



**Ultra International B.V.**

Essential Oils, Ingredients, F & F

THE COLOURFUL WORLD OF ESSENTIAL OILS  
**MARKET REPORT**  
~ JUNE 2016 ~

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## MARKET RESEARCH

# GLOBAL ESSENTIAL OIL GROWTH

### *Our Analysis*

Recent studies have suggested that the value of the global essential oil market is set to reach a staggering USD11.67 billion by 2022, compared with a current estimated value of USD 5.51 billion. That's around a 10% year-on-year growth – good news for all you'd assume?

This growth is primarily based on a growing consumer awareness regarding the health benefits associated with natural and organic ingredients in personal care, beverages and household products. The continued trend of moving away from synthetic ingredients should ensure that we see year-on-year demand growth but with this trend the risks associated with dealing with natural products also increase. To ensure that we don't face future supply issues we need to continue to invest in projects at grass roots level, by trying to grow products in different countries and regions to reduce the risks of being dependant on any one area for one product. Only with greater diversity of supply sources will we be able to sustain this anticipated growth, which is why Ultra continues to invest in our supply.

Global essential oil market demand was estimated at 165,000 MT in 2014 with orange oil leading the way accounting for 29.1% of total market volume. Orange oil's environmentally friendly characteristics make it suitable for use in perfumes, household cleaners and as a biological pest control agent. Also it is expected to be one of the highest growth essential oil products with growth forecasts of 9.7% year-on-year from now until 2022. Bad news considering some of the immediate supply issues we are facing!

It's not just orange which is facing challenges. Fresh citrus fruit demand is growing around the world in particular for lemon and limes. Taking into consideration that the oil market is a by-product of the fresh citrus market this could result in less fruits for processing, meaning less oil. Add to this the growing demand across the beverage markets then you can see potential unbalances in the years ahead.

Food & beverages is the dominant segment within the essential oil market commanding a demand share estimated to be over 30% in 2014. Growth of the food & beverages industry, particularly in the Asia Pacific region, is expected to drive this segment forward over the coming years.

Another emerging market is the aromatherapy sector in Europe and North America. Moving away from conventional drugs and medicines to alternative, natural remedies has created a huge market expansion with other regions yet to follow. This is also the case with the spa market, particularly in South East Asia,

which has accounted for some significant growth in recent years and will continue to do so in future years.

Europe is the leading market for essential oils with a market share exceeding 40% in 2014. This is attributed to a greater awareness amongst consumers regarding health benefits offered by natural and organic products. Asia Pacific is expected to witness the highest per annum growth of 9.2% from 2016 to 2022.



“

***It is interesting that today we have many buyers for many essential oil waiting for new season material expecting prices to fall when most users are at the same time confirming they are experiencing A 10-15% growth in natural demand.***

Meanwhile, on the supply side, there are only a few naturals where you can say plantations and therefore production is actually increasing to meet this demand, especially through any planned and sustainable investments.

So whilst thinking about tomorrow's supply and how 2016 is shaping up, it is important to look at the bigger picture and think about our future. The good news is that we all have a future and with market growth there's plenty of room for all of us. How will you shape your business for the future?

## LEMON OIL Argentina

*Citrus limon (L.) Burm. F.*

Due to rains there has been some delays during April and May to the start of the season which has put some additional pressure on both the oil and fresh fruit markets. It was widely expected that Argentinian lemons would be exported earlier to relieve some pressure on fresh fruit supplies in Europe but the 4-5 week delay only helped push local prices in Spain up another 5-10%. According to some Argentinian processors the delays are also expected to have an impact on fruit yields but to what extent cannot be verified.

Despite this minor setback there have been significant increases in production over the past 12 months and based on the most recent forecasts, as much as 1.45 MMT (Million Metric Tonnes) of fresh lemons will be produced in the 2015/16 season. However, other reports suggest that the figure will be closer to the 1,300,000 MT we saw last year, especially after these recent harvest delays.

**FRESH LEMON**  
*Production increasing*

**1,450,000 MT**



We have already seen the impact on the lemon oil market as supplies rebalance and with it, to some extent, prices. That said, this doesn't apply for all regions as the European fresh fruit and oil markets face far different scenarios, which will also play a role in Argentina's pricing, as demand for them will increase from other markets.

With Argentina producing more oil than all other origins combined it does have the greatest impact with regard to global supply and demand. Just as we saw in 2014 when Argentina had problems and prices rose significantly, now supplies are fully recovered prices have softened but not back to anything like pre-2014 levels. The reason is they don't need to.

The Argentinian producers are aware of the difficulties in other lemon oil producing countries and the fact that prices in these areas are actually increasing means that Argentinian producers are in a stronger position to optimise their profits this year and make up for the previous difficult times.



For 2015/2016, fresh lemon exports are projected to increase significantly to 280,000 MT (a 51 percent increase from the previous year), due to the production rebound and less fruit supply in Northern Hemisphere countries.

*According to Uno Entre Rios Argentina's total citrus production amounts to 2,600,000 tons, 55-60% of which correspond to lemons. In 2015, Argentina exported 95% of the lemon harvested for 600 million dollars; 70% of these lemons were processed and sold as juices and oil.*

*Argentina has 50,000 hectares devoted to the cultivation of lemons, 90% of which is located in Tucuman, and the remaining 10% is in Salta, Jujuy, Entre Rios, and Corrientes. The country's lemon average yield is 35 tons per hectare. The industry employs around 50,000 people in Tucuman alone, the largest generator of jobs in the region.*

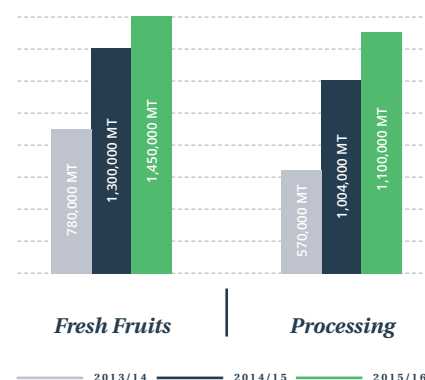
The main markets for Argentinian exports are the EU and Russia making up for 72% and 16% of all exports respectively. This is around 180,000 MT of fresh lemons. More good news for the international markets is the Argentine government's decision to remove export taxes in an effort to counter the recent devaluation of the local currency. For lemon oil this means a 3.5% decrease in local taxes, which many producers are looking to pass on to their customers in order to gain a competitive edge.

It's certainly better days for the Argentinian producers but not necessarily for all end user markets. With demand increasing both domestically and internationally for fresh fruits and oil, Argentina will no doubt fill many 'boots' and probably at

reasonably high prices. The global net position on lemon production is estimated to be 3% down on last year.

 **USD 30.00 - 32.00 /kilo**

### HISTORICAL OUTPUT (MT)



**BUDDAWOOD OIL** 🌍 Australia

*Eremophila mitchellii*

Regular production is generally meeting the needs of the market with only some short delays occurring should demand patterns change without warning. Production is steadily growing as the product finds its way into new applications, in particular masculine fine fragrances. There are plans afoot to continue to increase capacities and should the market require, further investment is on hand to cater for any sudden extra demand.

🏠 AUD 450.00 /kilo



**KUNZEA OIL** 🌍 Australia

*Kunzea ambigua*

New production of a higher viridifloral type of oil started in late 2015 and has already found its way into new markets. With capacities much larger than the previous sources in Tasmania, end-users can add this product to their portfolio with much more confidence of a sustainable future. Furthermore, the improved economies through distillation of larger volumes and modern harvesting equipment mean more attractive pricing is becoming available encouraging interest from other areas in particular the fragrance markets. Gone are the days of an annual market of a few hundred kilos; capacities today can be measured in tonnes should they be required. Expect good supplies throughout 2016.

🏠 AUD 350.00 /kilo

**CYPRESS OIL BLUE** 🌍 Australia

*Callitris intratropica*

Supplies remain difficult as production fails to keep up with global demand, which has seen good growth over the past year. There are plans for a plant upgrade, which will increase capacity, but this isn't expected to come online until the third quarter, leaving supplies tight until then.

🏠 AUD 450.00 /kilo

**SANDALWOOD NUT OIL**

*Fusanus Spicatus Kernel Oil*

Harvesting started before the new year and was completed late March. Stocks are plentiful and are expected to remain so throughout 2016.

🏠 USD 150.00 /kilo

**ROSALINA OIL** 🌍 Australia

*Melaleuca ericifolia*

New production started in early 2016 and with it a renewed sense of sustainability. Over recent months many aromatherapy companies have been discouraged from using this wonderful oil due to inconsistencies in quality from mainland Australian suppliers, but this new production based on Flinders Island could ensure the product has a much brighter future. Although it is slightly different from previous examples, the prospect of pure oils and a consistent quality over a long-term period is already starting to encourage the market to adopt this newer quality.

🏠 AUD 250.00 /kilo

## SANDALWOOD OIL WEST AUSTRALIAN

### *Santalum spicatum*

New production of oil from plantation wood has started to come online bringing with it a sense of relief from those desperate to find alternative sources. This has been a long term event and the benefits should be seen long into the future.

The extra volumes are modest for the moment so the impact on price isn't being felt as yet but this will come, as will the additional security of supply many have been waiting for.

Additionally a change to the local wood distribution supply will come online in October this year. It is expected to bring with it better access to wood for other producers who have long been forced to pay higher prices to gain access to wood supplies via different routes. This along with the new plantations stocks will see the markets open more freely to processors over the course of 2016.

