

**PMAC weekly update 9th to 16th July**

1. **Government agencies**: ICPR changes, Update on entry across the Australian border; Frozen vegetable recall; WTO Notifications
2. **New Zealand News:**  Sustainable farming boost; Biosecurity awareness needs work; Growers to tell their story at Horticulture Conference; Seeka puts recently acquired T&G Global orchards on market; Global seed group confirms PGG Wrightson interest; New Zealand kiwifruit experts share tips with Chinese growers; New Zealand’s kiwis to remain top horticultural export fruit; Kiwifruit claimants concur with $800 mln estimate; Dümmen Orange acquires New Zealand calla assortment; New Zealand robot to bring data to kiwifruit orchards
3. **International news:** GAIN reports; European Parliament; Regulatory status of non-GMO plant innovations under current EU law; UK: Impact calculator helps industry prepare for Brexit; Customs tariffs for some US fruits exported to China increased by 400%; US plans tariffs on 6000+ Chinese products; China and US already looking for new trade partners; Trade Wars are Good, and Easy to Win; US: Food companies launch Sustainable Food Policy Alliance; Carrefour uses blockchain technology for tomatoes; The smartphone is China's latest farming tool; China modernizes its kiwi industry to eradicate poverty; Europe: Listeria outbreak causes retailers to remove frozen vegetables; Tasmanian vegetables are safe’; CDC releases investigation update on multi-state outbreak of E. Coli; An orange a day keeps macular degeneration away’; Technology promises to calculate "true" shelf life; Effect of low-frequency electromagnetism on root-knot nematodes

***Editors comments***

*Food safety and trade are again high profile this week . The listeria contamination of EU packaged frozen vegetable has demonstrated two interesting elements . Partially processed vegetables to date have been considered safe. This will now cause regulators and the public to look even more closely at food in terms of causing illness. What is truely amazing in this outbreak is the use of technologies that can identify an outbreak that has affected only 47 people over 3 years and 5 countries . Without gene sequencing it is highly unlikely that any one would have recognised the connection. However despite enhanced ability to detect outbreaks finding the cause is another matter. The report onthe Ecoli outbreak on lettuce in the USA has ( after many months) been traced back to water but not how it entered that water or contaminated the lettuce. This ups the anti for any supplier of fresh food But for those who are confident of their production systems there will be money to be made and you can see Tasmanian vegetable growers are using the listeria news to try to boost their own sales.*

*Trade –Well Trump seems determined to plunge the world into a trade war with 4 articles reporting on various aspects of the stand-off with China*

1. **Agency news**



* 1. **ICPR changes**

The ICPR for Russia and EEU has been updated with changes to the [rewording of a note under section 4.1 for Apples to Russia - to correct an error.](http://www.mpi.govt.nz/document-vault/11518)

* 1. **Update on entry across the Australian border**

The MPI / PMAC working group has released in latest update on the phase out of OPI. It reports that currently there are 8 OPI inspectors who will visit New Zealand before next May (one available for booking at any one time). From now all product that is not precleared will need to be inspected in Australia. To facilitate smooth entry across the border it is very important that exporters do all they can to ensure product is compliant with Australian’s importing requirements.

 It now looks as though OPI will end by June 2019. In the meantime MPI and DAWR have a number of initiatives underway to try to streamline entry into Australia. For the full communication see the July update on [this web page](http://www.pmac.co.nz/advice-for-exporters.html)

* 1. **Frozen vegetable recall**

Greenyard Frozen UK is recalling a range of frozen vegetables in New Zealand that could cause listeriosis. The product that's being recalled has been associated with cases of listeria overseas, involving 47 cases and 9 deaths. MPI reports there have been no reports of associated illness in New Zealand and frozen vegetables generally pose no risk if cooked correctly before eating. [Full article available here](http://mpi.govt.nz/news-and-resources/media-releases/frozen-vegetable-recall/)

* 1. **WTO Notifications**

Please find attached the most recent WTO notifications from countries that are considering changes to their plant import requirements for specific products. If you have any concerns about the notifications being presented please contact Plant.exports@mpi.govt.nz so that they can potentially make a submission to the notifying country. Changes notified over the last week include:

South Africa – MRL’s and regulations governing general hygiene requirements for food Premises, the Transport of Food and Related Matters (Government Notice R.638 of 22 June 2018)

The embedded files for the last week (which has links through to the original notifications)is available here 



1. **New Zealand News**



* 1. **Sustainable farming boost**

15 new SFF projects were confirmed last week. A massive oversubscription to the fund in recent years was relieved earlier this year by Budget 2018’s $15 million boost over four years. The next SFF funding round opens on Monday 9 July.

Project of potential interest to plant producers are:

* ***Productive Riparian Buffers***- $349,300 for Evaluating the operational, financial and environmental performance of “productive” riparian buffers featuring a range of native and non-native plant species.
* ***Effective Fresh Produce Traceability Systems*** $272,649.99 for Understanding barriers to effective traceability in the domestic fresh produce industry to improve internal traceability at all stages of the supply chain and ensure a more robust, streamlined traceability framework.
* ***Alternative Pollinators for Seed Production*** $232,805 for Developing managed fly species that can be mass reared to provide sufficient and predictable pollination to a range of field and covered crops to maximise economic yields. [Full article available here](https://www.beehive.govt.nz/release/sustainable-farming-boost)
	1. **Biosecurity awareness needs work**

