Sadly, our last report on orange proved too sanguine. Back in March, the estimates in Florida supported the notion that the total box count would increase marginally when compared to 2014. In reality, the final box count was 96 million, another drop in production from the previous year. While everyone understands the degree to which Citrus Greening has affected the groves of both orange and grapefruit, it is impossible to predict the amount of fruit drop among the sick trees. We do believe it is reasonable to assume that as the trees get sicker, fruit drop will increase. For years to come, that may well result in final total box count numbers lower than initial estimates.

The last week of August began the forecast season in Florida. The most popular prognosticator has published an initial forecast of 93 million boxes and a large producer has forecasted 85 million. Should the final number be either of those, or somewhere in between, new record lows for total boxes will define the past 50 years.

So the question is, is Brazil coming to the rescue? The answer is probably, yes, but at a price. The drought in Brazil brought production down by over 10%. Offers at source are at high prices. Not record high prices, but high prices.

The combination of low production in Florida and lower production in Brazil would lead us to conclude that covering a portion of requirements would be prudent, particularly in light of how long it has been since either a hurricane or a freeze has hit Florida.

We welcome your inquiries.
continue to move lower as new production from Argentina became available. So far, prices from Argentina mimic those of Spain. While new crop production is being offered at prices well below those of a year ago, prices have not returned to 2013 levels.

While we still believe there is a stronger case to be made for lower prices than for higher prices, there may be sufficient support at current levels to create what the economists once called “soft landing”. Should this happen, buyers would be best off to cover a portion of their requirements, perhaps, 30% and wait for the market to come to them.

A winter freeze in California would necessitate a rethinking of our position.

We have taken our own advice and can offer meaningful quantities of lemon oil. However, our warehouse is far from full of this citrus oil.

### LIME

Lime production for both distilled and cold pressed lime oils during 2015 in Mexico marked the end of the price-war over fruit. Although citrus greening continues to infect trees in Colima, the low number of oil processors has prevented a bidding war for scarce fruit from exacerbating the situation. As such, prices drifted lower from January through August and have recently leveled off as the major production season draws to a close.

Prices for both distilled and cold pressed lime oils from Key and Persian fruits are lower than in 2014 but in both cases they are well above 10-year averages.

We believe the political strife in Michoacán and the diminished fruit availability in Colima support prices at this level and suspect that today's price is within 10% of what will become the new normal price for these oils.

As such, we encourage our customers not to wait before covering as history has shown lime to be a product for which you are best off covering your requirements for the period November through June, by October. Over the years, too many companies have been caught short by trying to time their purchases too carefully.

We are in a position to offer and invite inquiries.

### GRAPEFRUIT

Fortunately for the flavor and fragrance industries, grapefruit remains unpopular. We say fortunately because Florida is a very important source of grapefruit oil and citrus greening disease does not distinguish between orange and grapefruit trees. Ever lower production combined with the issue of agricultural residues makes it difficult to secure top quality grapefruit oil. We continue to “cherry pick” specific lots and do a good job filling the requirements of our customers. As long as the demand for grapefruit juice remains low, processors are not going to accumulate more juice than they can sell, and, as a consequence, grapefruit oil will continue to be hard to find. The ongoing situation supports higher prices and we suggest that all our customers stay well ahead. Nobody should get caught short by waiting for prices to retreat, they are not going to, anytime soon.
We find ourselves repeating the message of our last few market reports with regards to tangerine. Basically, production is low, but adequate and prices are high but not unjustifiably so. As such, staying ahead on this low-volume citrus oil is the best course of action. If you are a customer of ours, we have you in our buying plan, so you should be fine. If your volumes are escalating up in a meaningful way, please let us know. If you have new business on the horizon for which tangerine oil is needed, please send us a note with a forecast. If you are looking for tangerine, we will do our best to accommodate your needs.

Rob's Crystal Ball

On the following pages, we offer information, and our views on those markets pertaining to our extensive product line of essential oils and aroma chemicals.

In addition to the customary factors that move prices, such as supply and demand, weather and currency valuations, all of us are also presented with another factor, the world economy.

Since the current global economic situation is on everyone's mind, it is possible that an overriding sense of caution will dampen demand for all goods and services as companies, acting out of an abundance of caution, choose to reduce raw material purchases to pare down inventories. If this occurs, it will reduce demand over the next few months until a renewed sense of confidence returns.