📈 USD 1,700.00 /kilo

## TEA TREE OIL 🌐 Australia

### *Melaleuca alternifolia*

2015 marked a new record production for Australian tea tree oil but despite this there remains very little carryover stocks. Many buyers covered their requirements early so the market has been seemingly flat in recent months. That hasn't detracted from the fact that an overall increased production of 150 MT over the course of the year has been consumed, owing to the fact that tea tree oil is becoming more and more popular.

A number of farmers are suggesting that this year's harvest could start a little later than usual so it may be that the market will tighten a little more into the new season, which is forecast to commence early July.

You can also expect some changes to market conditions this year as we are likely to see some consolidation amongst producers within the local markets and the upcoming changes to the ISO Standards should encourage more use of pure Australian tea tree oil than other less compatible origins.

📈 AUD 45.00 /kilo

## SANDALWOOD OIL INDIAN 🌐 Australia

### *Santalum album*

***The plantation resource in Western Australia is starting to produce good quantities of oil. Press releases by one of the producers indicate that it will increase production by more than 10 fold in 2016 suggesting an additional 10 MT more of Indian sandalwood oil!***

With the added introduction of a second supplier during the year there will be a little competitive tension in the market and whilst the quality of the plantation oil is not quite up to the traditional Indian standard, it does appear to be of reasonably good quality.

This will give perfumers a real chance to start using the oil again after a period in the 'cold' due to the wild harvest Indian sandalwood not being accepted as it had a high percentage of untraceable wood. However, prices do remain high with one producer currently asking US\$4,500 per kg.

That said there are unconfirmed reports that long-term deals are being done at significantly lower prices to encourage usage whilst keeping the appearance of the market price higher to satisfy investors.

Another supplier is now offering oil around US\$ 2,500 /kilo which is more realistic in today's market so we expect to see prices of plantation oil stabilise closer to these levels in the near future.

📈 USD 2,500 /kilo +/-



**LIME OIL CP** 🌐 Brazil*Citrus latifolia*

Domestic demand for fresh fruits has meant a reduction in this season's first bloom limes being sent for processing. It is anticipated that the net effect is around a 15% reduction in oil processing, a trend that we may see continue throughout the year.

Although the season is all year the main harvest period lasts between December and July but heavy rains in January and February hit the production hard. That said there is some availability but supply and demand is delicately balanced.

🏠 USD 34.00 /kilo

**D'LIMONENE | ORANGE TERPENES** 🌐 Brazil

This year, shipments from origin are around 10% up on the monthly averages from 2015 but prices (based on FOB rates) are on average 45% higher!

Generally, markets seem stable although firm but it is thought that the supply pipelines from origin to end-users are fairly low as consumers continue to cover only their basic needs. This adds an element of vulnerability to the markets should supplies start to slow as they seasonally do around mid-Summer. The story of any citrus bi-product will follow the paths of the fresh fruit, juice and oil markets before their own market dynamics play a part, but with the uncertainty surrounding those markets at the moment the future prospects of d'limonene remains delicate.

🏠 USD 8.00 /kilo

**KUMQUAT OIL** 🌐 Brazil*Fortunella japonica*

Interest continues to grow with tangible results now being seen in markets across Europe and Asia. Capacities remain at around 5 MT per annum but thoughts are in place to expand this capacity given current interest and ongoing development work at the end-user level.

🏠 USD 180.00 /kilo

**ORANGE OIL BITTER** 🌐 Brazil*Citrus aurantium ssp amara*

Production of both green and mature fruits have been quite good and with an earlier than usual season, new oil is already available.

Demand is expanding substantially for this material for both flavour and fragrance applications and with reduced availability from Italy and Ivory Coast demand remains firm.

🏠 USD 58.00 /kilo

**ORANGE OIL CP** 🌐 Brazil*Citrus sinensis*

Markets remain very firm and volatile as we look towards the second half of 2016 although statistically supplies paint a different story.

In January and February, Brazil exported around 90 containers more orange oil than in the same two months of 2015, which continues a trend we saw in the final quarter of 2015. This would suggest supplies have increased at a time when Brazilian producers achieved a premium for their oil. Despite this, the market remains firm and on high alert, as supplies continue to be threatened by the major producers.

It is normal to see supply to the markets fall from June to August, which will be a telling time for how the market gears up for supplies in the second half of 2016. Most major buyers and end-users will

**LEMON OIL** 🌐 Brazil*Citrus limon (L.) Burm. F*

The season has been quiet good for this up and coming lemon producing nation with many now happy to consider Brazilian quality as a straight alternative to Argentinian. Production is continuing to grow along with general demand.

🏠 USD 28.00 /kilo

**MANDARIN OILS** 🌐 Brazil*Citrus reticulata*

Overall production volumes have been slightly reduced this season at a time when demand levels are very high. This is particularly the case for any 'Italian' types of oil being produced.



be well covered for the next quarter but all indicators from source suggest a similarly difficult second half, just as we've seen over the past 12 months.

Average FOB prices are still under today's market levels as seen in most parts of the world but those numbers continue to be skewed from the conclusion of old contracts. It is expected that when we see average prices from Q2 2016 exports, they will be more inline with today's market prices.

It is understandable why processors are worried about future supplies. In a normal year around 20% of oranges go into the fresh fruit domestic market. Due to the late blossoming flowers from last year (which produce low yielding fruits unsuitable for processing), it is estimated that this year another 20% will also reach the local market for fresh consumption. Generally the local markets for fresh fruits peak from February to April so many of these off fruits have been recently picked and sold leaving the available fruits for

processing from May onwards very low. This at a time when fruit picking is at its lowest.

Officially Citrus BR closed the 2015/16 season with figures of 261 million orange boxes processed (40.8kg per box). The total of processed and non-processed fruits was calculated to be at 302.2 million boxes for which they summarised as follows:

Looking ahead to the 2016/17 season

*The juice yield on fruit of 302.2 boxes per metric ton of FCOJ was the worst average ever recorded by the industry. It was 25.7% LOWER than the 240.5 boxes experienced in the 2014/2015 season. The lower juice yield is the result of the above average rainfalls caused by the El Niño during peak harvesting season. As a result, not only juice content in the fruits has significantly dropped, but average brix of fruits processed have also fallen from 12°Brix in 2014/2015 to 10.2°Brix in 2015/16 season.*

the story doesn't get any better and with it neither do the prospects of more oil availability and price reductions. A Brazilian crop estimate project (PES) looks at the total number of orange bearing trees, average productivity forecasted per

bearing tree and estimated total orange production in the state of São Paulo and Minas Gerais Triangle Citrus Belt for the 2016/17 Season.

Today they're forecasting a SHARP REDUCTION of 18.3% in the total 2016/17 crop compared to the one that just closed which will take another 60 million boxes out of the market!

This short and medium term forecast of

limited fruits being available for processing will inevitably put pressure on oil supplies during the second half of the year, no doubt keeping prices firm.

📈 USD 9.00 /kilo

## LAVENDER OIL 🌍 Bulgaria

*Lavandula angustifolia*

It is still too early to see how this year's crop will perform but generally the plants came through a mild winter unscathed. That said Spring has been very wet but whether this has any lasting impact remains to be seen. June is a critical time for lavender plantations as it needs enough sun to blossom. It will be hoped that the clouds break and the sun shines soon, otherwise those good plans for additional oil this year could soon seem more like a dream.

Depending on the hours of sunshine and temperatures at that time, yields can be significantly increased or decreased to the extent that if all goes well we can expect perhaps 250 MT this year but if the conditions that prevailed in 2014 occur again, the same plantations could yield us as little, or less than 160 MT.

With additional plantations in recent years we understand there to be around 4,000 hectares of lavender fields in Bulgaria. Final calculations from 2015's crop suggest Bulgaria produced and exported around 200 MT of oil, which was significantly up on the previous year by around 60 MT. Today there is very little oil available in the market and nothing at origin, suggesting the markets easily consumed these increased volumes.

📈 Euro 70.00 /kilo

## ROSE OIL 🌍 Bulgaria

*Rosa damascena*

Relentless rains are stalling and damaging this year's rose collections as harvesting was hoped to have started already. Producers are reluctant to commit to any details and pricing at this time.

📈 N/A



**CASSIA OIL** 🌍 China*Cinnamomum cassia Blume*

This year's crop period was very short. A delayed start was concluded with an early finish with around 30% less oil produced than from the same period last year. This continues a downward trend in recent years for cassia as last year's production was 50 MT less than 2014 at levels of 400 MT.

Producers have cited increased costs of around 20%, which they are trying to compensate at the other end with the buyers but in a weak market that is proving difficult to achieve. As such there will come a time in the not too distant future when stocks are depleted and their higher target prices will become more obtainable. Our advice would be to cover now at reasonable prices rather than risk the markets firming at a later date.

📈 USD 37.00 /kilo

**CITRONELLA OIL** 🌍 China*Cymbopogon winterianus*

The early season has not been great as cold weather destroyed many crops over the winter period. Thankfully after last year's bumper crop, stocks remain reasonable but it is expected that prices may increase over the coming weeks or until the summer season begins from late July.

📈 USD 17.00 /kilo

**EUCALYPTUS OIL** 🌍 China*Eucalyptus globulus*

The market remains delicately balanced, which is a pattern we are starting to get used to for this product. Over the past 12 months, we have seen supply and demand keep fairly in line with each other with the only changes to this being short lived. This comes either when demand spikes or during the seasonal months when harvesting and production fall, as we are seeing now.

The trouble is that this time the effects could be felt for longer as too many leaves have fallen due to inclement weather, meaning there is likely to be no summer harvest and possibly a very small harvest in December. This will mount pressure on a delicate situation so we expect prices to continue to firm.

📈 USD 14.00 /kilo

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

It is still a challenge to understand the full context of the situation in China. Despite noises being made to suggest there will be an increased 2016 production; we are seeing China in the global market as net buyers.

