is monitoring long-term output of test farms. It is too early for results, but these tests represent new ways to harness Indonesia's terroir to save the sustainability crisis.

September's tsunami in Palu took everyone by surprise and is a great tragedy for Sulawesi. In reference to patchouli, a few areas of cultivation were touched but thankfully the impact was not major. In fact, the more serious short-term concern is the continuing dry season, which is significantly hindering crop productivity and health. Along with the recent disaster, a speculative atmosphere is emerging in which growers start floating enquiries in fear of what is to come which creates uncertainty and potential price fluctuations. Despite its ideal topography, or because of it, Indonesia still faces challenges in cultivation and farming culture.

**MIGRATION**

Without doubt, the most demanding challenge facing patchouli production today is its long-term sustainability, which is constantly under threat. The main cause has been over-farming and poor care of the land, relying on lacklustre traditional cultivation templates, no bedding, no cover for planted seedlings, and no fertiliser (or using chemicals instead of organic products). Following an initial incubation period of two to three months when baby seedlings are matured in a greenhouse and the soil is brought up to standard, patchouli should provide a healthy harvest once every 90 days. However, many farms not implementing guidelines in Indonesia are surprised to find, following a bountiful initial crop, that the plants are smaller and smaller as the year goes by; by 12 months crops can begin to get infected, and by 18-24 months the land can become barren. On top of this, there has been a trend in the past of farmers cutting the plant too early in order to advance their cash, which results in a poorer end yield and inferior distillation.

The farmers are certainly not alone in blame. Patchouli works the soil very hard, even when 100% best practices are actioned. Regardless of the soil profile, patchouli will only grow on one specific plot of land for two to two and half years before it can't sustain the nutrient demands of the plant anymore and the soil is damaged. Mitigating nutrient loss and plot cycling are the most significant answers to the most common problems. Farmers must understand the importance of putting back into the soil that which is taken by their crops, using regular organic fertiliser (before, during, and after patchouli programmes have run their course), maintaining efficient drainage, and rotating crops across their property so the land has time to rest and recuperate, before a new patchouli run can be farmed five to seven years later. Transfer of this *savoir-faire* is dependent on an agro-educational infrastructure, which Indonesia has lacked.

National production centres have shifted from island to island over the last 20 years due to the plant's need for fresh soil, but were greatly exacerbated by over-farming without strategy or foresight. In 2000, Sumatra represented almost 100% of Indonesian supply whereas today it is 15%; in 2005, Java contributed 80% but today only 5%. The island of Sulawesi is now the biggest player with 80% of production. This is in a large part down to the government's decades-long transmigration programme in which land, investment, and seedlings were made available to farmers willing to move out of heavily populated areas to country with plentiful free land in order to stimulate agricultural economy, control population density, and alleviate poverty. Sulawesi received the predominant amount of its transmigrants from Java. In 2015, the programme was ended by incumbent President Joko Widodo to avoid social disputes between communities.

Sumatra represented almost **100%** of Indonesian supply whereas today it is **15%**  
 in 2005, Java contributed **80%** but today only **5%**





## IMPACT

Given all the complications explained above, many farmers simply gave up their patchouli plots for easier-to-farm crops such as cacao and coffee. The cultural dilemma with the transmigration programme is also evident in an education deficit – it takes many years for cultivators to develop expertise with their crop and the constant resettlement of patchouli has meant true expertise cannot be developed. This goes hand-in-hand with more diseases for which ‘Budog’ is currently the most prolific infection, a fungal contamination solved only when the soil is in peak condition and treated with organic manures and pesticides.

In many cases, the ‘new’ soils in Sulawesi were not as rich as the volcanic ones in Java and Bali, resulting in differences in acid value and patchoulol content in the essential oil. Sumatra has historically had the highest average patchoulol content at 30-34% and the lowest acid value at 3-4; Java is in a similar range at 30-31% and 4-5, respectively; Sulawesi’s blend is on the other end of the scale with 26-28% and 11-17.

The prediction is that throughout 2019 the next migration will begin to take place, moving away from Southeast Sulawesi and further into the central mountains, which will result in some instability in production and potential price increases. Under the current production system, Sulawesi will only remain viable for the next five years or so, and where will it go from there? Some have suggested Flores as an option, but this is a very small island with little capacity. The oddity is that Java, after the exhaustion gap of 10 years now, should be ready to re-plant but patchouli has not yet returned to Java. Why has it not come back? Is it due to the land or the people or both?

## STABILISATION

As long as everyone remains siloed and concerned with their own interests, no one will profit from patchouli’s schizophrenic holidays around Indonesia. The most important people in the supply chain are without doubt the farmers themselves, as if they can’t grow then no one else has a job. The responsibility is on everyone to get this right, or otherwise patchouli may no longer be grown in Indonesia at all. Farmers must be willing to sacrifice short-term gains for longer-term profits, rather than always living for ‘today’. Their business partners should be willing to invest in the people, equipment, and R&D to support farmers and help them grow their business, as they are easily the most vulnerable demographic within the supply chain.