Only time will tell as to whether or not the Flavor and Fragrance Industries notice a slowdown. If that happens, pricing for many products may soften despite what appears to be normal logical market forces that might otherwise lead one to conclude that the price of a particular product will move higher.

For this reason, we encourage our customers to cover appropriately, and in particular, to cover those products whose production season is just beginning in the fall of 2015. While caution may keep prices from moving higher, the fact is, when a crop item is sold out, there will no more until the new production. Our suggestion would be for customers to be less cautious with their purchases of aroma chemicals derived from abundant petrochemicals and more cautious with essential oils and spice extracts that could be unavailable before too long.

It is clear the current global economic situation is not nearly as bad as the situation that led to the economic meltdown of 2008. Stock market corrections are a normal part of the economic cycle. The current correction is getting unusual attention because it has been so long since one has occurred and because, to a great degree, it has been triggered by a slowdown in China.

If you would like to share your views on this topic, please contact me directly by email.

Best regards,
Rob
Essential Oils

Star Anise & Natural Anethole

Anise oil is grown in the Yunnan Province of China. Since this year's spring crop was produced with average yield, and this year's crop looks to be similar, so prices have remained in the same range as last year. We understand these modest prices are frustrating to the growers who collect the fruit and leaves. In our opinion, while current prices are near a recent low, and the peak harvest season ready to commence in October we feel this is a good time to cover your short term needs. As one might guess, we would anticipate prices climbing once the demand picks-up. This is a good time to review your future requirements and provide forecasts. We continue to be in a strong position and welcome your inquiries.

Basil

The July crop in Vietnam was similar to last year, a good one. The general sentiment is that prices will inch up as the stocks at source are sold. We have a good position and invite your inquiries.

Bay Oil

At this writing, hurricane Erika just passed through the little island of Dominica and devastated the main distillery, buildings and infrastructure. Sadly, two employees lost their lives. While the plan is to rebuild and get back to work it is at times like this we must pause and extend our heartfelt thoughts and prayers to the families who lost loved ones. As we reported in the last edition of the Crystal Ball, this Caribbean essential oil, a long-standing trouble-free product, has become an acute problem during the past 9 months. This past year it was reported that new social programs permitted many of the workers to take free government money rather than work (to produce the oil). This development has created a rapid decline in production resulting in severe shortages. We recommend that you contact us for up-to-date information.

Bitter orange

The crop in Brazil is well underway. While the crop looks marginally better than last year, offers from source are limited. In the Dominican Republic the next crop is still a couple months away. We can also report that last year's yields were very small and no Dominican oil is available at source. Therefore, given the limited availability, it is advisable to communicate your annual requirements in advance. We continue to be very active in this specialty essential oil and maintain a healthy position of oil produced in both the northern and southern hemispheres. We are always happy to update you when questions arise.
Buchu

Buchu, grown in South Africa is available, however, with the recent robust demand, prices have firmed. We continue to offer a variety of Buchu oil and have recently enjoy energetic demand from our customers.

Cardamom

The Guatemalan crop was completed in April and the next crop is about to begin. The new crop looks to be reduced again this year due to high temperatures, drought and insects. It was mentioned that these issues could very well prompt growers to look at alternate crops to reduce the risk. This may lead to another decrease in production next year.

Similar to Guatemala, India is experiencing uncharacteristic weather along with troublesome gusty winds. In short, this is also expected to lower the yields on this year's crop. Collectively all these factors will push up the seed prices and decrease availability. If you have short term needs our recommendation would be to cover now for the next nine months and give us your annual requirements for the 2nd half of 2016. We are well positioned to help you with your needs. We welcome your inquiries and even better with your orders!

Carrot Seed

Carrot seed oil appears to be more plentiful than in the previous two years. However, if you have sizeable needs we recommend staying ahead on this unique essential oil.

Cassia & Natural Benzaldehyde

With the upcoming October/November crop reported to be average the harvest of the leaves and twigs should be in balance. The price has remained relatively flat and we maintain a strong year-round position on this popular essential oil grown in Southern China. In recent weeks prices have softened due to lack of demand but we believe they will rebound once demand and economic forces kick in.

