



# Juices



## Contents

Juice market in overall decline

Expensive pineapple juice is not in demand

Orange for danger

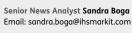
**Bumper year for Poland** 

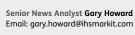
**Tropicals and others** 



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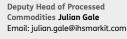
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# Juice market in overall decline

Pure fruit juice consumption is falling in the major markets. Growth elsewhere has not compensated for this.

#### By Neil Murray

This is an industry under pressure. The problems facing it are many and varied. They include climate change, whose effects upon production of raw material (the fruits and, increasingly, the vegetables) have been profound. The issue is not so much actual warming, though this is happening, but wild fluctuations in the weather. We are seeing hotter and longer heatwaves and longer and heavier periods of rainfall.

This makes it harder and more expensive to plan production, especially in tropical zones where the variations are more pronounced.

## Cold-pressed juices are gaining traction everywhere

Then there is the problem of consumption. Fruit juices are getting a bad press right now, although work by the AIJN and IFU is gamely fighting this. The many sugar taxes, actual and proposed, are focusing on sugar-sweetened soft drinks, which include nectars, and juices are largely excluded, but juices contain sugar and are being demonised just the same.

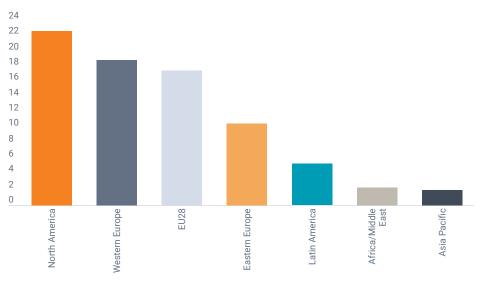
Consumption in the major world markets is falling. See the charts on this page. EU consumption of pure juice fell by 4% between 2014 and 2018 (the most recent data available) and is continuing to decline. The decline in nectars has been steeper. In the US, retail sales of orange juice, once a breakfast staple, have been declining for nearly a decade (though now look like bottoming out). Tariffs are hampering global trade, especially between China and the US and the US and Europe.

True, consumption is increasing in regions like Africa and Asia-Pacific, but consumption there is about one-tenth that of the combined EU and US, and it will take many years to reach the levels of these two giant consuming regions. For all this, there are bright spots. Consumers are trading up: buying better, costlier products. China seems to have leaped (in the major cities, anyway) from juice drinks to cold-pressed NFC juices without bothering with reconstituted juice or even 'ordinary' NFC in the interim. Cold-pressed juices are gaining traction everywhere, in fact. Consumers still hanker after new, exotic flavours and so the future looks quite bright for tropicals.

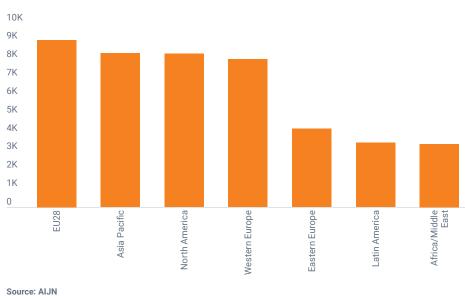
In the next few pages, we examine certain sectors in detail.

#### Regional juices and nectars markets by consumption

(Litres Per Head Per Year)









# Expensive pineapple juice is not in demand

Pineapple used to be the most expensive of the 'Big Three' juices. Then it became the cheapest. Now prices are soaring again.

#### By Neil Murray



Processed pineapple has always been a boom-and-bust industry in Thailand. The cycle goes like this: prices for juice (and canned fruit) are high, so the farmers pile in and plant pineapple everywhere. This results in an over-supply, so prices tumble. Growing pineapple is no longer financially worthwhile, so the farmers switch to something else, like sweet corn or sugar cane, and in a season or two there is a shortage of raw material. This makes the fruit expensive, as processors compete for supplies (most exported Thai pineapple is processed: fresh exports are small), and the price goes up, so the farmers pile in again...

This cycle has been going on for decades and there is no sign of it ending. From time to time it is exacerbated, generally by climate change. Excessive heat or heavy rain, or a lethal succession of both, can seriously damage crops. Then there was the issue of excessive nitrate levels, caused by overgenerous use of fertiliser, a few years ago. Something strange happened at the end of 2015 and the start of 2016. A shortage drove prices up to USD4,000 per tonne and beyond. European consumers stopped buying pineapple juice

Under pressure from the Thais, it was decided to raise the permissible nitrate level from 25 parts per billion to 50ppb. All that did was damage the perception of Thai juice as a top quality product. European buyers, especially, insisted on the original 'low nitrate' specifications.