The answer, overall, relies on ‘smarter’ farming – implementing best-practice based on updated soil studies and life cycle analyses to produce better patchouli using better organic materials; more strategic cycling of land and financial planning for growers; and more honesty from exporters and willingness to re-nourish previous production sites to solve supply issues. The knock-on effect should be beneficial for everyone – healthier patchouli producing a superior distillation with more patchoulol, fewer dollars needed for washing and refinement, and more efficient operations.

The Van Aroma Team is up for the challenge. In their view “we all have to act responsibly, all major buyers and all exporters, and gather together the resources and efforts required to re-educate and support farmers through this process. Everyone has the same goal – to keep patchouli production healthy and consistent in Indonesia. If we had worked together years ago, perhaps the crop would have never moved from Sumatra”.

Today’s millennial and Gen Z consumers are more ethically conscious than any previous generations and want to know how things are made and where they come from. The marketing possibilities for patchouli are huge. You can’t pretend patchouli is not a problem anymore, we must embrace it and work together to fix it, starting in Sulawesi before it is too late.

“***Their business partners should be willing to invest in the people, equipment, and R&D to support farmers and help them grow their business, as they are easily the most vulnerable demographic within the supply chain.***”

<sup>1</sup> Kathryn Hindess in ‘Why is patchouli linked to hippies?’, <https://uk.lush.com/article/why-patchouli-linked-hippies> (accessed 8th October 2018)

<sup>2</sup> Mercola in ‘What Benefits Can You Derive From Patchouli Oil?’, <https://articles.mercola.com/herbal-oils/patchouli-oil.aspx> (accessed 8th October 2018)

<sup>3</sup> New Directions Aromatics in ‘All About Patchouli’, <https://www.newdirectionsaromatics.com/blog/products/all-about-patchouli-oil.html> (accessed 8th October 2018)

<sup>4</sup> Amy Galper in ‘Patchouli Essential Oil: An Aroma with History’, <https://www.organicpamagazine.com/patchouli-essential-oil-an-aroma-with-history/> (accessed 8th October 2018)

<sup>5</sup> Van Aroma on patchouli, <http://vanaroma.com/product/patchouli> (accessed 8th October 2018)

<sup>6</sup> Ibid.



## GETTING TO THE ROOT OF ALL FRAGRANCES

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**BERGAMOT OIL**

*Citrus bergamia* 🇮🇹 Italy

Almost all the growing areas witnessed inclement weather in the form of gusty winds and an aridity that impacted all crops. Large quantities of flowers were damaged; almost 20% to 40% of the crops were severely affected, depending on the fruit variety or growing area. The bergamot was originally used only for oil. However, the increased demand for fresh fruit has pushed up prices. As more fruit is being directed into the fresh fruit market, raw material for oil is in short supply. Consequently, this affected prices; the rates for bergamot have escalated considerably. This year seems to be discouraging, but more clarity is expected in the coming months.

🏠 Euro 250.00 /kilo



**LEMON OIL**

*Citrus limon L. Burm. F.* 🇮🇹 Italy

The lemon crop for 2019 is reported to meet expectations, although in some areas there is a suggestion of reduced quantity. Harvesting will not commence before December; and naturally it is too early to comment on the pricing.

🏠 Euro 31.00 /kilo



**ORANGE BLOOD OIL**

*Citrus sinensis* 🇮🇹 Italy

It is somewhat early to make any forecast; though it is reported that this year's crop is less by approximately 30%. This is not surprising considering that last year there was a bumper crop. The processing of the fruit for oil will not commence before the end of February 2019.

🏠 Euro 9.00 /kilo



**HINOKI OIL**

*Chamaecyparis obtusa* 🇯🇵 Japan

The hinoki tree is an indispensable part of Japanese culture. Related to spirituality, pureness and cleanliness, hinoki holds a place of veneration in the hearts of the Japanese people and several other Asian countries. It has a distinct woody, earthy fragrance reminiscent of a forest glade; and is associated with the famed Japanese Forest Bathing experience. The unisex appeal of its fragrance is becoming a highly coveted ingredient in perfumery as well. The global intelligentsia recently discovered this treasure when it was showcased at the World Perfumery Congress (WPC) in Nice. Amidst the backdrop of this globally renowned convention, hinoki garnered a very encouraging response. As people are realising its benefits, demand too is growing.

In Japan, given the significance of hinoki, it is well protected. However, the challenge lies in finding the right sustainable mix and manufacturing conditions that enable hinoki oil production. Improved technology has led to an increase in distillation capacity alongside better quality control. Previously fluctuation prices have been replaced by greater price stability.

