

## MARKET REPORT

### JULY 2016

#### MEXICO

##### Key Lime Oil Distilled

*Citrus aurantifolia*

We will start this brief market update from Mexico with the punch line; just in case the explanation isn't so interesting.....news in from the new season suggests poor yields, high domestic demand on fresh fruits and as a result rising prices.

The assessment from early July is that Colima's and Michoacán's volumes for the season will be significantly reduced as the season has started late and is likely to finish early. Depending on where you thought the market was you could be looking at 35-45% increase on local export prices!!

The reasons can all be put down to a series of climate issues but it hasn't been just one factor involved this time but a variety of such, which has snowballed the situation and compounded today's problems.

##### Challenge 1: Hurricane Patricia

Mexico thought it had dodged a bullet last October when Hurricane Patricia stormed through the country and seemingly did little damage. Hurricane Patricia was the second-most intense tropical cyclone on record worldwide, with a minimum atmospheric pressure of 872 mbar. It hit the lime growing regions of Mexico between October 20th and 24th 2015 but thankfully the results, whilst significant, were not catastrophic as it came after the peak season period. That said there was some longer-term damage as it destroyed early blossoms and the weather patterns that followed didn't allow for any real recovery. However it wasn't this 4-day event that left the most significant mark on today's issues but the following 9-month long problems brought upon us by the effects of El Niño!

It's never easy to assess the on-going effects of a weather system. In fact, Mexican producers had been keen to play down any negative effects El Niño may have had, but today as we enter the new season the full impact of climate change is being felt.

##### Challenge 2: El Nino & La Nina



*Plantations in Colima, Mexico*

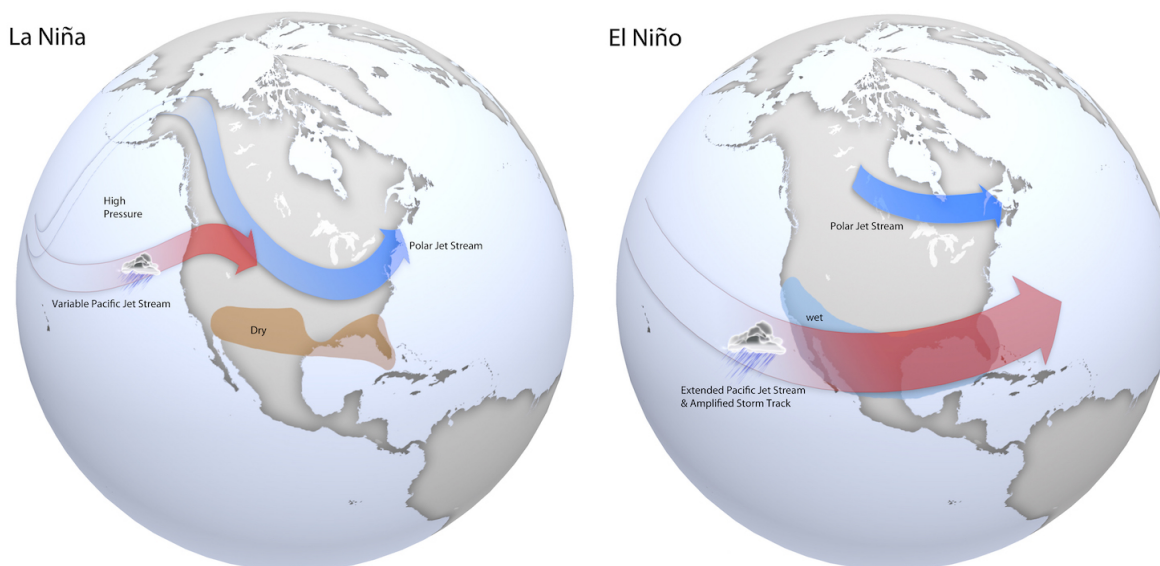
You may have heard about this on the news and forgot to think about the possible effects on our markets but there is almost no doubt that during this particular event we have seen some disruptions to our supplies. For Mexico this has lasted from October 2015 to June 2016.

When and where El Niño strikes is hard to predict. Generally, it brings changes to rainfall and temperature averages around the world but other recent El Niño events can show us some patterns.

Said to be the largest event since 1996, Mexico has suffered from more extreme storms and generally warmer weather during this latest El Niño season.

There are now signs that this event is coming to a close but officially it isn't over yet. And then what next?

It is expected that from September/October we could see a quick transition to a La Nina event as sea surface temperatures in the central Pacific at the equator will cool to more than 0.5°C below average.



This is unlikely to be the solution to El Niño but more the potential start of the next problem. La Nina will bring cooler conditions and a lack of rains, which based on historical experience, could lead to droughts. It could also bring strong winds later in the year. Interestingly, but not too relevant to Mexico, La Nina will bring a strong tornado season and more Atlantic hurricanes.

So Mexico should dodge bad hurricanes next winter (October – January) but could have some drought conditions to deal with.

### Challenge 3: Disease

As we have identified, climate change in some regions of Mexico has almost halved citrus production. In addition to climate change and the effects of this last El Niño, Mexico is also fighting against a number of diseases like HLB (citrus greening) also called yellow dragon plague.

It is hard to estimate today how much area is still affected by the disease, which became prevalent back in 2012 but it's an ongoing battle. Only 4 years ago it was thought that 80% of citrus plantations in Colima and Michoacán had been affected by the disease, which significantly reduces fruit yields.

As recently as January 2016 the citrus sector in Tamaulipas stated the current risk of Yellow Dragon was high with many fearing a return to the devastating effects of 2012.