Then something strange happened at the end of 2015 and the start of 2016. A shortage drove prices up to USD4,000 per tonne and beyond. European consumers stopped buying pineapple juice, partly because it was expensive and partly because supermarket chains pulled the product from their shelves some months before. Even Spain, by far the biggest consumer in Europe, held back. In Germany, multifruit and multivitamin drinks, with pineapple at their core, fell out of favour.

And pineapple juice has been out of favour ever since. Prices have plummeted and stayed weak: they have been below USD1,500/tonne for at least two years, below USD1,200/tonne for at least a year a half and as low as USD1,000/tonne for around a year. Even these low prices have failed to stimulate demand.

Juice production has been hit hard by poor harvests. Thailand has its summer and its winter pineapple crops. This year, there have been some small signs of a recovery in demand, but prices have remained low simply because it is feared that any increase in price will kill whatever demand is left. In summer, fruit prices were around THB9.00 per kilo (equivalent to USD290/ tonne) and yet Thai PJC was still priced around USD1,300/tonne, perilously close to Costa Rican prices, and Costa Rican PJC is 65 brix rather than 60. "With Costa Rican NFC juice at about USD700/tonne, this price (on a brix basis) is ridiculously low," said IEG Vu.

The winter crop has been a disaster. Thailand had barely 1.1 million tonnes of fruit for processing (processors are generally canners and juice producers at the same time): the smallest raw material availability for at least 20 years. The problem now is that the factories have been competing for raw material, bidding the price higher and higher, and IEG Vu sources reckon that Thai PJC from the winter crop is around USD1,650-1,750/ tonne and set to go higher.

European buyers would be happy with a price of around USD1,700/tonne but everything now hangs on the 2020

300

summer crop. If that is good, it will simply make up for the current shortfall in production and prices will be reasonably stable. If the crop is poor, especially if there is an El Niño (there was no such event this year), then all bets are off and prices will go up to USD2,000/tonne and any recovery in demand will probably be smashed.

## Costa Rica has the advantage of processing MD2 pineapple, highly prized by lovers of the fruit

#### Costa Rica

Costa Rica has the advantage of processing MD2 pineapple, highly prized by lovers of the fruit. In the past, its pineapple juice production has focused on NFC juice but its production of concentrate has risen sharply over the years. However, in the last year or two there has been a price war between processors in the country that has driven down the cost of Costa Rican PJC to as low as USD1,175/ tonne fob, earlier this year. To be fair, the very low price of Thai product also means that Costa Rica could not maintain a high price difference.

Prices have recovered now, but the discounting has not improved Costa Rica's foreign sales. Its PJC exports have more than halved since 2015. They were around 26,000 tonnes last year and should be



somewhere between 22,000-24,000 tonnes this year. Its NFC juice exports have weathered the storm better. They peaked at some 176,000 tonnes in 2015 and 2016, then 190,000 tonnes in 2017, and should be around 165,000 tonnes this year.

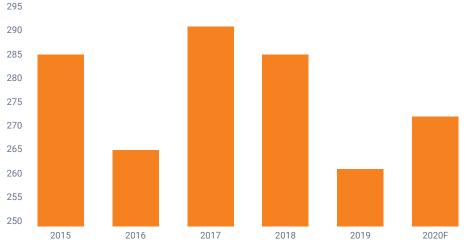
However, Costa Rica has other problems. The country is focusing very closely on ecotourism (which is proving very lucrative) and environmental protection and has decided to limit, or reduce, the amount of growing land allocated to pineapple. Its production has grown in tandem with demand for many years, but in the next few years some 9,000 hectares of land under pineapple cultivation will be grubbed up. Henceforth, Costa Rican juice production will have little chance to grow and IEG Vu expects this will have an effect on price, assuming that demand for its MD2 juice remains strong(ish). If Thailand could be at USD2,000/tonne by late 2020, Costa Rica could be at USD2,300/tonne.

#### Indonesia and the Philippines

These two origins have suffered less than Thailand. While they produce less than Thailand (their combined juice production is about equivalent to Thailand's), their production has been much less affected. The 2020 Philippines harvest is predicted to be its highest ever. Indonesia tends to track Thai prices and can be expected to slightly underprice Thailand next year. The Philippines is forecast to produce some 58,000 tonnes of PJC next year, Indonesia 36,000 tonnes and Thailand 93,000 tonnes, down from 5,000 tonnes in 2019.