🏠 USD 1440.00 /kilo (Leaf), 450.00 /kilo (Wood), 750.00 /kilo (Branch)

**CLOVE LEAF OIL**

*Eugenia caryophyllata* 🇲🇩 Madagascar

This year, the clove crop has been rather disappointing. This analysis pegs the expectations at ± 4,000 MT as opposed to a whopping ± 15,000 MT last year. Though this can happen after a good crop, this year's volume is significantly lower. Consequently, there was a possibility that farmers distill the clove leaf earlier (in October), which actually they did, but not as extensively as was thought. The reason is the stronger interest in vanilla bean, which commands appreciably higher prices. The returns are better for a few dozen kilos of beans than several drums of clove leaf oil. Prices for clove oil have dropped slightly. Distillation was completed by the end of October and there will be no more oil coming until February or March next year. Stocks are somewhat constrained. Depending on demand during this period, prices are likely to stay at the current steady levels or take an upward turn.

🏠 USD 14.00 /kilo





At the IFEAT Cartagena Conference in September 2018, a presentation by Norberto Rodriguez of Mexico estimated the production of Mexican essential oils as follows:

MEXICO - ESTIMATED ESSENTIAL OIL PRODUCTION (MT)

Essential Oil	Production in MT
Orange Oil	7280
Lemon Oil	30
Persian Lime Oil	700
Mexican Lime Oil	1575
Grapefruit Oil	228
Tangerine Oil	100
Mandarin Oil	36

### KEY LIME OIL

*Citrus aurantifolia* 🌍 Mexico

This year, between all the processors of Mexico, slightly more than 200,000 MT of limes were processed during the first three quarters. The peak season is over since mid-September and volumes are now dwindling.

The total processing volume of lime during 2018 is estimated to go up to about 230,000 MT. This implies a decrease of 40% compared to previous years. The overall crop is normal with near 3.7 MMT expected for the lime crop in general. Despite this, the fresh fruit market is still expanding significantly in the USA and Europe. This has affected availability of material for processing. It is anticipated that 6% of the limes available in Mexico during 2018 will be processed as essential oils, juices, and peel.

Market predictions forecast this situation to linger throughout 2019. More plantations are being planted in Mexico. But, they are still in the developmental stage and have not yet achieved production at normal yields. The demand for distilled oil has been slow since 2017; it seems that this will persist through 2019. The low raw material availability has put demand and offer on an even keel. The demand for CP lime oil is on the higher side. Prices look to be on an upsurge throughout 2019, since the raw material availability is not expected to improve in the short term.

📈 USD 30.00 /kilo

### MANUKA OIL 🌍 New Zealand

*Leptospermum scoparium*

In the aromatherapy sector, manuka oil is the star amongst all other varieties available. With the emergence of new applications, and aromatherapy brands in the market, demand for the oil shows a significant increase. The high demand and short supply has lifted the price of the oil. However, the triketones level has presently gone down from 28% to 15-20%.

📈 AUD 950.00 /kilo



### CABREUVA OIL

*Myrocarpus frondosus* 🌍 Paraguay

There is still plenty of material available in Paraguay. Prices continue to remain stable.

📈 USD 40.00 /kilo



### GUAIACWOOD OIL

*Bulnesia Sarmientoi* 🌍 Paraguay

Since June 2018 the price began to soar upwards. As mentioned in the previous report, the new CITES regulations have imposed additional costs on exporting this oil, including a substantial rise in certification costs, and pre-shipment loading inspection charges. Despite this, demand for this oil remains strong. Adequate availability of stock at origin keeps the market stable, and no further changes are anticipated in coming months.

📈 USD 23.00 /kilo



### PETITGRAIN OIL

*Citrus aurantium ssp.* 🌍 Paraguay

As the farmers are busy seeding other varieties of products, the current production of petitgrain oil is almost nil. The main crop began processing in the latter part of October. Assuming no weather complications, Paraguay is on track to have a healthy crop this year. Thus, crop production availability is expected for shipment mid-November onwards.

📈 USD 56.00 /kilo





**ARTEMISIA TAURICA OIL***Artemisia taurica*

Production was affected by poor growing conditions while late rains delayed harvesting. Nevertheless, output and yields were somewhat better than other Russian oils in part helped by the regional spread of plantings and a combination of old and new plantations.

📈 NA

**CLARY SAGE OIL***Salvia sclarea L.*

This year's clary sage oil production is down as no material is left at source. The quality of clary sage oil has deteriorated to a great extent. Many producers are hesitant to forecast the crop at this point.