We certainly know that their internal demand for sclareol is high as demand for Ambroxan grows year on year and they've been trying to address this with new plantations.

Suggestions of an additional 15 MT are still being discussed, which will

help the overall supply imbalance in the market but one report recently suggested that the oil quality won't be very good on colour and odour. It certainly won't be good enough for the perfumery and aromatherapy markets but may be suitable for processing.

The new season will begin later than usual around October but it isn't thought that any outcome of this crop will make much impact on the global scene.

Essential oil buyers will need to turn to France and Russia for their supplies.

📈 USD 220.00 /kilo

**GINGER OIL** 🌐 China*Zingiber officinale*

The new season has certainly helped to ease supplies and prices after we'd seen prices creep up towards the end of last year.

Today there are some good offers available so our recommendation would be to buy now for the rest of 2016.

🏠 USD 75.00 /kilo

**LAVENDER OIL** 🌐 China*Lavandula angustifolia*

In 2015 the Chinese had a difficult year competing on the global lavender markets, not helped by strong production from Bulgaria and France. Even today you are able to find some stocks from last year's production with many producers happy to cut their losses and look towards a better 2016. Whether they get one will very much depend not just on their own crop conditions but the conditions of other producing areas. If everyone has a good year it is questionable as to how much the Chinese can compete but that hasn't deterred their interest for now so let's see how the next few months play out. Mother Nature can work in mysterious ways!

🏠 USD 90.00 / kilo

**NATURAL CITRAL** 🌐 China

EX LITSEA

We're off-season and as supplies diminish, prices are rising slowly. This could be a trend until the new season, which begins late August so ensure you have cover until Q4.

🏠 USD 20.00 /kilo

**GERANIUM OIL** 🌐 China*Pelargonium graveolens*

The smaller production in 2015 managed to keep prices firm, which is a trend many expect to see continue despite the new season having just started. Competition amongst collectors, coupled with higher labour and production costs, has meant that early calculations of new season oil actually see prices increase! The season will continue over the next 4-5 months so maybe there is room for things to improve; however, at this stage this scenario seems unlikely.

🏠 USD160.00 /kilo

**GARLIC OIL** 🌐 China*Allium sativum L.*

Depending on whom you speak to there has been either zero production or very little production for over 12 months. This has put an immense pressure on supplies and with it market prices. Today prices are higher than they have ever been with no real positive changes foreseeable on the horizon. The season started in May but it seems production will only be made against firm orders, which will no doubt leave us with no carryover after the short season. Analysts say that based on the real price for garlic in the local market the oil price would have to be over \$400 / kilo to be viable.

🏠 N/A

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## AUSTRALIA KUNZEA OIL

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### *What makes it so special?*

Is this just another one of those mystical, conceptual, fantasy essential oils from Australia or is it something real? Well we can tell you this one is 100% real!!! Why is that you ask, then read on.....

Kunzea has been around for a number of years, pioneered in its early days by farmer John Hood on the Australian Island State of Tasmania. Producing a few hundred kilos a year, Kunzea found itself in a few small boutique aromatherapy brands but was always the underachiever in comparison to essential oils like tea tree. Well we feel that this could now change having seen the investment recently made to upscale production in order to reach new markets.

Kunzea ambigua or 'White Cloud' is native to Southern Victoria, Tasmania and the Bass Strait Islands including Flinders, which lies off the north east coast of Tasmania. The plant is a large shrub growing 3-5 metres in height, flowering in the spring, which in this region is from late August until December.

The oil itself is known for its therapeutic values. The local TGA (Australia Therapeutic Goods Act) referencing evidence of it assisting with the 'temporary relief of pain associated with arthritis and for the relief of muscular, tendon and joint aches and pains.' The oil also offers 'temporary relief for symptoms of influenza.' The official TGA listing is AUSTL 72143. Google this reference for more information on its associated benefits.

*A number of essential oils can lay claim to similar therapeutic benefits so what makes this one actually work, or considered as better than others? Well it has a high content of important sesquiterpene compounds (C15), in fact it has five!! This is impressive as many other essential oils only contain 2 or 3.*

*Kunzea is the only one known to contain so many. It is these sesquiterpenes that provide the anti-inflammatory benefits, relieving inflammation in a powerful way. The five C15 compounds present in Kunzea are globulol, viridiflorol, spathulenol, ledol and bicyclogermacrene. We've highlighted viridiflorol for a reason. Keep reading.*

Another reason why Kunzea is different from other essential oils is its unusual biochemical properties. Its two major constituents are alphapinene and 1,8 cineole. The pinene is present in a larger percentage than the cineole, which is very unusual, in that the opposite is the case for most other similar essential oils, taking Eucalyptus as an example. The presence and ratio of these two compounds gives Kunzea its powerful properties for treating all manner of respiratory conditions. Its low percentage of cineole also means that it is very safe to use on the skin, another good feature for use within topical applications as Kunzea is largely considered to be a non-irritant.

Viridiflorol is highlighted due to the fact that some of the oil recently distilled is particularly high in this component potentially enhancing its performance as an anti-inflammatory. We believe that harvested at the right time increases the level of viridiflorol in the yield. Further trials surrounding harvesting techniques are currently being investigated along with ways to isolate this molecule. Viridiflorol is also found in Niaouli, Tea Tree and Eucalyptus essential oils. Analytically

- ◆ Alpha-pinene 45-50%
- ◆ 1,8 cineole 11-13%
- ◆ Alpha-terpineol 2%
- ◆ Bicyclogermacrene 4-5%
- ◆ Globulol 7 -9%
- ◆ Viridiflorol 7%

Kunzea oil commonly looks like this: In relative terms work with Kunzea has only just started. Dr. Daniel Pénoël, a renowned French physician who specialises in the therapeutic use of essential oils, gives high praise to Kunzea essential oil and is currently conducting studies to see if it can be used as a treatment in capsule form for Crohn's Disease.

**Kunzea's main THERAPEUTIC BENEFITS can be broken down into the following attributes with references compiled from various sources including Mark Webb's book 'Bush Sense'.**

#### INFLAMMATION

Again referring to Dr Pénoël's work he reported the case of a patient of his whom he treated for severe inflammation inside her lungs as a side effect of radiotherapy for breast cancer treatment. Her lungs were not infected, simply inflamed, as though they had been burnt.

During treatment with Kunzea, her body's inflammatory reaction decreased and her energy levels improved. When the Kunzea treatment was stopped after two weeks, her energy level dropped significantly and her inflammatory response started to rise again.

#### MUSCLE PAINS

Mark Webb, a well-known Australian aromatherapist, lists that Kunzea promotes rapid repair of soft tissue injuries, such as sprains and strains. This is backed up in a number of other publications.

#### MICROBIAL INFECTIONS

Kunzea's anti-infectious and antimicrobial properties can be effective if treated at the first signs of a common cold.

Kunzea is also excellent for respiratory and throat infections when used in a throat gargle or steam inhalation. Kunzea also has the added benefit that its anti-inflammatory properties are effective in soothing inflamed respiratory passages and lungs.

The results of microbiological testing undertaken by Tasmanian Laboratory Services show that Kunzea oil is effective against staphylococci and legionella. Mark Webb mentions Kunzea's effectiveness against *Staphylococcus aureus*, *Pseudomonas aeruginosa*, *Escherichia coli*, and the fungal *Candida albicans*.

#### DENTAL PAIN

Kunzea oil has successfully been used as a dental antiseptic and anti-inflammatory. In applying neat Kunzea oil, several times daily, the inflammation cleared up and bacterial growth can be stopped.



Beyond aromatherapy and as a PERFUMERY INGREDIENT it is being recognised as something unique in the green herbaceous family and can already boast a number of references. Its fragrance is clean, fresh, and medicinal with a hint of spice.

Kunzea is an interesting product with a great story that can add a unique twist to many FRAGRANCES and medicinal products. In our dynamic market each product must have something unique as well as being a great functioning item, so why not give Kunzea a try?



### HELICHRYSUM OIL 🌍 Croatia

#### *Helichrysum angustifolium*

Today there are little supplies to talk about in the market with the next season not starting until late June.

This is the only season planned this year and will last around 8 weeks, until mid-August. As with 2015, there will be no spring season as the government continues to restrict harvesting.

Last year we saw a 40% reduction on the previous year's production. We expect similar levels this year to those of last.

🏠 N/A



### BASIL OIL LINALOOL 🌍 Egypt

#### *Ocimum basilicum L*

Prices remain firm with limited oil to cover until the next crop starting in July. Unfortunately good quality material remains an issue with many having to accept a higher level of methyl chavicol in order not to be forced to pay higher prices.

🏠 USD 115.00/kilo

### CUMIN SEED OIL 🌍 Egypt

#### *Cuminum cyminum*

The crop started in May and continues but has so far yielded some poor results. As a result, the price for seeds has increased and with that oil prices have also started to rise and many are forecasting this trend to continue. As we mentioned in April the sooner you cover the better price you'll pay.

🏠 USD 110.00 /kilo

### CORIANDER HERB OIL 🌍 Egypt

#### *Coriandrum sativum L.*

Production started mid-April and finished late May but as usual most production is made to order. Prices have softened but remain higher than prices from other origins, where we are still finding some carry over stocks from last year, which may affect demand this season for the Egyptian oil.

🏠 USD 135.00 /kilo





## GERANIUM OIL 🇪🇬 Egypt

*Pelargonium graveolens*

Difficult to summarise as prices have been low along with demand for some time. There doesn't appear to be much justification for the weak markets and it is hoped that demand will return this year.