#### PJC production from all main origins ('000 tonnes)

Origins, in order of size: Thailand, the Philippines, Indonesia, Costa Rica, Kenya, South Africa, all others



Source: GGPC Output for 2020 forecast



# Orange for danger

A recovery in processing orange production has relieved the orange juice drought, but prices remain volatile.

#### By Neil Murray

With a forecast 2019/20 orange crop of some 388 million boxes, Brazil is no longer short of orange juice. Production has risen in Florida, though it is still a long, long way from its zenith. Globally, orange juice consumption has been falling for some years. Not even increased consumption in the Far East and Africa has been enough to turn the tide (yet).

The combination of higher FCOJ production and stagnant, even falling, demand in the major markets of the US and Europe have brought the FCOJ price down to (at the time of writing) around USD1,700-1,750 per tonne cfr duty unpaid Rotterdam.

This is a fall of some USD600/tonne in a year and, ordinarily, one would expect that sort of price fall to have an effect on demand and consumption but it is not as simple as that. Brazilian orange juice yields are also improving: from a low of just over 300 boxes of fruit to one tonne of FCOJ, in 2018/119 the yield improved to 270 boxes/ tonne. These are still a lot worse than the pre-disease figures seen at the turn of the century (220-230 boxes/tonne), though.

The US first: retail sales of orange juice has been falling for seven or eight years. From around 540 mln gallons in the 2011/12 season, they dropped to 404 mln boxes in 2017/18. The figure for 2018/19 was 390 mln gallons (IEG Vu forecast 380 mln) so the rate of decline has slowed. More importantly, sales of reconstituted juice are actually starting to rise again. It is probably no coincidence that this category's retail price has dropped noticeably.

NFC prices, though, are still rising. In the

last report of the season, they were USD8.55 per gallon, up from USD8.19/ gallon in the preceding month. NFC sales continue to fall, so it does look as though US consumers are voting with their wallets.

IEG Vu thinks that this season will see a small increase in US consumption to 405 mln gallons, mostly driven by renewed interest in cheap reconstituted juice.

However, IEG Vu also reckons that Brazilian orange juice prices are going to rise in 2020, probably from the second half of the year. There are a number of reasons for this.

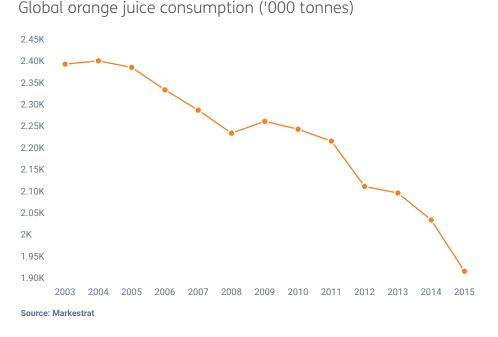
The first is that there has been some sort of internecine warfare going on in Brazil. Louis Dreyfus, which has openly stated that it wants to get out of the orange juice business, has partnered with a Chinese company, Luckin Coffee, to produce NFC orange (and other) fruit juices in China, which will be sold through Luckin's chain of coffee shops. IEG Vu thinks it is possible that this could eventually give China a toehold in Brazil.

This would give other Brazilian processors, especially the biggest, Cutrale, heart failure. Louis Dreyfus has already sold its storage and blending facilities in the US to Prodalim and owns two orange juice processing plants in Brazil.

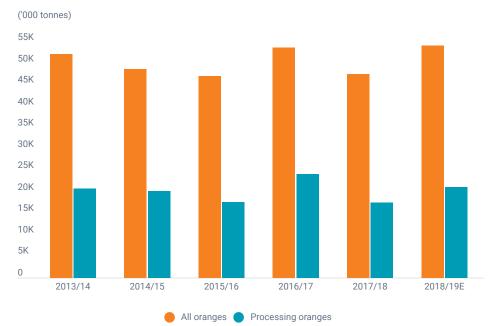
At Anuga this year, Brazil's FCOJ price bounced up and down by the day. Brazil has adopted a tactic of paying top dollar for the processing fruit while cutting the price of FCOJ. This means that any competitor will have to pay more for raw material and slash their margins to compete with the 'official' Brazilian price. Therefore they are being squeezed at both ends.