📈 USD 160.00 /kilo

**CORIANDER SEED OIL***Coriandrum sativum L.*

Prevailing bad weather conditions have reduced the growing region drastically, and prices have increased by 50%. However, there is an adequate availability of carryover stocks. However, low prices for the seed, as well as the oil, have negatively impacted farming practices. As a result, the growing region has reduced drastically in comparison with past years.

📈 USD 60.00 /kilo

**CORIANDER HERB OIL***Coriandrum sativum L.*

Currently, coriander herb oil production is on hold, as the major growing regions were badly affected by a severe drought. The market remains stable, as there were plenty of carryover inventories from last year.

📈 USD 85.00 /kilo

**DILL WEED OIL***Anethum graveolens L.*

Today's market continues to remain in a tense situation due to insufficient rainfall. Unfortunately, low rains negatively impacted the harvesting of this material and led to a reduction in total production. With the prevailing dry situation, a sudden rainfall is needed by farmers to protect crops for next year's harvesting.

📈 USD 44.00 /kilo

**FIR NEEDLE OIL***Abies sibirica Ledeb.*

During summer the production figures increased and ensured the availability of reasonable material. Currently, there is an adequate availability of stock, but fir needle oil is charged 2-3 euros higher by the distillers, owing to higher production costs.

📈 USD 36.00 /kilo

**LAVENDER OIL***Lavandula angustifolia*

This year's lavender oil production is low due to unfavourable weather conditions. Adverse weather has caused smaller than typical yields, and made the harvest more difficult. Prices have already risen dramatically, and a further increase is expected.

📈 USD 128.00 /kilo

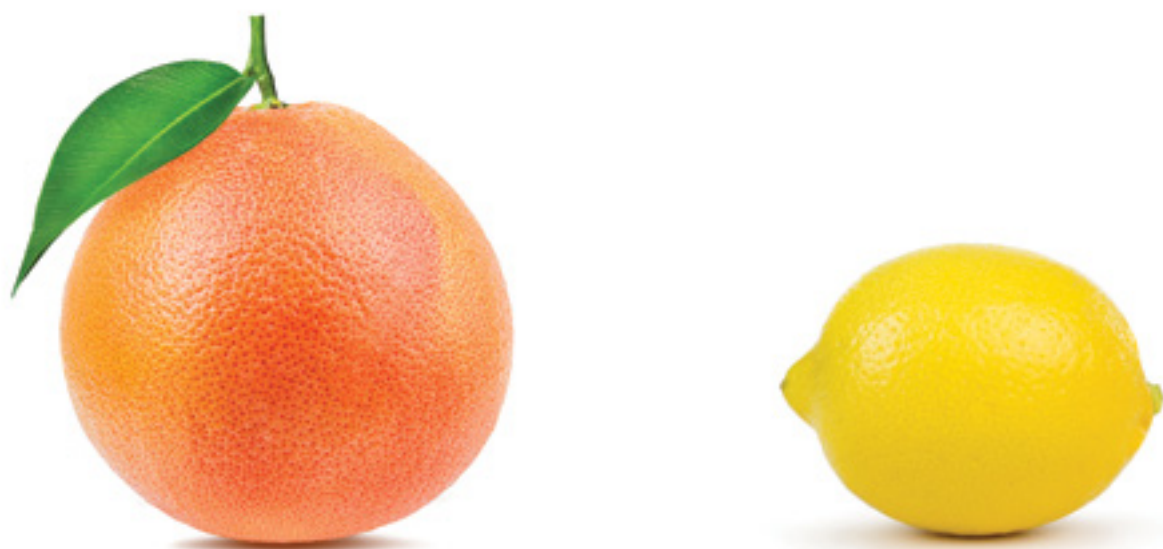




## THE CITRUS SCENE

Citrus in South Africa is grown across the country. Limpopo, Eastern Cape, Western Cape, Mpumalanga, KwaZulu-Natal, Northern Cape, and North West provinces are the key growing regions. In 2016-17 there were 74,902 hectares of planted area dedicated to citrus. Limpopo Province is the largest citrus production area, accounting for 43% of the total area planted. Eastern Cape comes next with 27%, followed by Western Cape 17%, Mpumalanga 8%, KwaZulu-Natal 2%, Northern Cape 2% and the North West region contributes less than 1%.

The cooler climate of Western Cape and Eastern Cape is best suited for navel oranges, lemons, limes, and mandarins/tangerines (soft citrus). The temperatures of Mpumalanga, Limpopo, and KwaZulu-Natal provinces are somewhat higher, and ideal for the production of grapefruit and Valencia oranges.