This could coincide with an expected smaller cultivation this year which could help prices to recover (good if you're a producer!) but to what extent it is difficult to say. There are always some external dynamics to consider with this oil and origin and already some farmers and speculators are using the idea of a poor crop to push prices up.

Locally prices have started to rise but with the weak local currency that increase isn't reflected in the export pricing...yet! It may be worth taking your cover now before the speculation gets out of control!

🏠 USD 70.00 /kilo

## BLUE CHAMOMILE OIL 🇪🇬 Egypt

*Chamomilla recutita L.*

Production started late March, which is a little earlier than usual and ended early May. This early start was in part due to a high demand from the market although there was some worry that the early start may affect overall yields. Despite another small crop there appears to be reasonable stocks and with the local currency devaluation prices have actually fallen.

🏠 USD 950.00 /kilo



## JASMINE ABSOLUTE 🇪🇬 Egypt

*Jasminum grandiflorum L.*

Markets have softened a little since the turn of the year with small lots still available from last year's crop. The new season will start around early June and is expected to be normal.

🏠 USD 4,000.00 /kilo



## PARSLEY LEAF OIL 🇪🇬 Egypt

*Petroselinum crispum*

No significant changes since our last report with supplies remaining limited as we're off-season and with little oil being produced this year due to overall weak demand.

🏠 N/A



## NEROLI OIL 🇪🇬 Egypt

*Citrus aurantium*

The new season started late April and ended soon after with all stocks immediately sold. Overall the flowers were 35% lower than last year with most of the raw materials used to produce concrete.

🏠 N/A

**CLARY SAGE OIL** 🌍 France*Salvia sclarea*

After last year's proposed new volumes didn't arrive everyone is hopeful that 2016 will be different.

There is a significant amount of new plantations that 'should' yield some results this year with the hope France can increase output by a few tons.

Last year's volume is estimated to be around 16 MT with every drop selling quickly at record high prices. The new plantations could add 5-8 MT more oil this year but as always Mother Nature will have the final say.

🏔️ N/A

**LAVENDER OIL** 🌍 France*Lavandula Officinalis*

Stocks at origin are now depleted after a complete sell out year for French lavender. Production last year was average even if some other lavender types performed better than expected it certainly wasn't the case for Maillette. Whilst other lavenders showed modest growth of around 4% on average Maillette suffered. As a result, prices finished on average higher than in 2014 as demand for this quality is always high.

As with all lavenders the flowering period before the harvest will determine what yields we can expect. This is always a balancing act by the farmers who have to be ready to move quickly once the right time arrives.

🏔️ N/A

**LAVANDIN GROSSO OIL** 🌍 France*Lavandula hybrida*

Despite a strong 2015 production (although without the growth we originally anticipated), demand has remained firm and all stocks at origin are now sold. 2015 production was up around 5% on previous years but it looks like that wasn't enough to fulfil the overall demand. Today, buyers are asking for material to tie them over until the new crop but are finding very little available. Instead many are turning to other sources, such as Spain, and finding they're having to pay much higher prices. It is too early to predict this season's outcome but so long as there is no major drought during spring and no overly hot pre-harvest period all should be set for a similar output to that of last year.

🏔️ Euro 30.00 /kilo

**LAVANDIN ABRIALIS OIL** 🌍 France*Lavandula hybrida abrialis*

Reflecting on recent years we can see that there is little future for this variety as year-on-year output declines. Last year's production was down a further 15% on 2014. It seems there are still a number of end users who insist on this variety but in reality they are less likely each year to be buying what they think they are buying with volumes of real abrialis almost non-existent. Today there are no stocks at origin.

🏔️ N/A

**LAVANDIN SUPER OIL** 🌍 France*Lavandula hybrida*

Recent years have seen this variety decline and with it prices increase and it is unlikely this trend will be any different during 2016. That said there is some good news, as recent new plantations will hopefully add new oil into the supply chain after the 2017 crops. Today there is no material at origin and with the season not starting until July (with oil available late August) expect the market to remain very firm.

🏔️ N/A



# SEASON

## IS IN

# SIGHT



Make Ultra your choice for  
**Lavender & Lavandin** oils this  
 coming season!

All varieties, all origins,  
 all in one place

### AMYRIS OIL Haiti

*Amyris balsamifera*

Production is now focused on the Dominican Republic and of late some local restrictions have been in place to prevent the movement of raw material to the factories. This is for deadwood as live wood cannot be harvested as it's under a government protection order.

Thankfully we are hearing that these restrictions have been lifted which in time will provide some relief. That said the market is starved of supply and it will take some time before there is a better balance in the market until then prices will remain high.

Historically it grew freely in Haiti but was depleted over time because the branches burned well due to their density and dryness making it a good energy source for local households. It is now harvested in the Dominican Republic and is a protected species therefore the industry is reliant on the availability of deadwood.

📈 USD 55.00 / kilo

### VETIVER OIL Haiti

*Vetiveria zizanioides*

Supplies are simply not available as the availability of raw materials and basic commodities for processing are short.

Last season (ending October 2015) there was no carry over stocks and today there is a backlog of orders to fulfil. In February limited production started again but the key word here is 'limited'. It is likely to take some months before supplies catch up with the demand so expect prices to increase over the next quarter.

📈 N/A

**LIME OIL DISTILLED KEY** 🌍 *India**Citrus aurantifolia*

Major projects continue to progress with a view to standardising the local fresh fruit market and increasing the capacity to receive more limes for processing. This will take time but it's likely to offer us more options for some small increased capacity during 2016.

Indian lime is a particularly good quality, similar to that of Mexican Key Lime but given current costs can be slightly more expensive. That said it is always good to invest in new origins and this one is no different. Better economies will come so it would be good to have this quality already approved and purchased.

🏠 USD 38.00 – 40.00 /kilo

**DAVANA OIL** 🌍 *India**Artemisia Pallens*

The new season started late and ended soon after with some highly disappointing results, which immediately resulted in escalating prices. What's more the davanone contents are very low in comparison to usual standards with the best available being in the range of 40-44%. The next crop isn't until February 2017 so this one isn't going to get any better soon.

🏠 USD 550.00 /kilo +

**LEMONGRASS OIL** 🌍 *India**Cymbopogon flexuosus*

The markets have started to rebalance and as a result prices are now more stable. In 2015 production was down around 30% and the availability of good quality oil became difficult. Whilst we're still not seeing good continuity it is thought that supplies are catching up with demand perhaps owing to a weakened market in recent months. Once we get to the summer harvesting period it is hoped the markets will improve further.

🏠 USD 18.00 /kilo

**CORNMINT OIL** 🌍 *India**Mentha arvensis*

The 2015 crop saw a 30% reduction on the previous year's output, most of which was planned due to the declining market demand. Markets remain flat with some stocks still available. Crude Mentha Arvensis prices are very low at the moment as producers look to turn over stocks before the new season starting in June.

🏠 USD 16.00 /kilo

**BASIL OIL HOLY** 🌍 India*Ocimum sanctum*

The new season has concluded with less production than in 2015 due to the declining prices and demand for anethole. Today prices are stable but stocks are low so it could be that during the year we see some price increases.

📈 USD 62.00 /kilo

**PEPPER OIL BLACK** 🌍 India*Piper nigrum L.*

India's pepper cultivation is reported to be around 195,000 Ha, making it one of the largest in the world, although Vietnam remains the largest exporter of the spice.

Over recent weeks the local markets have seen an increase in prices for black pepper spice with global pepper prices (spice not oil) at an all time high. A recent report into the industry forecasts a 3.2% growth in the pepper markets over the next 4-5 years. This is based on consumer trends and supported by many of the world's largest food producers. This growth trend is supported by the IPC (International Pepper Community) who recent assessed the spice markets in saying; 'There is no decline in supply but prices are in increasing trend.

Recent investigations reveal that the change of food habits, increase income in new markets and deviating from artificial flavours have created higher demand for natural food like spices. Though no quantified strong evidences available, it is likely to continue the present prices for pepper with no decline for future.'

Today the oil markets remain stable but will be influenced by the conditions of the spice markets. Should they continue to grow and prices rise we may see some increases in oil prices which have been in more a buyer's market condition in recent months.

📈 USD 90.00 /kilo

**PALMAROSA OIL** 🌍 India*Cymbopogon winterianus*

A lower output this season due to heavy rains has seen local oil stocks reduce, which has helped move prices back to a more attractive level for farmers to cultivate next year. Prices had fallen until the start of the year on the back of weak demand and over supply. Here we see just how things can turn on their head in a relatively short period of time.

📈 USD 40.00 /kilo

**PEPPERMINT OIL** 🌍 India*Mentha piperita*

There is a general sense of an improving situation amongst the Indian producers. After a low yielding 2015 and a weaker market new enquiries ahead of this season 1st cut which started in May has given renewed optimism. It is understood there was around 20-25% additional planting earlier this year which is hoped will lead to a healthy 1st cut.

Today stocks are almost fully depleted with very little carryover from 2015. Today's prices are not indicative of what may come next as we await the new season and the markets requirements.

📈 USD 15.00/kilo (Rect. BP 50%)

**SPEARMINT OIL** 🌍 India*Mentha spicata*

Last year we saw a 35% reduction in plantations compared with 2014 to try and rebalance the supply in the markets due to weak demands brought about by the introduction of synthetic alternatives. This year it is likely to reduce another 25% as more and more farmers are discouraged by market prices from investing in production. It is a buyers market!

📈 USD 22.00/kilo (60% L'Carvone)

# INDONESIA

## P.T. VAN AROMA

*Celebrating 10 years*

### NO LONGER JUST A COLLECTOR

*2016 is an iconic year for our sourcing in Indonesia as our partner, P.T. Van Aroma celebrate their 10th year of business.*

Once considered to be just a collector, Van Aroma can now boast a state-of-the-art facility in Jakarta which produces many different essential oils and natural derivatives. They are also able to say that in 2015 they became Indonesia's largest exporter of Patchouli Oil.