Cedar leaf Western Red

If you have any upcoming sizeable needs for this unique oil please contact us many months in advance to source/contract this hard-to-find essential oil.
Chamomile Roman

As previously reported, Chamomile Roman was basically sold out this past year due to a failed crop. This year the harvest is in process but delayed at least a month. Unfortunately, the news this year appears to be almost as bad as last year. Therefore, we recommend giving us your requirements immediately so we can cover at least a portion of your needs.

Cinnamon Leaf /Bark

As previously reported, inclement weather affected cinnamon yields and prices have increased from a year ago. In the last update we stated that from an historical standpoint prices were too low and would bounce. Currently we recommend that customers provide us projections as soon as possible as cinnamon leaf oil has the potential to be difficult to source in Sri Lanka. Pricing for the smaller volume cinnamon bark oil is stable. C&A is always well-positioned on both oils from the island of Ceylon.

Clove Leaf & Eugenol

In recent weeks this Indonesian essential oil, primarily produced in Java, has seen some price softness due to favorable weather conditions and steady demand. The peak crop time is in September so we feel this is a good time to evaluate your needs and send us your projections. Citrus and Allied is basic in Clove leaf and maintains healthy stock position for all clove (bud and stem oils) for our customers year-round use.

Coriander seed

The saga of Coriander continues to unfold. With no significant stock in anyone's hands, this oil's roller coaster pricing is mostly impacted at source. Political changes which include the annexation of Crimea along with far fewer distillers have added to the lack of availability of this spice oil. In addition, the ever-growing demand from the spice industry has driven up the price of the seeds. While the news seems somewhat negative we can report that the harvest is taking place in Crimea and Stavropol areas, the harvest is going well and the acreage seems to be up from previous years. Our recommendation is to give us your annual volumes today so we can secure lower price material before it is too late. One word of caution: in this part of the world it is probably better to have too much rather than too little inventory especially with the lower prices we have not seen in the past two years.

Petitgrain Cordillera

While the October 2014 harvest has come and gone, future availability, while slightly improved, is still difficult. We will report back in November on the 2015 crop when the information is made available. This is a product that is best managed by planning out 6 months.
### Cumin Seed

With the continued political instability in the Middle East we recommend staying ahead on this spice essential oil. In spite of all the uncertainty, prices have remained calm. The recent April crop yield is completed and reported to be average. Current attractive prices seem to be on the rise but only slightly. We feel the supply will meet the demand and we welcome your requests to fulfill your requirements.

### Davana

The traditional March production of davana from Karnataka, India was a month late due to unseasonal weather which in turn has hurt the yields on this extremely weather-sensitive grassy plant. C & A is prime in davana and can offer the best quality and at the most competitive prices.

### Eucalyptus Radiata

This new essential oil for C&A has been plagued with frost and drought which has hurt both the collection of the leaves and yields for oil. This, in turn, has created a severe shortage in availability. It is imperative that you give us your volumes well ahead of time so we can encourage growers in Africa to plant enough to satisfy your needs in the 4th quarter of 2015. We are hopeful with better weather we will be able to offer additional volumes to our growing customer base.

### Eucalyptus & Eucalyptol

Prices edged up in the last quarter of 2014 and continue to strengthen on strong demand and limited availability. The uncharacteristic weather in the Yunnan Province has also reduced production. Despite the recent devaluation of the Chinese currency this product continues to be firm in price. We recommend staying ahead on this popular essential oil which is harvested in the June-August peak season. We do not see any short term relief.

### Garlic

As we predicted, garlic prices have risen sharply over the past six months, and it appears this trend will continue well into June 2017 until decisions are made at source to distill additional garlic. To makes matters worse, finding good quality oil is always a challenge. We are now presented with a situation where prices are quite high so we encourage our customers to communicate projected volumes months in advance so we can strategically enter the market place on your behalf.
Geranium

It was unusual to watch two completely opposite price trends in the same essential oil family. The price of Chinese geranium continues to escalate with the recent short crop coupled with high demand, while the Egyptian quality has finally bounced off its recent low price but still well below the Chinese. This year’s Egyptian crop was good, but, if prices do not strengthen, next year's production will probably decrease.

Ginger

With the conclusion of the recent crop and robust demand for ginger spice, prices have risen for dried roots (for distillation). With decreased production, this year’s prices remain firm. We continue to have a solid position on ginger oil and welcome your requests.

Ho Wood (Natural Linalool)

Due to the extreme heat and fewer trees in the growing region, the production of oil and availability in China is down. Consequently, of late, prices firmed and then plateaued. We have adequate stocks to fill your needs and invite your inquiries.