### GRAPEFRUIT OIL

*Citrus paradisi* 🌍 South Africa

The USDA forecasts a 5% increase in grapefruit production from 354,000 MT in 2016-17 MY, to touch 370,000 MT in 2017-18 MY. This is due to the rise in area planted and good weather prevalent in the main growing regions of Limpopo and Mpumalanga. However, this increase was partially offset by damage due to hailstorms in the Mpumalanga region. Limpopo is the principal grapefruit growing region, and accounts for a substantial 59% of the total production. Followed by Mpumalanga 22%. KwaZulu-Natal 10%, Northern Cape 6% and Western Cape with less than 1% of the production.

The predominant variety produced is Star Ruby, which has a high global demand, and accounts for 84% of production. This is followed by the Marsh variety at 13%. South Africa is emerging as a promising future origin for this product.

Considering the improvement in production, the grapefruit for processing is set to go up by 8% to 127,000 MT in 2017-18 MY compared with 118,000 MT in 2016-17 MY.

🏠 USD 95.00 / kilo (White)

### LEMON OIL

*Citrus limon (L.) Burm. F.* 🌍 South Africa

Market pundits are anticipating a 7% increase in the production of South African lemon to 460,000 MT in 2017-18. This is due to a substantial increase in planted areas with new orchards coming into full production. Since 2010 the total planted area has almost tripled and is currently estimated in 2018 at 12,100 ha. Favourable weather conditions in the main production areas of Eastern Cape and Limpopo have also helped. In fact these regions account for about 80% of lemon production.

There is a spurt in demand from Asian and Middle Eastern markets and total export of fresh lemons is estimated to go up by almost 7% to touch 320,000 MT in the 2017-18 MY. Nevertheless, lemons for processing are also anticipated to continue their upward trend rising from 56,000 MT in 2015-16 to 115,000 MT in 2016-17 to 123,000 MT in 2017-18.

🏠 USD 29.00 /kilo

### ORANGE OIL

*Citrus sinensis* 🌍 South Africa

In view of the adequate rainfall and the increase in planted area, this year's predictions for orange production are positive. Estimates show an anticipated growth of about 8% to 1.47 million MT in 2017-18 MY. The area planted to orange trees is estimated at 44,000 ha. There has been a proliferation of planted areas in the main growing regions of Limpopo, Eastern Cape, and Mpumalanga. Altogether these regions are the largest contributors with about 82% of the total orange production.

Fresh orange exports are estimated to increase 4% in 2017-18 to 1.22 million MT, in part because of increased Chinese demand and South Africa's successful efforts to address the Citrus Black Spot (CBS) challenge in the EU market, which remains the largest export market. South Africa prioritises supplying fresh oranges to export markets, with surplus oranges supplied to the domestic fresh and processed markets. In 2016-17 the quantity of oranges processed fell to 123,000 MT but is estimated to have increased substantially in 2017-18 to 188,000 MT.

🏠 USD 9.00 /kilo

### MARULA OIL

*Sclerocarya birrea* 🌍 South Africa

New areas for marula production have been established in 2018. These projects comprise new collection areas with the local communities and additional processing facilities. The oil has been commanding international attention of late, and it continues. Available supply has increased potentially by 20%; while prices remain consistent in 2018.

🏠 USD 40.00 /kilo

### TAGETES OIL

*Tagetes erecta* 🌍 South Africa

2018 was a good year for tagetes oil. The rainfall during the year-end of 2017 contributed significantly to a healthy production. The crop and production figures rose to their previous levels. Prices remain moderately constant. In general, producers expect to see a 5-6 % price increase from what they were in 2017.

🏠 USD 170.00 /kilo

### TEA TREE OIL

*Melaleuca alternifolia* 🌍 South Africa

Good weather prevailed in South Africa's main growing region on the east coast. Naturally, indications point towards a favourable harvest in the next six months. The production season commenced in September. There was zero carryover stock from the previous season. This implies that stocks will have to be built, and expected to enter the market around October.

**Organic:** Production has improved albeit at a slow pace, since project expansions have materialised. Some of the planned organic projects were confronted with severe pest issues. This has resulted in these projects turning to the conventional route. Prices are unwavering as a result of increased production keeping pace with a rise in demand.

**Conventional:** The production of conventional oil is pegged to go up from the 2017/18 season due to significant planted areas coming into production this year. It is anticipated that the demand for conventional tea tree oil is expected to remain strong. There is a compelling possibility of a marginal price hike as a result of an inflationary increase in the cost of production.

🏠 USD 45.00 /kilo





## THE SPANISH COLLECTION

### LAVANDIN GROSSO, LAVANDIN SUPER, AND LAVANDIN HYBRIDA OILS

*Lavandula hybrida* 🇪🇸 Spain

The lavandin crops were severely lashed by rains, thereby drastically impacting the yields. Prices soared due to high demand and unavailability of adequate enough quantities. Several farmers have switched to growing lavandin (mainly grosso and abrialis), thus increasing the cultivated area. The challenges at the moment are to find stems, and exorbitant prices. However, in the next 10 years we forecast a considerable increase in the available volumes from this area.