Patchouli is one reason why the business in Indonesia is no longer simply about collecting raw materials and steam distilling. Mother Nature has provided us with a new challenge as traditional qualities continue to change with each new planting cycle, which means bringing the quality up to industry standards involves a more sophisticated process. Given the fact that our industry cannot accommodate such irregularities in quality, our continued strategic investment in Van Aroma's infrastructure will not only allow us to build our capacity and offer new exciting derivatives, but also it will ensure consistency in the quality of the products we supply to our customers worldwide. And it goes well beyond patchouli!

Visit [www.vanaroma.com](http://www.vanaroma.com) for more information on their recent expansion.



Oil production (MT)	2014	2015	2016
Citronella	550	700	Growing
Clove	4,000	4,500	Stable
Ginger Fresh	7	10	Decline
Massoiia Bark	15	20	Stable
Nutmeg	400	350	Decline
Patchouli	1,000	1,400	Decline
Vetiver	25	20	Decline

### PATCHOULI OIL TRANSPORT CLASSIFICATION

There has been some recent confusion over the transportation classification of patchouli essential oil with many clients challenging shipping documents.

Internet searches will bring up many archived SDS's all of which seem to state that Patchouli is non-hazardous, however according to its Classification under Regulation (EC) No 1272/2008, Patchouli is a CLASS 9 Marine Pollutant (H411) and may be fatal if swallowed and enters airways (H304). If you're following GHS you will already be aware of this but many aren't.

Somewhat worryingly a number of Indonesian producers are ignoring this classification and continuing to ship patchouli as non-hazardous.

### PATCHOULI **CLASS 9** Marine Pollutant

As the world's largest shipper of patchouli, PT Van Aroma is committed to ensuring all the regulations are met when it comes to shipping and material safety so goods will only be shipped as per the correct classification.

## NEW ESSENTIAL OILS & DERIVATIVES



### BENZOIN RESINOID

A gum resin which exudes from the bark after tapping. Available as a pourable blend using natural benzyl benzoate. It has warm and sweet vanilla tones.



### ISO EUGENOL

A sweet, spicy, clove-like character for fragrances as well as in oral care products. It is understood the market to be in the region of 100,000 kilo.



### MACE OIL

This is a special oil for any spice lovers! Although from the same fruit, mace is more delicate than nutmeg with sweet undertones, reminiscent of the freshly grated spice.



### NATURAL CITRONELLAL, CITRONELLOL, GERANIOL & RHODINOL

Isolates derived from our Citronella Oil Java offering unique notes and excellent value.

## INDONESIA'S ECONOMY & CURRENCY

Indonesia has the largest economy in South East Asia and with 14.4% of its GDP coming from agriculture this is a very important sector. Because of its proximity to the equator and the existence of over 150 active volcanoes, many Indonesian Islands have rich, fertile soils, perfect for growing a variety of products, making Indonesia one of the world's most bio-diverse countries. With over 40% of Indonesia's workforce employed in the agricultural sector, residents have to adapt and think long-term as their livelihood is not just for today but also for many years ahead.

The country has been able to boast GDP growth over the past decade at over 5% per year and has recently reported a 2% reduction in poverty headcounts since 2010. Back in the Asian Financial crisis of 1998 this was a remarkable 24% of the population! Although GDP growth

has slowed in recent years, the recent transition to a new government has raised expectations, with the World Bank predicting good solid GDP growth of 5.5% in 2015 and 6% in 2016.

Currency plays a major part in the stability of export pricing for all Indonesian products. Generally, we work on the basic principle that supply and demand are our biggest contributors to what makes 'today's market price', but when you work with a currency that can swing one way or another by 10% in a week, this can bring many complications. In fact, over the past 18 months the Indonesian Rupiah (IDR) value against the US Dollar has weakened significantly from 11,000 IDR to 14,200 IDR – which is over a 20% swing. This not only makes export prices cheaper / more competitive at times but also can mask what is really happening to the supply situation on the ground where local prices for raw materials can be going up or down.

It is estimated that the export revenues of essential oils, natural extracts, derivatives and natural isolates have a net income for Indonesia of around \$500 million. A sizeable amount!!

The banking system itself is fragile and rarely supports those needing to find finance to improve their cash flow. Interest rates are double digit and the number of reputable lenders is few and far between. This means that many exporters in our market need to have the ability to self-finance, as the crude raw material side of the supply-chain is cash intensive. From the procurement of raw materials when the cash is first exchanged to the receipt of the funds from the client for the final product can take a matter of months rather than weeks and we are not talking about cheap commodities!

**CAJEPUT OIL** 🌐 *Indonesia**Melaleuca cajuputi*

Finally fresh, uncontaminated lots of this oil have started to come through after months, even years, of ongoing problems. There is still some work to do to ensure it's longer-term sustainability but for now it is pleasing to see some good quality oil. We hope that during the course of 2016 the situation will continue to improve further.

🏠 USD 24.00 /kilo

**CANANGA OIL** 🌐 *Indonesia**Cananga odorata*

The market is now pure speculation as there is no fresh oil available and none for the foreseeable future. As such today's prices are at an all time high and will rise based on who wants what and when. We do not expect to see fresh supplies soon and would recommend you cover any short term needs quickly if you can.

🏠 N/A

**CITRONELLA OIL** 🌐 *Indonesia**Cymbopogon winteranus*

There was almost a 20% growth in production last year as Indonesia continues to express itself in the global market. Whilst still shy of the 2,000MT China produced in 2015, prices for Indonesia origin remain more competitive and more and more end users are switching qualities. Many still see the two origins as interchangeable but for those who don't there are signs of large users accommodating the small differences in quality.

Supplies are continuing to increase from Sumatra with local prices remaining stable. The only difference in pricing month to month is based on the currency exchange rates but in large this only amounts to +/- 5% when the price advantage Indonesia has over China is closer to 10-15% with China expecting price increases later in 2016.

Export prices are further supported with a weakening Indonesian Rupiah.

🏠 USD 15.00 / kilo

**CLOVE OIL** 🌐 *Indonesia**Eugenia caryophyllate*

There remains a reasonable balance in the markets despite supplies of clove leaf slowing in recent weeks. Collections are traditionally lower at this time of year with the next main collection period coming online in August. We may see some small price decreases especially with the weakening local currency. For now, markets remain stable.

🏠 Leaf USD 11.00 – 14.00/ kilo; Bud USD 23.00 /kilo; Stem USD 15.75 /kilo; Eugenol USD 15.00 /kilo

**MASSOIA BARK OIL** 🌐 *Indonesia**Cryptocaria massoia*

Overall supplies in 2015 improved but this market sector lacks controls and continuity. Supplies are ad hoc and qualities need to be re-worked constantly. Efforts are in place to improve this long term but it will take time to find to reassurances we all like to have when dealing with these premium natural ingredients.

Today prices remain firm but stable.

🏠 USD 400.00 – 700.00 kilo

**GINGER OIL FRESH** 🌐 *Indonesia**Zingiber officinale*

There is much interest in this product at the moment as the market assess the viability of this quality as a long term option. It has been seen to be accepted in a number of new and interesting applications. Prices are steady however supplies are not as consistent as they could be. Hopefully more controls from within the supply chain will improve this.

🏠 USD 110.00 /kilo

**MACE OIL** 🌐 *Indonesia**Myristica fragrans*

Despite more apparent challenges within the nutmeg supply the availability of mace for oil production is stable, likely due to the smaller oil market. As a newer product it is gaining momentum and qualities are consistent.

Expect prices to remain at today's levels for the short term unless the nutmeg situation gets out of control.

🏠 USD 75.00 /kilo

**PATCHOULI OIL** 🌐 *Indonesia**Pogostemon cablin*

On the surface the markets remain fairly stable with only small ups and downs in recent month largely due to exchange rate movements rather than raw material costs and supply. That said there is always an ongoing challenge within the local patchouli communities to ensure this stability can continue. Each month following droughts or floods in one area there is a need to balance supplies from other areas and so on. As such more and more effort is required to keep a consistent export quality with only those with the technologies able to keep on top of this. This is one reason why Van Aroma has growth to be the world's largest exporter as their state-of-the-art technologies and quality controls have allowed it to develop the raw material market in newer growing areas.

These technologies combined with the constant reinforcement of good farming practices have helped ensure supplies remain stable and therefore prices.

Over recent weeks supplies from Sulawesi have been low due to recent floods but good stocks with producers has meant the market hasn't felt this potential ripple in supply. Supplies from Sumatra are stable but there is nothing coming from Java at present. Fresh production should start early June which will be needed to add some safety stocks back into the supply chain. We always advise clients that August is known to be a good time to buy and we'd say anytime between now and then will make a safe and good purchase. With the extra collections and the weakening local currency the influencing factors will be on the buyer's side over the coming weeks, so book now, you can't go wrong.

📈 USD 46.00 – 70.00 /kilo

**VETIVER OIL** 🌐 *Indonesia**Vetiveria zizanioides*

The situation simply does not improve with supplies continuing to remain low and market demand increasing by the week. It has been difficult for producers to accommodate even regular clients needs with many new and expectant clients left disappointed.

Earlier in the year we anticipated prices would increase another 15-20% before Q2 and now we're in Q2 we can say the same for the next quarter if not by more. There are simple supply and demand dynamics involved here at every step of the supply chain and with each step the prices keep getting higher and higher with no real changes expected in the short-term.