Today there is continuous assessment to detect any changes in conditions as early as possible.

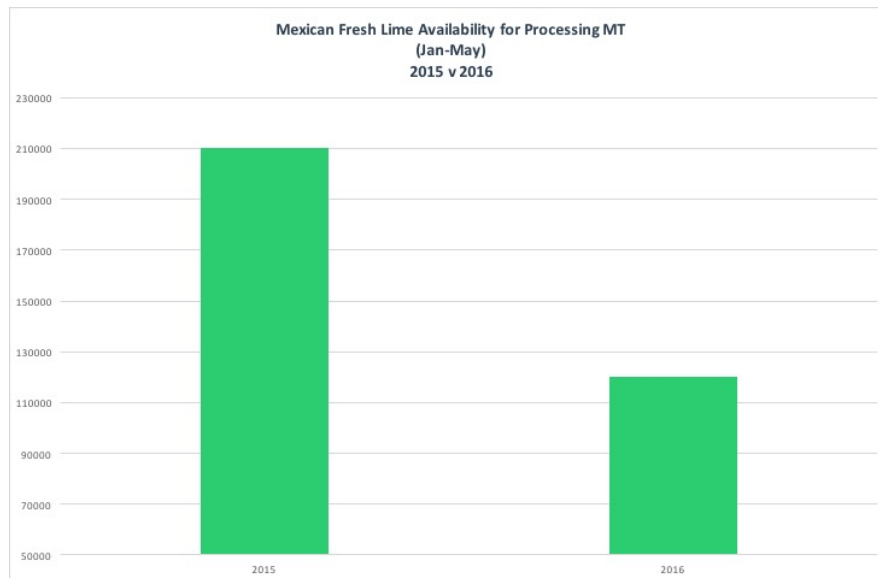


*Healthy limes ready for harvesting*

## Challenge 4: Fresh Fruit Demand

Local fresh fruit prices have increased 4-fold since the turn of the year, peaking in June. As we enter July we have seen a little softening but prices remain 2-3 times the 2015 average.

Helped by a relentless hot period caused by El Niño, demand for fresh fruit has soared. This season's shorter harvest period, lower yields and higher demand for fresh fruits are expected to lead to as much as 50% less fruit being available for processing.



Limes in Mexico are like water for the rest of us. Hardly any food or drink goes without a slice or a squeeze of lime (named as limon by the locals). They simply can't live without it.

At the end of April prices of local fresh fruit were up over 40% and as the headlines in the *Mexico News Daily* said 'Lime prices soar but they've been higher' – a threat that we should all prepare ourselves for.

## Conclusions

There is no doubt that the past 12 months have been challenging for Mexican producers and there is no quick solution. We will be faced with a shortage in the market over the coming months and as always, this is likely to mean higher prices.

Other producing countries are unlikely to support such gaps in the market but no doubt it will prove an opportunity for some emerging markets like India to push their quality to the international markets. India is the largest producer of fresh limes in the world. Strong efforts are being made to bring their lime oil onto the global market but so far progress has been slow.

These global issues are compounded with similar news from Peru (Key Limes) and Brazil (Persian Limes) where both have suffered with their own share of climate issues.

In Brazil it's now winter so the output is much lower but the demand for fresh limes is higher than ever. At this time of year, the demand comes from Europe where prices for supermarket fruits are already 20% higher than the average for the year, with further rises expected soon.

None of this is new. Whether it is one of these events or another there have been similar stories from Mexico for many years. Back in 2014 Aljazeera published the following news article <https://youtu.be/2dFLOIKVNKU>, which also covered Yellow Dragon Plague and 2013's Hurricane Manuel. Add to this the effects of 9 months of El Niño and you understand how difficult today's situation really is.

The strong demand and production issues are other examples, which give further thought to the overall impact of growing demand for naturals were we simply can't keep up on the supply side. Make sure you read our article on Global Growth, considering this scenario for Mexican Lime as just one typical example of the challenges ahead.

**Market prices USD 45.00 – 49.00 /kilo**

Lime oil is extracted from *Citrus aurantifolia* (also known as *Citrus medica* var. *acida*) of the Rutaceae family and is also known as Mexican and West Indian lime, as well as sour lime. Originally from Asia, it is now cultivated in many warm countries, especially the West Indies, Southern Europe, India and the Americas.

Key limes are smaller and seedier to Persian limes, which are more common to Brazil. Persian limes are sweeter and larger and for this reason have a larger share of the global fresh fruit market.

Lime oil has been extensively used in the food and beverage industries, as well as in creating fragrances. Key limes are more commonly distilled for oil to be used in the beverage industry. This versatile citrus oil is also added to household cleaners, detergents, soaps, and other beauty products. It is frequently used in aromatherapy for its refreshing and stimulating character and can be also used for its cleansing properties.

Lime juice is widely known as a remedy for treating scurvy and it has been said that the early British sailors used it to prevent scurvy and other skin problems due to its rich Vitamin C content. That same Vitamin C content can help boost the immune system, helping to protect you from common colds and flu.

Mexico is the second largest producer of key limes in the world, behind India. However, Mexico processes more fruits for oil making it the largest oil producer. The main producing areas are Tecoman (Colima), Apatzingan (Michoacán), Las Vigas (Guerrero) and Costa, (Oaxaca).

In recent times Mexico has cultivated over 80,000 hectares of key limes ever year, producing on average over 1,000 MT of distilled oil and over 500 MT of cold pressed oil.