🏠 Euro 35.00 - 50.00 /kilo

### LAVENDER SPIKE OIL

*Lavendula latifolia* 🇪🇸 Spain

The harvest usually happens in August, when the plant flourishes. There were intense rains almost every week this summer; this forced farmers to put a hold on the harvesting and distillation. Eventually, distillation was completed by the last week of September. The average production yield has decreased as the harvest period lengthened. At the beginning of the crop it was 35 kg/hectare, and at the end of the crop it decreased to 24 kg/hectare. Prices this year have slid down compared to the prices of previous years as a consequence of the increase in plantations and the drop in demand. This was a preferred oil in the perfumer's palette some time ago, however this is not the case now.

🏠 Euro 47.00 /kilo

### SPANISH SAGE OIL

*Salvia officinalis* 🇪🇸 Spain

The crop in the current year was advanced in comparison with the previous year. The harvest started in August, and finished in September. The yield has been satisfactory, with an average yield of 40 kg/hectare. The prices remain stable as does the demand.

🏠 Euro 65.00 /kilo

### THYME OIL

*Thymus vulgaris* 🇪🇸 Spain

This year's figures stand at production of 20 MT. The demand from the aromatherapy sector is very strong for this product and it uses almost 80% of the production.

🏠 Euro 115.00 /kilo

### LEMON OIL

*Citrus limon L. Burm. F.* 🇪🇸 Spain

Once again with a bumper crop, Spain repeats its dominance as lead supplier of superior grade lemon in the European Union. According to AILIMPO, the forecast for the 2018/2019 lemon crop for Spain is expected to reach 1,300,000 tonnes. This is higher than the average production of the last 10 years (2001 to 2017 average) which is 951,385 tonnes.

Based on this data, Spain will continue to be the main supplier of fresh lemons in the European market and the second processing country worldwide.

Harvesting of the **Fino** variety will begin in September and an increase of 14% is expected due to good flowering conditions - leading to more fruit per tree - and also because of new plantations over recent years now coming into production. A production figure of 920,000 tonnes is forecast, depending on the amount of water available in summer and rainfall in autumn.

As regards the **verna** variety, the preliminary forecast expects a harvest of 380,000 tonnes, which would be a significant increase of 90% in comparison with last year. "We are a little jewel in the crown," summarises with pride José Antonio García, Director AILIMPO when he talks of Spain in context of the lemon processing industry.

🏠 Euro 28.00 /kilo

### SPANISH LEMON PRODUCTION AND FIRST FORECAST FOR THE 2018/2019 SEASON (TONNES)

Type	Production (2016/2017)	Production (2017/2018)	Forecast (2018/2019)
Fino	810000	804000	920000
Verna	350000	200000	380000
Total	1160000	1004000	1300000



May to September marks the southwestern monsoon season in this island country. It is at this time that the spice growing areas receive the most rainfall. This year saw moderate rains from July to September with sunny weather, conducive to a favourable, year-end spice harvest. However, the weakening Sri Lankan rupee will work in favour of overseas buyers.



#### CINNAMON BARK OIL Sri Lanka

*Cinnamomum zeylanicum*

There is an abundance of raw material since it is peak season. Cinnamon harvesting ends by early December. The demand for the oil is as robust as ever, and prices remain stable. It is recommended that customers book requirements for the next six months.

 USD 385.00 /kilo

#### CINNAMON LEAF OIL Sri Lanka

*Cinnamomum zeylanicum*

There is ample availability of the product with prices maintaining their steady levels. Adequate supplies of raw materials have contributed to ease availability and facilitate price stability. The situation is expected to remain so till the end of the harvesting season in December. It is a good time to place orders; it is recommended buyers cover future requirement now.

 USD 17.50 /kilo

#### CITRONELLA OIL Sri Lanka

*Cymbopogon winterianus*

Citronella harvesting season is closely dependent on the southwestern monsoon rains. The season is from May to September; thus it is safe to assume that there may be supply limitations this quarter. Since the prices for Javanese citronella oil continue to remain reasonably low, demand for the Sri Lankan variety also continues to be modest. Market predictions do not foresee much variance in prices in the immediate future. However, the next quarter may see a noticeable price rise.

 USD 25.00 /kilo

#### CLOVE BUD OIL Sri Lanka

*Eugenia caryophyllata*

The clove crop is only available at the end of the year. Consequently, prices of raw materials too, have escalated. Sri Lankan clove bud oil prices can be expected to remain firm and may move up further till the new crop is received.

 USD 75.00 /kilo

#### CLOVE STEM OIL Sri Lanka

*Eugenia caryophyllata*

Currently, there are limitations in availability of raw materials as a result of farmers hoarding stocks of stems. Prices are predicted to remain on a firm footing; or there may be an upward pressure until the new crop is received at the end of the year.