📈 USD 300.00 /kilo +

**NUTMEG OIL** 🌐 *Indonesia**Myristica fragrans Houtt.*

Supplies remain slow from all regions and with stocks amongst major traders diminishing and large multinationals jumping in to secure supplies, the overall situation remains one of concern. To understand the reasoning behind this we need to backtrack 18 months to recall the previous market conditions and then what happened during 2015 to prices after the introduction of new plantation material.

Back in 2014 prices of nutmeg were averaging around \$120 / kilo – too high and damaging for any new development work. Last year the introduction of new plantations significantly shifted the dynamics of the market with the oversupply of raw materials.

This pushed prices down to unsustainable levels with many farmers abandoning their plantations.

At these low price levels collections slowed down and in time stocks have dried up. Today we find that supply cannot keep up with demand and the obvious patterns continue. Finding a balance seems to be a big problem which is always the case when the markets are unregulated with little to no cohesion at origin when it comes to long-term perspectives.

Can prices continue to climb? Well the feeling locally is yes. Our advice – cover as far as you can as today's prices, despite feeling high compared to several months ago, they are likely to remain the best prices available for some time.

📈 USD 56.00 - 60.00 /kilo +

**LEMON OIL** 🌍 Italy

*Citrus limon (L.) Burm. F.*

There will be some challenging times ahead for the Italian lemon producers after the winter season yielded some poor results. Whilst the number of fruits looked good, dry weather back in November has significantly reduced the yields.

Last year's Italian fresh lemon production was down 2% on the previous year, with imports from Spain (55%) and Argentina (21%) increasing to support the domestic demand. Italy's processing capacities were hit hard in 2014 with 16% fewer lemons processed than the previous year.

The impact of another poor season has pushed up prices for fresh fruits so raw material costs to processors have significantly increased. To put into perspective Spanish lemons are twice the price of Argentinian lemons and Italian lemons are 3 times that of Argentina's!

It is almost certain that Italy will import more lemons this year than last year to compensate and indeed they may become net buyers of oil from other regions. This is another reason why globally the price of lemon oil is likely to remain firm.

▲ EURO 35.00 / kilo

**MANDARIN GREEN OIL** 🌍 Italy

*Citrus reticulata*

No significant change to that last reported, namely prices remain firm amidst a shortage of supply and a strong demand.

The 2015 crop was 15% less than that of 2014, continuing the decrease we've seen in recent years. This is due to farmers turning their attention to other trees, as the cost of mandarin harvesting and cultivating is too high. Of the 17,000 MT crop estimate, around 10,000 MT will go for processing.

▲ EURO 35.00 /kilo

**ORANGE BLOOD OIL** 🌍 Italy

*Citrus sinensis*

Following a good season and low demands from the fresh fruit markets there is good availability of fruits for processing. The only downside is the intensity of colour for blood orange juice, which is not as good as in the past due to warmer climates in January and February. Usually colder nights during the winter months help pigment the oranges to give that intense colour.

Generally prices are stable. However there is a premium charge for good quality material due to increased global demand.

▲ EURO 8.00 /kilo

**LIME OIL DISTILLED** 🌍 Mexico

*Citrus aurantifolia*

Mexican producers are keen to highlight that despite Mexico being hit by the current El Niño event (which could last another few months) the effects on the lime crops are seemingly negligent. Whether that opinion changes when the June harvest arrives is still subject to a few variables, which can occur in the weeks before harvest begins.

Generally the market and prices remain stable at a little under last year although it is understood that a number of large buyers are yet to cover all their 2016 requirements, which could quickly put a squeeze on supply. If this should happen we could see prices increase later in the year. Another factor is the growing domestic and international demand for fresh fruits, which is adding some additional pressures to the number of available fruits for processing.

▲ USD 38.00 /kilo

**ONLY THE FINEST  
LIMES**

**GO INTO OUR  
MEXICAN  
LIME OIL**



*Citrus aurantifolia*





## MANUKA OIL 🌐 New Zealand

### *Leptospermum scoparium*

Supplies continue to increase catering to the markets growing enthusiasm for this special oil. Have you tried it yet or even seen Manuka Honey in your local health food store or supermarket? Here's a refresher on why you should give it a go!

🏠 NZD 600.00 /kilo

*Manuka Oil can also be referred to as Red Manuka or locally Kahikatoa. Over recent years 'Manuka' has become more familiar as a honey, known to be high in antioxidants as well as being damn tasty! Honey is good for us due to its hydrogen peroxide properties, which make it a good antibiotic but manuka honey offers even more components, which act as an antibiotic making it a 'super strength' product.*

*This component is methylglyoxal (MG). Often applied externally on sores and burns manuka honey also has inner health benefits to treat infections. So powerful some experts believe this to be one of the only natural products to fight the hospital superbug infection MRSA (Methicillin-resistant Staphylococcus aureus).*

*It's as a possible superbug antibody that the oil production comes into its own. Maintaining these antibiotic properties through its  $\beta$ -triketones balance the oil is making its way into the healthcare markets at an interesting pace. Although still wild harvested from areas along the East Cape of New Zealand, recent improvements in the collection and extraction process (steam distillation) have increased capacity and with it the producer's ability to offer a more sustainable product.*

*Capacities are now at tonnes and not kilos as the market continues to take a great interest in this hidden treasure.*

## GUIACAWOOD OIL 🌐 Paraguay

### *Bulnesia Sarmientoi*

Production continues to improve with good stocks now available at origin. This should remain in place for the rest of 2016.

🏠 USD 22.00 /kilo

## PETITGRAIN OIL 🌐 Paraguay

### *Citrus aurantium ssp.*

There has been an ongoing situation since early 2015 with the supply of petitgrain oil. Affected by the current El Niño event, supplies have fallen significantly below market demand and as such prices have increased almost month on month for the past year. It is not expected that the situation will improve soon so we can expect this shortage in supply to continue. The advice remains as always – buy what you can and plan as far ahead as you can just to avoid any disappointment from not obtaining product.

🏠 N/A

## CABREUVA OIL 🌐 Paraguay

### *Myrocarpus frondosus*

Supplies continue to be short but against a slow down in sales prices have weakened in recent months. It is unlikely that supplies will improve in the short term so future pricing will depend on market demand over the coming months.

🏠 USD 40.00 /kilo



## ROSEMARY OIL 🌐 Morocco

### *Rosmarinus officinalis*

Difficulties continue with supply with little or no oil available at origin. The same can be said for other North African producing countries like Tunisia. The season started in May although the prospects don't create a great deal of confidence for the markets to improve in the short term as demand for the dry leaf also remains high.

🏠 USD 60.00 /kilo

**ARTEMISIA TAURICA OIL** 🌍 *Russia**Artemisia vulgaris*

It is too early to consider how the 2016 crop will perform as this plant isn't harvested until September/October although heavy and persistent spring rains could ensure there is more material to harvest.

There is also the added complication of where this plant grows as it is cultivated in the South and South East of Ukraine, where lasting conflict remains and where accessing the territory and crossing borders continues to be over complicated.

Today there is limited material on the market, which in turn is putting some pressure on prices.

🏠 USD 80.00 /kilo

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

The headline statement for clary sage is still that it is in high demand with prices remaining firm. Russian quality has emerged as the preference for many end users as it has become more regularly available than that from other origins, despite the primary reason for its cultivation being for the production of clary sage concrete and not oil.

However, early signs for 2016 aren't good with an assessment after the winter suggesting there could be as much as 30-40% fewer plants this year than last! That said we might see a better yield from a smaller area, which could offset some of the forecasted losses.

As with many floral oils the key to a good harvest is determining when to harvest and what the conditions are at the time of harvest. This will only be known come July when the next harvest is upon us. Today the markets are limited with the number of options available for supply small since only a few stockists are carrying material. As such prices remain firm.

🏠 USD 170.00 /kilo



Photo top left  
*Artemisia Taurica*

Photo bottom left  
*Coriander seeds*

Photo right  
*Lavender*

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

As with coriander herb the condition of the plants look to be healthy for this time of the year so it is expected there would be a good crop, although it is thought that the acreage of plants around Russia is less than in previous years so the overall yields could be smaller.

Harvesting for seed oil begins in July/ August with the first shipments made in September/October. After a healthy crop in 2015 and a fall in market prices the market has re-balanced at stable levels.

There was a lot of competition from producers last year, which is unlikely to prevail to the same extent this year, which should bring more stable pricing from origin. There appears to be reasonable stocks still available both with traders and at origin which should keep prices stable until the new crop. It is expected when all factors are considered that prices into the new season should remain similar, if not a little less than today's levels.

🏠 USD 75.00 /kilo



### CORIANDER HERB OIL Russia

*Coriandrum sativum L.*

The condition of the plants looks to be healthy for this time of the year. So it is expected that there will be a good crop, although it is thought that the acreage of plants around Russia is less than in previous years so the overall yields could be smaller.

Harvest for herb oil will start mid June and as always this is generally a made to order product. Any plants not harvested will go on to seed and will be available at a later time to be harvested for seed oil.

There is a little carry over from last year but today the markets remain quiet. Prices are expected to remain around the same levels into the new season.

 USD 85.00 /kilo

### FIR NEEDLE OIL Russia

*Abies sibirica Ledeb.*

The market is still faced with the same situation as forestry restrictions mean there is a significant reduction in harvesting with processing plants based in Russia reported to be running at less than 50% capacity.

Material from other Baltic states is supplementing supply but this quality is slightly different.

Prices remain firm and are likely to remain so in the short-term despite the spring season usually bringing about fresh supplies. Unfortunately it is understood that the new season hasn't yet started (beginning of June) and forward offers from source have suggested price increases not decreases lie ahead.