"This is sending a very clear signal to the Chinese," commented an IEG Vu source. It is probably sending a similar signal to Prodalim, which is more of an immediate threat, and IEG Vu is watching this wrangle with great interest.

The next reason is that Europe needs to rebuild its FCOJ stocks, so will be buying more as this year ends and the next begins.



## Global seasonal fresh and processing orange production



The final reason is that early indications for the 2020/21 Brazilian harvest are not good. Very hot weather has badly damaged Brazil's oranges. There seem to be only two assessments: bad and very bad.

IEG Vu has been told that there is even a possibility that the Hamlins will not be harvested at all, and that Brazil will go straight onto the later varieties. There is no second flowering for Hamlins, but there is a possibility of a decent second flowering for the others. Total production could be down to 240 mln boxes, though it really is too early to tell.

Brazil's Citrus Defence Fund (Fundecitrus) says that, despite an increase in the number of trees, the area planted with orange decreased by 1.42% across the Sao Paulo and Triângulo (western Minas Gerais state)/south-west of Minas Gerais state, citrus belt to 395,764 hectares.

The five regions that are part of the agricultural belt, the North (Bebedouro, Altinópolis and Triângulo Mineiro regions) and south-west (Avaré and Itapetininga regions) were the only regions with positive variation in the orange area, 1,384 and 275 hectares, respectively.

The less significant loss of orchards in these regions is probably due to low greening rates. According to a survey by Fundecitrus in 2018, the average incidence of greening in the citrus belt is 18.15%, but the north has 5.21% of contaminated trees and the south-west, 8.20%.

The question is what effect this will have on the FCOJ price. With 388 mln boxes for the 2019/20 harvest, there is plenty of orange juice around right now. The US NFC market is still shrinking while there are signs of increasing demand for FCOJ. European demand, however, is 25% up on last season's with nearly 285,000 tonnes of FCOJ shipped from Brazil between July and October this year.

IEG Vu forecast US 2018/19 retail OJ sales: 380 million gallons Actual figure: 390 million gallons IEG Vu forecast for US 2019/20 retail OJ sales: 405 million gallons



# Bumper year for Poland

Poland has enjoyed record apple juice exports this season, seizing market share from China.

#### **By Neil Murray**

There probably has not been a year like 2019 in the apple juice industry.

For a start, who would have foreseen, five years or more ago, that Poland would actually produce more apple juice concentrate than China? Who would have foreseen a season in which there would be a combination of a record apple harvest in Poland and a massive harvest slump in China?

While all eyes have been on Poland's AJC industry this year, as it elbows China aside and grabs a large share of the US market, the country's NFC juice industry has eschewed the limelight. This is strange, because its growth has been extraordinary.

Poland's 2018 apple harvest was the largest in the country's history. At the time of writing (mid-November), there has still been no definitive report of its actual size. Initial estimates were just under 5.0 million tonnes. These grew to 5.5 mln tonnes, and some people even believe that the total was close to 6.0 mln tonnes. Nobody not even the USDA, believed the estimate by GUS (the Polish National Statistics Institute) of 3.6 mln tonnes. Later in the season, it increased its estimate to 4.4 mln tonnes and that was also treated with derision. At the time, everyone – including IEG Vu wondered just what Poland would do with all that fruit. It was assumed that a lot would go for animal fewd, because nobody really thought it could all be consumed by the fresh and the processed industries.

It turned out that it could.

The Polish apple farmers, of course, suffered from ridiculously low prices for their juicing apples: below five euro cents per kilo, in some cases. Unsurprisingly, they were restive, complaining that the prices they were getting were lower than the production cost but, as an IEG Vu source sagely remarked, they never complain when apple prices are too high. Also, Poland's farmers have benefited enormously from the EU's investment in (some would say, with reason, 'subsidy of') their industry by funding not only a whole new network of coldstores but also the new high-yielding orchards that were responsible for the colossal harvest.

The Polish government decided to intervene in the market by buying up some of the surplus fruit and send it for juicing. Somewhat bizarrely, it tasked a frozen food company to do the job. Eskimos had absolutely no experience in the fresh fruit sector. Nor did it have the infrastructure to

acquire and distribute 500,000 tonnes of apples, nor the financial resources to do that, and so had to rely on a loan from the government to pay the farmers for the fruit. Unsurprisingly, other (probably more eligible) companies complained, saying they had not had the chance to tender for the contract.