Lavender

The harvest is coming to a close in Bulgaria and the total production looks to be around 160-170MT. It was reported that this was a good crop but quality was not as expected. This will put some pressure on buyers eager to find higher quality oil. While prices today are below last year’s levels, it is likely that prices will edge up quickly as the good quality oil is sold at source. Our recommendation would be to cover your annual needs in the next 30 days as the market is active today.

Lemongrass

In a repeat of our last report, the situation for lemongrass remains the same. Again we would like you to know that we continue to contract well in advance so that Guatemalan lemongrass is planted and distilled to keep pace with the rising demand of this beautiful aromatic Central American oil.

Rosemary

The availability of Rosemary oil has gone from bad to worse. The recent harvests in Morocco and Tunisia have been problematic while the demand is up. We see this oil as being a year-long challenge. C & A has acted accordingly and has a strong position while supplies last.
Litsea Cubeba & Natural Citral

The season for distillation is in process and should end by mid-September. The 2015 crop looks similar in size to the 2013 crop which was better than 2014. This news comes from the distillers from the Yunnan & Jiangxi Provinces. We think the best buying opportunity is in September when the stocks at source are plentiful and before the usual demand occurs. It is also reported that the carryover from last year is the lowest it has been for some time which puts additional pressure on prices. We ask that customers provide us with citral forecasts so we can cover litsea at the lowest price.

Mandarin Petitgrain (Mandarin Petitgrain Terpeneless)

The January processing took place without incident. While we have experienced steady prices for the 2nd year in a row we expect prices to firm as we hear farmers are not interested in continuing to grow at these price levels for next year. This in turn will persuade growers to switch to alternate crops in the coming season. C&A has a solid position and would like to supply your requirements for both the whole oil and terpeneless derivative.

Mint – Peppermint & Spearmint

On the North American front, the lack of snow pack and water is on every one’s mind. In addition, the extremely hot temperatures in Idaho & the Willamette Valley continue to affect the quality of oil in each growing region. This year in contrast to last year, the season was ahead of schedule as growers had to make decisions to harvest at non-traditional times to assure consistent quality. The deep freeze of 18 months ago that severely damaged and or killed significant acreage in the Washington & North Central Oregon growing areas has reduced the overall availability of low menthofuran oil. That being said, yields in the Pacific Northwest and even in the mid-west were favorable. As we begin to evaluate hundreds of samples from growers, we must emphasize that the prolonged hot weather in Idaho & the Willamette Valley has caused elevated menthofuran levels. Collectively, all these factors have caused the low furan and double cut oil to strengthen in price. It is also estimated that 90% of Willamette peppermint oil has been contracted. As such it is practically sold out. The overall acreage appears flat.

In India, mentha piperita, arvensis and spearmint prices have increased as the planting decreased. This decrease has been most significant with regards to total acreage for menthe arvensis. This news, along with lower carryover stocks, have pulled oils from spearmint, mentha arvensis and piperita off the lows of last year. However, the recent weak rupee has given producers reason to hold back inventory from the marketplace. A tug of war may ensue. Please feel free to contact us for up to date prices and information.

Nutmeg

In stark contrast to the past 10 years of ever-increasing prices, Nutmeg oil has softened considerably in the last 9 months. A weaker Indonesian Rupiah, new plantings in the traditional growing areas of Sumatra, and the new growing region of Sulawesi have collectively satisfied the demand for both nutmeg spice and oil. We continue to strive to find the highest quality oil and maintain strong positions for our customers. Citrus & Allied welcomes your inquiries.
Pimento Leaf

The collection of leaves is in full swing in Jamaica and little carryover exists. This summer the weather was so hot it has affected many of the trees in various provinces and hurt the yields. Therefore, we recommend that our customers provide forecasts. At the same time we are mindful of the fact that the producers of pimento are never more than one hurricane away from confronting a disaster. C&A is prime in pimento oil and we welcome your inquiries. We are here to help.

Wintergreen

Over the past few seasons this boutique essential oil, harvested in July-August has been in short supply. So short, that we believe the demand may exceed supply. This year our larger customers informed us of the volumes they required and we have contracted our needs at source. This is one product for which we need forecasts from customers in order for us to communicate with our distillers in China to ensure September shipment. We look forward to assisting you on this unique oil.