 USD 42.00 /kilo

### LAVENDER OIL Russia

*Lavandula angustifolia*

The few plantations still viable in Russia seem to have made it through the winter period well. Despite this, we are not expecting big volumes from the area as over recent years plantations areas have been reduced due to market competition and year-on-year weather conditions resulting in poor crops.

The recent heavy spring rains could improve yields but this isn't going to have a great effect on the overall output.

 USD 85.00 /kilo

**ORANGE OIL** 🌍 *South Africa**Citrus sinensis*

The USDA says South Africa's fresh orange production forecast is virtually unchanged at 1.7 million tons. Exports are expected to be down 50,000 tons but still account for over 25 percent of global trade. The European Union and Russia remain its largest markets.

Most of South Africa's fresh oranges are either consumed domestically or exported to Europe with around 400 MT of oil being produced each year. There are no numbers yet to quantify recent production but it is expected to be down on previous years as much as 35% due to below average rainfalls and higher summer temperatures. Any offers today are at relatively high prices compared to previous years from South Africa but typical of today's global markets.

🏠 USD 8.50 /kilo

**TAGETES OIL** 🌍 *South Africa**Tagetes erecta*

No changes of late with prices stable and with some healthy supplies remaining at origin despite being in the closed season. The next crop will take place mid-June 2016 and it's expected that prices will remain at today's levels post crop.

🏠 USD 180.00 /kilo

**TEA TREE OIL** 🌍 *South Africa**Melaleuca alternifolia*

There have been suggestions that in 2016 South Africa will produce more tea tree oil than in previous years but any small growth will be modest in comparison to the dominance of Australia. Much of South Africa's production is wild harvested and organic and as such has a different place in the market. That said, it has its place and will no doubt continue to be a viable option for those end users looking for a different consumer story.

This year's harvest should start early July.

🏠 USD 45.00 /kilo

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

There are few offers from South Africa at the moment even though the new season began in May. Drought conditions and high temperatures during summer severely affected the size of the fruits reducing overall yields. Additionally, some areas were hit by hail recently, which is thought to have damaged some fruit.

It is estimated that there will be a 30% reduction in the amount of fruits available for processing which based on the usual 60,000 MT would suggest no more than 42,000 MT of fruits will make it to the factories. Previous estimates suggested that figure would be closer to 20% so the situation appears to be worse than first thought.

🏠 USD 31.00 /kilo

**ROSEMARY OIL** 🌍 *Spain**Rosmarinus officinalis*

There is no let up in the supply issues which have prevailed for some time now. Small batches are irregularly available and when they do the price is as much as someone is prepared to pay.

🏠 Euro 60.00 /kilo

**LAVENDER OIL SPIKE** 🌍 *Spain**Lavandula latifolia*

Limited stocks remain available at origin and at premium prices. The past crop was more than disappointing and although a better crop is expected when harvesting begins in August there is a lot of pipe-filling to achieve before the market becomes more settled.

🏠 Euro 110.00 /kilo

**CYPRESS OIL** 🌍 *Spain**Cupressus sempervirens L.*

There are sufficient stocks at origin to satisfy demand giving us a stable market situation.

🏠 Euro 28.00 /kilo

# YOUR PARTNER FOR LEMON

*Citrus limon (L.)***LAVANDIN GROSSO OIL** 🌍 *Spain**Lavandula hybrida*

After a disappointing 2015 few stocks remain at origin and those that do come at premium prices. That said, with French stocks depleted and with limited options available it could be that the Spanish are able to sell at a premium over the next few months.

🏠 Euro 32.00 /kilo





## LEMON OIL 🇪🇸 Spain

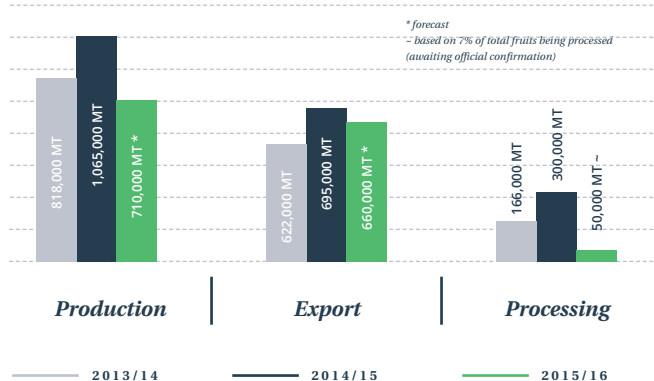
*Citrus limon (L.) Burm. F.*

No matter which set of statistics you read none of them create a good picture. As the season comes to a close further analysis can be made to the extent of how poor the fruit crops have been and more significantly how little went to be processed with only 7% of fruits processed compared to 27% last year.

Quoting recent headlines from Agra-net, Spanish lemon production shrank by 35%, which has led to a reduction of 75% in the volume of fruit sent to the industry since the beginning of the season to December 2015. AILIMPO's lemon harvest forecast for the 2015/16 season estimates an output of 710,000 MT, nearly 35% less than in the previous campaign.

This is 60,000 MT less than we anticipated at the beginning of the year and with fresh fruit export demands calculated to be around 695,000 MT (and increasing) you can see there is little chance of any fruits going to the processing markets or Spain fulfilling their export demand. The result is processors have had to pay a premium for the fruits, which has again pushed up their production costs and ultimately their selling price. Based on these figures, you can see how such a scenario puts severe pressure on the market:

### SPANISH LEMON HISTORY



Fresh fruit demand continues to put pressure on local prices and oil processors costs as the Spanish producers struggle to keep ahead of the game when it comes to oil sales.

Having recently dominated supply gaps left by Argentina the roles have been reversed over recent months after Argentina came out of the dark and the Spanish faced increasing prices. Today the cost of fresh Spanish lemons is double that of Argentinian lemons giving local oil producers an immediate disadvantage. That said, we're not comparing apples with apples (or lemons with lemons!) as the qualities are different for many of the end user markets and within Europe the Spanish have a competitive edge over the Italians, who have their own problems.

## THYME OIL RED 🇪🇸 Spain

*Thymus zygis L.*

This one has been a tale of one problem after another in recent years and as this year's crop begins (late May / early June) the market is waiting with great anticipation. Prices have been high recently with little or no oil availability for some time. To what extent the prices soften post harvest remains to be seen, as producers are still reluctant to offer firm pricing until the whole harvest is complete.

🏠 Euro 125.00 /kilo

🏠 Euro 33.00 /kilo

## CINNAMON BARK OIL 🌐 Sri Lanka

*Cinnamomum Zeylanicum*

Reasonable supplies remain from last season's crop with the next harvest coming online from June 2016 with the outlook for this year's crop stable.

🏠 USD 275.00 /kilo

## CINNAMON LEAF OIL 🌐 Sri Lanka

*Cinnamomum zeylanicum Nees C.*

New production started in May with limited supplies remaining at origin before this time. Demand remains high, as are prices, which will remain strong until new oil comes online in July.

🏠 USD 36.00 /kilo

## BASIL OIL 🌐 Vietnam METHYL CHAVICOL

*Ocimum basilicum L*

The market has been firming in recent months as supplies dwindle in the market. Following a disappointing 2014 crop after heavy rains disrupted harvesting it was expected that prices would firm throughout the off season which is exactly what is happening.

🏠 USD 90.00 /kilo

“

**A recent survey by the University of Florida Institute of Food and Agricultural Sciences on the impact of citrus greening concluded as much as 90 percent of their acreage and 80 percent of their trees are infected by the deadly greening disease, which is making a huge dent in the state's \$10.7 billion citrus industry. The survey covered around 200 growers who also stated that the overall negative net effects on yields are around 41%.**

## ORANGE OIL 🌐 USA

*Citrus sinensis*

You need to dig through the statistics to find something positive here as the impact of citrus greening takes its toll.

Although slightly up on April's figures the overall situation suggests the Florida output to be 81.1 million boxes. This is up 7% on last month mainly due to an improved estimate for Valencia oranges (up 5 million to 45 million) but still represents a 16% reduction on 2014/15.

To quantify this the total orange harvest is the lowest since 1963/64 season and for the Valencia type the lowest since the big freeze of 1989/90.

Based on figures gathered early June, around 90% of the total fruits have been harvested.

The net effect of these figures can be felt in the oil markets, compounded by the ongoing global supply issues mainly originating from Brazil.

The oil markets are hurting but the Florida citrus markets are hurting more with the future looking rather worrying.

🏠 USD 9.00 /kilo



**GRAPEFRUIT OIL** 🌐 USA*Citrus paradisi*

We've had some small improvements over recent months with the USDA again in May extending their forecast by 150,000 boxes on top of the 200,000 added in April. This brings the overall forecast up to 10.85 million boxes.

Sadly, that's where the good news ends and the reality sinks in. As the 2015/16 season comes to an end we will be around 16% down on last year's poor crop, the lowest since the 1931/2 season!!

The USDA Row Count survey suggested that on 10th May most harvesting was complete so we are now unlikely to see any additional fruits go for processing. This implies that today's dire oil situation is about to get worse with no fresh supplies expected until later in the year.

There is some irony in the fact that global fresh grapefruit production is thought to be up 300,000 MT given the large increase in cultivated areas in China, however, these are primarily for the growing fresh fruit markets. Hard to believe given the problems in the oil markets! Difficult times ahead!!

🏠 Pink USD 40.00 /kilo+  
White USD 60.00 /kilo+

**LEMON OIL** 🌐 USA*Citrus limon (L.) Burm. F.*

Generally the market is stable with only small variances in recent forecasts over those made early 2016. Overall fruit harvesting has been similar to the previous year at 900,000 MT.