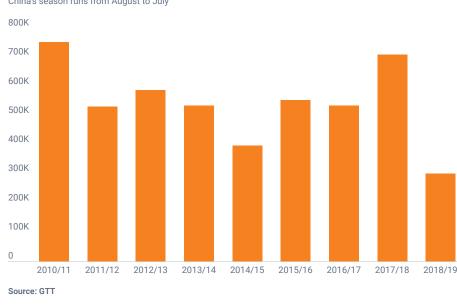
To cut a long story short, the farmers had to wait until May 2019 before they were all paid, the debacle drove Eskimos into a loss for Q1 2019, there is now an enquiry by Poland's anti-corruption body into the way the contract was awarded and only 200,000 tonnes of fruit were collected.



#### Polish seasonal AJC exports (tonnes)

Source: GTT





China's season runs from August to July

However, and this is important, that figure represents a potential extra production of around 28.000 tonnes of AJC.

When it came to the start of the new (2018) apple harvest, to everyone's surprise, including that of IEG Vu, Poland had a carry-over stock of 104,000 tonnes of fresh apples, according to the World Apple & Pear Association (WAPA). While this was about double the usual carry-over volume, that meant that Poland had actually managed to swallow anything up to 2.0 mln tonnes of extra fruit, compared with what it would have used a few years before.

## Quite how much AJC Poland made is unlikely ever to be tallied, but IEG Vu thinks it was at least 400,000 tonnes and could have been as high as 450,000 tonnes

IEG Vu had expected that, given the very low price of AJC from the 2018 harvest, the big bottlers and blenders would be filling every storage tank they could with product, which could easily be sold in the following season. We heard rumours to that effect, too. Our original estimate, made in last year's Global Outlook, was for up to 350,000 tonnes of AJC exported (which would have been a record figure) but in November, Polish customs suddenly revised their export figures upwards and that 350,000-tonne target was reached with a full month left to go. With the final date now in, we can see that Poland exported an incredible 373,300 tonnes. And that figure may yet be revised again.

Quite how much AJC Poland made is unlikely ever to be tallied, but IEG Vu thinks it was at least 400,000 tonnes and could have been as high as 450,000 tonnes. Processing was continuing right into March 2019 – and possibly later, in some cases, as processors worked through the inventory of fresh apples, many of which, it turned out, had been harvested too late, were soft, and thus unsuitable for fresh sale.

In March, fruit from coldstores was being offered at around PLN0.30/kg, equivalent to around USD75-80/tonne. At this point, the European market mostly switched to a



#### NFC apple juice

Poland exported nearly 76,000 tonnes of NFC apple juice in the 2013-14 season (September to August). In the following season, exports dropped by some 16,000 tonnes to between 59,000-60,000 tonnes.

That season, though, was Poland's annus mirabilis, when a bountiful harvest and Chinese production that was too expensive to compete gave Poland an entry into the US market, so NFC production was probably considered lower priority than AJC.

Since then, however, Polish exports and production have grown very quickly. Germany and the Netherlands, unsurprisingly, are by far the largest market for Polish product. This past season, the Netherlands has accounted for some 55,600 tonnes and Germany about 62,400 tonnes.

The UK is also a keen buyer, in third place with just over 39,000 tonnes. After these three countries, exports to other destinations are much smaller.

Polish seasonal NFC juice exports have showed annual growth rates of around 40% year-on-year since the 2014/15 season, culminating in a figure of nearly 180,000 tonnes last season. This season's figure is close to 188,000 tonnes. spot basis as buyers, comfortable in the knowledge that there was plenty of product around (but very little high acid – see below) saw no need to cover well forward.

This, at the time of writing, is affecting exports because Poland has been shipping AJC right into the start of the new season, at volumes far above those of last year. In short, cheap juice from 2018 has been readily available and may continue to be for some time.

## With China's 2018 apple harvest cut to around 32 mln tonnes, there was always going to be a severe shortage of raw material for processing

#### China

If this article devotes less space to Chinese apple juice than Polish, that is simply because China has been an irrelevance for the past season, with the world stage belonging to Poland.

With China's 2018 apple harvest cut to around 32 mln tonnes, there was always going to be a severe shortage of raw material for processing and that fruit was going to be expensive. China acknowledged as much at the 2018 China Juice conference, the Chamber of Commerce saying it would only make 300,000-320,000 tonnes of AJC in the 2018/19 season: a figure that IEG found realistic. Paying the equivalent of USD150/tonne for juicing apples, China was never going to be able to compete with Europe whose raw material price was about half that.