 USD 30.00 /kilo

#### NUTMEG OIL Sri Lanka

*Myristica fragrans*

A mid-year smaller crop was available from some parts of the country. It was too insignificant to have an effective impact on curbing prices. Hopes are pinned on a good harvest, given the continuing favourable weather conditions. The prices for Indonesian nutmeg oil continue to be stable and cater for global demand. Local market prices are expected to inch up until the major harvest comes in for distilling at year end.

 USD 50.00 /kilo



## CEDARWOOD OIL

*Juniperus mexicana* 🌐 USA

The Edwards Plateau in Texas, USA is home to the species *Juniperus ashei*, locally called Texas Mountain Cedar. Covering 80% of the terrain, it regenerates by aerial seeding. This provides a highly sustainable source of raw material for the production of the coveted Cedarwood Oil Texas.

The cedar tree is rather unpopular with Texas ranchers. It impedes the growth of any other plant, thereby leaving the surrounding soil barren. Its high water affinity results in lapping up water from the underground aquifer, which naturally affects supplies for nearby farms and urban settlements.

The cedar is unable to decay due to its high oil content of between 2 to 3%. Its short, twisted trunks are not conducive for sawing lumber, but yield significant amounts of essential oil. Cedarwood Oil Texas, with annual production of 700 – 800 MT, is one of the most widely used oils in the fragrance industry. A favourite among perfumers, it is said that some small amounts of cedarwood or its derivatives (particularly cedryl acetate and methyl cedryl ketone) are used in 80% of all household products, fragrances and cosmetics.

🏠 USD 18.00 /kilo

## GRAPEFRUIT OIL

*Citrus paradisi* 🌐 USA

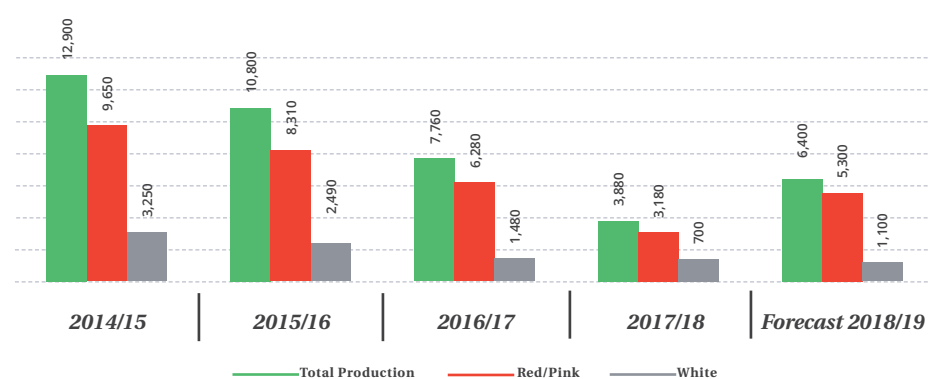
The USDA forecasts 6.40 million boxes for Florida grapefruit. This figure is 65% more than last season's hurricane affected 3.88 million boxes; and down 4% from the 2016-2017 season. Putting aside last season's hurricane-reduced crop, this is the lowest since the 6.7 million boxes in 1921-22. The total is comprised of 5.3 million boxes of red grapefruit and 1.1 million boxes of white grapefruit. Representing a 73% and 71% rise respectively. However, in both cases, fruit size is below average and the downward trend in fruit-bearing trees continues.

With increased applications of grapefruit oil and consequently rising demand, the market will remain under pressure till we recover from the substantial loss in 2017-18.

🏠 USD 90.00 /kilo (White)

🏠 USD 70.00 /kilo (Pink)

USA - GRAPEFRUIT PRODUCTION OF FLORIDA ('000 BOXES)



## LEMON OIL

*Citrus limon (L.) Burm. F.* 🌐 USA

The 2018-19 USDA forecast for lemon shows a fall in production due to a 6% reduction in Californian production, the dominant US producer. Total US lemon production is forecast to be 21.4 million boxes of which California accounts for 20 million boxes. California focuses on fresh fruit consumption, thus leaving less fruit for processing.

🏠 USD 36.00 /kilo



## ORANGE OIL

*Citrus sinensis* 🌐 USA

The USDA report for 2018-2019 released on 8<sup>th</sup> November reduced the overall Florida orange forecast by 2.0 million boxes to 77.0 million. Nevertheless, this is some 71% higher than last season's final production. These figures comprise 32 million boxes of non-Valencia oranges, (i.e., the early midseason and Navel varieties) and 45.0 million boxes of Valencia oranges. In both cases there has been a sizeable increase in fruit per tree but fruit size is the smallest on record. The total number of orange fruit-bearing trees is 49.9 million. The trees that were planted in 2015 or earlier are now bearing fruit. June 2018 saw the completion of the latest Commercial Citrus Inventory.