Lemon acreage increased this year by 1,000 acres to 56,300 acres and processed fruit increased to 260,000 MT. As with many countries the United States is now

importing more lemons than ever before, including recently from Argentina. With a growing domestic fruit market and a relatively static local production this is a trend that is likely to continue.

The latest USDA figures for the 2015 – 2016 season shows the California lemon forecast to be 42.0 million boxes, up 5 percent from the January forecast and up 2 percent from last season's final production. In California the desert harvest is now complete.

🏠 USD 36.00 /kilo

## AUSTRALIA TEA TREE OIL

*A Growing Future*

In modern history tea tree oil (TTO) has around 70 years of recognised antiseptic, anti-bacterial, anti-fungal, anti-inflammatory and anti-viral properties and its reputation keeps on growing. Over the last several years this growing reputation has diffused into more day-to-day uses, more consumer brands around the world and an increase in production. But what's next for tea tree and why do we keep seeing it in every supermarket, pharmacy and high street? Furthermore, tightening quality standards will give us all, as consumers, more assurances of pureness and heighten the potential benefits we find in TTO products. Let us examine the details in the hope that we leave you as excited as we are about the future of this particular essential oil.



### CURRENT MARKET 2015 & 2016

*2015 was unofficially a record year for tea tree oil production in Australia with volumes estimated to have reached around 700 MT for the year. This is a 200 MT increase since 2012 and with rare exceptions shows a continued growth in output over the past 20 years.*

*This is due to an expanding market as more and more applications, brands and markets accept tea tree as a marketing 'active' which holds genuine properties. Prices have held firm and stable throughout the season which starts around June and lasts until November.*

Announcements during late 2015 by the ISO Standards Committee confirmed changes proposed by the Australian Standards to the specification would be accepted. This involves additional chiral testing on the terpineol-4-ol to help detect the presence of adulterated oil, often derived from other origins. This will play into the hands of the Australian producers who have fought this battle over many years to try and eradicate inferior alternatives, which have a long-term impact on the development of the market.

It is understood that North America currently imports around 40% of Australian oil, Europe 30% and Asia 25%, the balance being sold into African and South American markets.

*Photo left*

*Harvesting fully grown tea tree in North Queensland, Australia.*

*Photo top right*

*Fully grown tea tree at around 2 metres tall.*





## HISTORY

We've already discussed the history but we'll tell it again because we like it and because not every essential oil is described by some as a 'miracle oil'!

There are legendary stories available that would suggest the tea tree plant (*Melaleuca alternifolia*) was somehow born from the Gods to reward a young princess for her bravery but more truthfully the aboriginals in Australia discovered the product. Indigenous aboriginals used the tea tree plant as a traditional medicine in a number of ways for treating many skin irritations and cold and flu symptoms.

One of the traditional growing areas in Eastern Australia is called Bundjalung, which translates to 'healing ground'. It is thought

## PRODUCT OVERVIEW

Tea tree is fast growing. From seed to harvest it can take just 12-15 months and will grow to around 2 metres high. It is harvested annually (some regions vary slightly) from just above the ground and can live with such a cycle for up to 30 years. It is planted at a density of 30,000 trees per hectare.

During distillation the biomass is heated for 2 hours by steam distillation in stainless steel chambers, condensing between 35-55 degrees from which the oil and water is then separated. Typical batch sizes produced are around 250 kilo of oil.

The product is then tested to the Australian

that Captain James Cook himself named the product 'Tea Tree' after observing the people of Bundjalung using the leaves to prepare a healing tea.

During World War II every Australian soldier's kit included tea tree oil, which could be one of the reasons why others around the world first started to learn of its medicinal benefits. As natural products became more glamourised in the 1960s and 1970s people started to take more notice of tea tree and small-scale production first began. However, it was not until the late 1970s and early 80s when the first commercial plantations began.

Over the past two decades many more plantations have been established and today Australia is the largest producer of tea tree and TTO, with recent figures calculated to be around 700 MT per annum.

Standard (AS 2782-2009) and the International Standard (ISO 4730). The oil is known to have over 100 components but it's usually the key 15 components that make up the specification standards. The main component is terpinen-4-ol, which is responsible for the antimicrobial and anti-inflammatory properties. However, on its own it does not have the same benefit.

It is thought that the smaller components in combination contribute to making the oil more antiviral, not the individual components themselves.

Also one component to note is the 1,8-cineole. This is a potential irritant and many end users try to buy lower cineole content material – usually less than 4%.



Photo top

Typical selection of cosmetic products now available from traditional High Street brands promoting the inclusion of tea tree as its main active ingredient.

Photo right

Tea tree plants a couple of month before harvesting.



## MARKET DEVELOPMENT

As consumers we have probably witnessed a growing number of products becoming available citing tea tree oil as an important ‘active’ (or reason to buy). Many traditional and higher end brands have emerged with new personal care, cosmetic and household products using various essential oils with tea tree being one of the most popular, but why is this?

As mentioned its active properties give added benefits to products and its long history and growing reputation make it a popular choice among leading brands.

For some of us this isn’t new as many aromatherapy brands and users have long appreciated the benefits of tea tree but its recent emergence on the high street has given it new life and increased global demand. For many major aromatherapy brands it’s always in the top 3 selling essential oils, somewhere just after lavender and peppermint. In the USA leading brands like Young Living, dōTERRA, and AuraCacia would probably verify this – a trend seen in most parts of the world.

Now high street brands such as Boots (UK), The Body Shop and Lush have range after range of products using tea tree along with other labels like Elemis, Faith and Nature’s Gate to name just a few. Google it – you’ll be surprised!

Cosmetic and personal care products introduce tea tree for its anti-bacterial properties but more and more pharmaceutical brands are introducing the product along with more pharmacies stocking pure oil. The presence of tea tree is starting to replace

conventional medicinal antiseptics like Iodine, merthiolate and hydrogen peroxide and also as an alternative to antibiotics for topical use as the oil fights against fungi, parasites and harmful microbes.

Here are some of the product types / applications were we’ve recently found tea tree as an active ingredient:

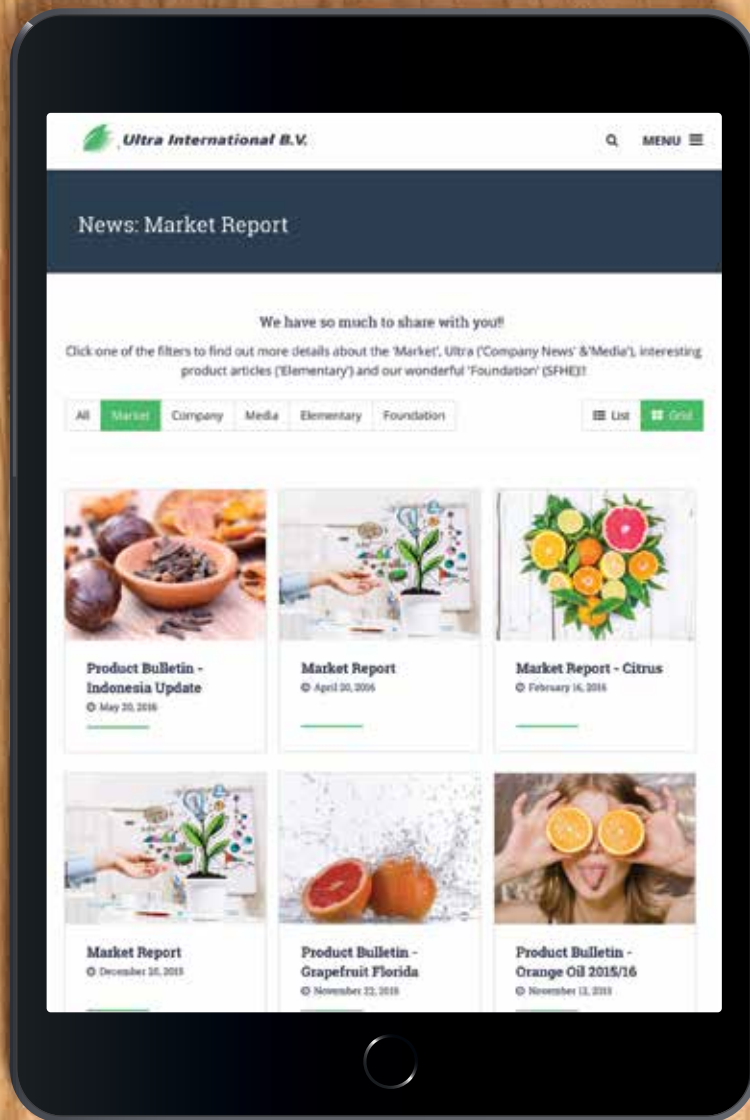
- ◆ Shampoo & conditioners
- ◆ Skin clearing lotion
- ◆ Shaping cream
- ◆ Mouthwash
- ◆ Scalp treatment
- ◆ Stretch mark reducer
- ◆ Creams with antiseptic
- ◆ Body lotion
- ◆ Shower gels
- ◆ Wool wash products
- ◆ Shoe deodoriser
- ◆ Cleansing soaps
- ◆ Deodorants
- ◆ Hand wash sanitiser
- ◆ Cat & dog skin care creams
- ◆ Animal ear cleaner
- ◆ Equestrian cleaning
- ◆ Mould & mildew cleaning
- ◆ Foot sprays
- ◆ Face creams
- ◆ Insect repellent

The list seems endless and studies are ongoing which should see the continuation of this recent growth across various markets. Studies like the control of sheep ectoparasites; the anticancer activity of tea tree oil (slowing down the development of melanoma cells); the effects of tea tree oil on biofilm formation; a study of tea tree oil in the decolonisation of MRSA positive wounds; and the impact of tea tree essential oil on antibiotic resistance development.



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