Not only that, but in late 2018 the US introduced tariffs of 10% on Chinese AJC. This was greeted by the Chinese industry as workable, but then the US announced that from January 1 2019, the tariff would be lifted to 25%. So Chinese exports collapsed. December export figures were just over 21,000 tonnes (compared with nearly 91,000 tonnes in December 2017), and January's tonnage was just 15,000 tonnes (over 40,000 tonnes).

Basically, China lost the US market to Europe, Poland being accompanied by Turkey whose prices were equally enticing and whose low acid product is liked by the US. China managed to hold onto some markets in Asia-Pacific, to which freight costs were too expensive for Polish juice. Australia continued to buy and Japan proved a remarkably loyal customer – Japanese buyers work on very long-term contracts and a single year when prices are high can be ignored in favour of a good working relationship. India, though, found it worthwhile importing Polish AJC.

China cut its export prices for the US as the season drew to a close, to around USD7.50/gallon, equating to an fob price of around USD1,200/tonne.

#### Prospects for 2020

China ought to be back in the US with a vengeance but, so far, it is not. This is partly because the US tariff of 25% has lifted its price into the US to close to Poland's – China is cheaper at the time of writing, at around USD7.35/gallon whereas Polish juice is well over USD8.00/gallon. It may take some time before Chinese exports to the US, its key market, reach reasonable figures.

China may have to downgrade its production expectations accordingly. IEG Vu thinks it will export more than last season, but not much more, and so is pegging its estimate at 350,000 tonnes.

Poland? At the time of writing, we are waiting to see what will happen to Polish prices, which we still believe are too high. We also think Polish figures will be higher than expected because of the carry-over from last season. We expect about 300,000 tonnes, including redirected exports from other countries (Ukraine, Moldova).

#### IEG Vu forecast for Chinese 2018/19 AJC exports: 300,000-350,000 tonnes

Actual figure: 301,000 tonnes IEG forecast for Polish 2018/19 AJC exports: 350,000 tonnes

Actual figure: 373,000 tonnes (however, some 38,500 tonnes is likely to be re-exported product from Moldova and Ukraine)

IEG Vu forecast for Chinese 2019/20 AJC exports 350,000 tonnes

IEG Vu forecast for Polish 2019/20 exports 300,000 tonnes

# **Tropicals and others**

What are the prospects for minor juices such as lemon, mango, passionfruit?

#### By Neil Murray



There is always considerable volatility in the markets for tropical juices. This is usually due to shifts on the supply side rather than fluctuating demand. Tropical regions tend to be susceptible to sudden weather extremes, especially with present climate change. Searing heatwaves can be followed by huge rainfall, and the fruits are first baked and then washed away. Tropical fruits, generally, tend to be fragile anyway.

Also, some fruits tend to be quite fastgrowing. This makes it easier for farmers to abandon fruit growing for other fastgrowing crops if the prices for their fruit fall and their land can be more profitable if planted to something else.

Mango has been particularly problematic this year. Most of the world's mango comes from India (India grows about 15-17 million tonnes per year, or half the world's entire production) and the season is very short. Mango does not keep for long periods of time in coldstores like (for example) apples.

The vast majority of fruit is for fresh sale. Only about 7-10% of India's crop is processed, and most of this fruit goes for pickling (chutneys etc) leaving maybe 600,000 tonnes of fruit to go for purée. Canned purée has been declining in volume as, prompted by customer demand, the major processors have switched to aseptic packing, but India has over-capacity in aseptic processing. Its industry can handle up to 700,000 tonnes of fruit annually, but rarely processes more than 500,000 tonnes. The production capacity for canning of around 100,000 tonnes of fruit is at least double the utilised capacity.

In 2018, India had a huge fruit harvest and prices for raw material and finished product tumbled. In 2019, the world ignored the

(entirely predictable) Indian warnings of hot weather damage to the fruit, particularly the Totapuri variety which, with the prized Alphonso, accounts for 90% of the quantity processed for juice and purée.

Buyers held back, assuming this was the usual series of false alarms and that production and prices would be normal, but this time the warnings were for real. Indian Totapuri, both purée (TMP) and concentrate (TMC), production was very small and prices started shooting up in the last quarter of the year.