🏠 USD 12.00 /kilo

USA - ESTIMATED ORANGE PRODUCTION ('000 BOXES OF 40.8 KG EACH)

X million of 40.8 kg Boxes	2015/16	2016/17	2017/18	Forecast 2018/19
Florida	81700	68850	44950	77000
California	58500	48300	45400	49000
Texas	1691	1370	1880	2400
Total	141891	118520	92230	128400

## BASIL OIL

*Ocimum basilicum L.* 🌐 Vietnam

Basil is usually planted on sunny days in March. The first harvest takes place around the end of May. After about 45 days, around mid-July, the second harvest takes place; and again at the end of August the third harvest. This year due to over-abundant rainfall, the second and third harvests were severely affected since most plants died. The total quantity this year is only around 10 MT far below the usual figure of 30 MT.

🏠 USD 52.00 /kilo

## CASSIA OIL

*Cinnamomum cassia* 🌐 Vietnam

There are two harvesting cycles for cassia. The first one lasts from March to June, and the second one from September till November. The prices of cassia oil hover more or less at the same levels all year round. This is because it is not much affected by weather conditions.

🏠 USD 34.00 /kilo



## ULTRA INTERNATIONAL ON RIFM BOARD

Renowned Principal Research & Development Director and Quality Specialist, Bhuvana Nageshwaran has recently joined the Board of Directors of The Research Institute for Fragrance Materials, Inc. (RIFM).

Bhuvana Nageshwaran was elected on Thursday, September 27, 2018. With her extensive know-how of the fragrance and flavour industry, Bhuvana is all set to provide new insight and direction to the research efforts of the association.

Ultra International Limited was the initial home ground where Bhuvana Nageshwaran started her career in 1985. She scripted a successful growth story to become Director - F&F, Ultra International Limited. She immersed herself in research and development, and gained more than thirty years experience in fragrances, flavours and essential oils.

Bhuvana has trained at the Perfumery Education Centre, London. A gamut of advanced courses of the British Society of Perfumers, her exposure to various organisational operations, and her participation in extensive on-site-study tours have further honed her acute understanding of the fragrance and flavour world. At Ultra, she is responsible for statutory and legal compliances and safety protocols set down by the global authorities on fragrance and flavour. These include the International Fragrance Association (IFRA) and the International Organization of Flavour Industry (IOFI) both in Switzerland; and of course RIFM in the USA.



Photo left to right: Michael Carlos, RIFM Ex-Chairman, Jim Romine, President, RIFM, Prof. Alok Dhawan, Director, CSIR-IITR and Bhuvana Nageshwaran, Director, F&F, Ultra International India

## ULTRA INTERNATIONAL STEERS CSIR-IITR AND RIFM TOWARDS A HISTORIC PARTNERSHIP

Ultra International India, one of the country's foremost fragrance and flavour (F&F) manufacturers, organised a two-day conclave in Lucknow, Uttar Pradesh in February 2018. The event was organised in collaboration with the prestigious global entity Research Institute of Fragrance Materials (RIFM), the International Fragrance Association (IFRA) and the Council of Scientific and Industrial Research and Indian Institute of Toxicology Research, CSIR - IITR.

Attended by doyens of the F&F industry, academia, and even farmers, the conclave was an eye-opener on the growing importance of safety assessment in the industry today. CSIR-IITR and RIFM agreed to work together to expand international partnership in this arena. The two organisations subsequently signed a Memorandum of Understanding (MOU) at The Chart House in Weehawken, New Jersey on September 27, 2018 to take this forward. While the partnership was signed and announced by Professor Alok Dhawan, and Jim Romine, distinguished heads of the respective organisations, it was Ultra who played the pivotal role in bringing them together.

As a speaker at the conclave, Prof. Alok Dhawan, Director, CSIR-IITR, Lucknow, India highlighted the safety factor and future potential for the natural fragrance ingredient market. Currently, valued at \$5.3 billion, India is poised to command about 40% of the global market by 2024. This indicates an impressive projected growth trajectory of approximately 12% in those five years. In his President's address, Jim Romine apprised attendees of latest initiatives like alternatives to animal testing and streamlined safety assessment for dermal and respiratory sensitisation. Topics as diverse as fragrance evaluations on skin sensitisation, phototoxicity, toxicology, biotransformation, and genotoxicity were showcased by RIFM scientists and researchers.

While the organisations have pledged to spare no effort in establishing safety testing methodologies and standards, these developments augur well for the Indian fragrance industry. India can now harness the benefits of innovative product development and match up to global quality standards.

  
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