As the year closes, prices are very high. TMC is around USD1,350 per tonne fob and TMP USD700-750/tonne and there is very little product available. Some processors may have a few containerloads of TMC tucked away: stocks of TMP are, to all intents and purposes, exhausted.

Those looking for product in early 2020 should be aware that because of the huge 2018 production, there are still some old stocks of TMC around. This may be blended with 2019 crop production, or even mislabelled as 2019 production, so care must be taken. Anything at a price that seems too good to be true should be avoided.

Latin America cannot make up for the shortfall in Indian production, not this season, so prices are going to remain firm at least until the 2020 harvest in May/June. No forecasts can be made for that because the weather is impossible to predict.

#### Passionfruit

This is another juice that has experienced wildly differing highs and lows. The problem with passionfruit is that the vines themselves are fragile and their roots shallow. The biggest supplier of passionfruit concentrate (50 brix) to world markets is Ecuador. Peru is also a serious producer, and at least one Ecuadorian company has operations in Peru. Peru is actually growing more fruit than Ecuador these days.

Like pineapple, passionfruit juice has always been locked into 'boom and bust' cycles. Ecuador is emerging from one of the 'bust' cycles and prices are climbing. At the time of writing, concentrate is around USD7,000-7,250/tonne cfr Rotterdam and IEG thinks it will go to USD8,000/tonne before the early 2020 crop.

The loss of a major processor, Tropifrutas, whose owner, Concentra of Switzerland,

has decided to quit the passionfruit business, is a problem. This may affect juice production, but Bernhard Frei of Quicornac, which processes in Ecuador and Peru, has told IEG Vu that his company is picking up contracts from farmers formerly supplying Tropifrutas, so there should not be a serious interruption in supply. Time will tell.

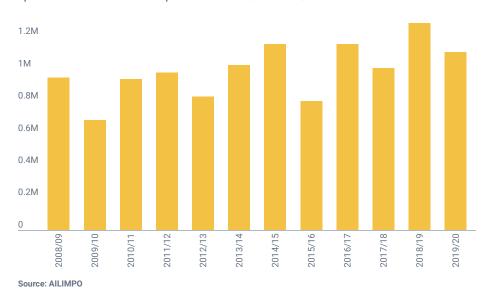
Vietnam is emerging as an interesting supplier. It grows around 200,000 tonnes of passionfruit annually (ie: a similar volume to Ecuador) but processes rather less (about 6,000 tonnes of concentrate). It also grows a different variety of the fruit (purple rather than yellow) and so the flavour/aroma is different, but it is very keenly priced and has its place in

Ecuadorian 50 brix passion fruit concentrate price (USD per tonne cfr Europe)



Source: IEG Vu

#### Spanish fresh lemon production (tonnes)



low-cost blends. Prodalim, the fastexpanding juice supplier, has signed a deal with Doveco, a Vietnamese passionfruit processor, and more Vietnamese product is likely to make its way to Europe and maybe the US in 2020.

#### Lemon juice/oil

Lemon juice has experienced some volatility, but nothing like as extreme as that seen in processed pineapple or passionfruit. At the time of writing (early December), prices from Argentina are low at around USD2,000/tonne fob Buenos Aires. This is the result of large crops in that country and also Spain, the world's other major producer.

Lemon oil prices are also extremely low: around USD18 per kilo.

## Vietnam grows around 200,000 tonnes of passionfruit annually

IEG Vu has noted some interesting new product development in lemon juice. Lemonades are becoming more popular (dollar sales in the US are up over 9% and volumes up nearly 5%). Lemon juice is perfectly positioned as a 'low sugar' juice, thus avoiding all the opprobrium doled out to sweet juices these days, and new 'adult' lemonades and similar drinks are appearing from carbonated soft drinks (CSDs) makers. Fentimans in the UK is a good example. Elsewhere, Coca-Cola has revived the Finleys brand and supermarkets are producing more sophisticated and higher quality private label lemon-based CSDs. Then there is the general trend for avoiding alcohol, especially among younger consumers.

In Europe, the EU is offering multi-million marketing support to promote European lemons and associated products and this will be bolstered by the formation of a global citrus trade association, the World Citrus Organisation

In Europe also, Spain's 2019/20 lemon crop is forecast to be smaller than the previous season's bumper production at around 1.11 mln tonnes. Spain processes 20-25% of its lemons, but supply of juice will be slightly tighter in 2020. For these reasons, we think that demand will increase and prices will firm in 2020.