More work needs to be done to help New Zealanders understand the true impact of biosecurity threats, says Minister of Agriculture and Biosecurity Damien O’Connor.  In a baseline survey done as part of the Biosecurity 2025 programme and released last week, more than 60 per cent of New Zealanders have a good understanding of biosecurity and think it is important, but only 2 per cent think they would be personally affected by a biosecurity breach.  [See public survey here](https://www.mpi.govt.nz/dmsdocument/29852)

The research also included a business survey that focused on two key groups: transport, distribution and logistics; and primary producers. Both groups have significant biosecurity risks associated with the day-to-day running of their businesses. “It was great to see that 71 per cent of transport, distribution and logistics businesses are actively managing pest and disease risk but we need to work more closely with primary producers, as only 30 per cent are actively managing pest and disease risk.  [See business survey here](https://www.mpi.govt.nz/dmsdocument/29849) [Full article available here](https://www.beehive.govt.nz/release/biosecurity-awareness-needs-work)

**General**

* 1. **Growers to tell their story at Horticulture Conference**

The Horticulture Conference will be held at the Air Force Museum in Christchurch from 23 to 25 July. The theme this year is ‘Our Food Story’, with the sessions tracing that story from the commercial vegetable gardens and fruit orchards, all the way through to the consumer. The conference covers:

* Telling the stories of Innovative Growers:
* Meeting Compliance: Two very compelling sessions focused on the constraints on growing and looking to a post-pesticide spraying future (robotics and labour issues will also be addressed);
* Future Diversity: strategies and initiatives for woman in horticulture,
* Distributors and supermarkets under scrutiny
* Satisfying Consumers- meeting the ever-growing demands of consumers for premium price

[Full article available here](http://www.hortidaily.com/article/44666/New-Zealand-Growers-tell-their-story-at-Horticulture-Conference)

**Industry news**

* 1. **Seeka puts recently acquired T&G Global orchards on market**

Seeka Ltd is selling nine horticultural properties in Northland. The properties are to be sold to somebody who will continue the orchard management and supply the produce back to Seeka by contract. They cover 288 hectares growing kiwifruit [Zespri SunGold, ENZAGold, EnzaRed and Hayward] along with avocados and lemons. There is significant bare land suitable for horticulture development.

Seeka is looking for a large scale investor or consortium to own these orchards with professional orchard management and post-harvest services in place from Seeka. At the same time Seeka is investing in the fundamental postharvest infrastructure with new packing facilities and cool storage planned for Kerikeri.” Tenders close 15 August 2018. Information is available on [www.seeka.co.nz](http://www.seeka.co.nz).

[Full article available here](http://www.freshplaza.com/article/197971/Seeka-puts-recently-aquired-T-and-G-Global-orchards-on-market)

* 1. **Global seed group confirms PGG Wrightson interest**

NZ’s NBR has reported that Barenbrug has confirmed its interest in PGG Wrightson’s seed unit. PGG Wrightson had hired First NZ Capital and Credit Suisse Australia to help with a strategic review. This can be seen as a move to invite offers from buyers for part or all of the company. Barenbrug is an innovative market leader with a global market share of 12.5 percent. The seed and grain segment is PGG Wrightson’s most profitable business. Chief Executive of Cropmark Seeds, Glen Jarvis, said there was a great deal of speculation around the future of PGG Wrightson’s seed division. He added a merger would have significant implications for the local market. Mr Jarvis noted PGG Wrightson and Agriseeds both had businesses that compete with Cropmark.

* 1. **New Zealand kiwifruit experts share tips with Chinese growers**

Zespri's *Project Bamboo*, aims to contract selected growers to supply the Tauranga-based marketer with fruit for its expanding Chinese market. Sales in China reached $505 million at the end of June and turnover is expected to double in four years' time. This is the third year of a three-year trial to determine whether Zespri can source kiwifruit in China of a similar quality to what is grown in New Zealand. The previous two years of trials found there would be "no insurmountable barriers" to find kiwifruit which would conform to its quality standards. F[ull article available here](http://www.freshplaza.com/article/197937/New-Zealand-kiwifruit-experts-share-tips-with-Chinese-growers)

* 1. **New Zealand’s kiwis to remain top horticultural export fruit**

Kiwifruit exports, valued at $1.86 billion, remain New Zealand's most valuable horticulture export. It is certainly closely followed by the value of wine exports, at $1.72 billion. Apples and pears are the next largest exports, and growing at a similar rate to kiwifruit. It is expected they will grow from $770,000 to $990,000 by 2022. Overall, the New Zealand horticulture industry is exporting nearly $5.5b worth of produce.

However a report, commissioned by the Samurai Wasp Steering Group, estimated that gross domestic product would fall by between $1.8 and $3.6 billion by 2038 if the stink bug became established. The horticulture export value could fall by an estimated $2b to $4.2b.[Full article available here](https://www.stuff.co.nz/business/farming/93369838/nz-horticulture-booms-as-kiwifruit-beats-wine-in-exports)

* 1. **Kiwifruit claimants concur with $800 mln estimate**

The successful claimants in the kiwifruit lawsuit against the government for negligence in allowing the Psa virus into New Zealand say they concur with acting Prime Minister Winston Peters' estimate of up to $800 million of Crown liability. The government has until the end of next week to decide whether to appeal the High Court judgement from the first stage. [Full article available here](http://www.freshplaza.com/article/198171/Kiwifruit-claimants-concur-with-800-mln-estimate)

* 1. **Dümmen Orange acquires New Zealand calla assortment**

Dümmen Orange has expanded their product portfolio with the calla assortment and breeding pipeline of Bloomz. Both companies signed their joint agreement and integration has started. These calla lilies from New Zealand will enhance the current Dümmen Orange product lines, especially in cut flowers.

Andy Warren (Managing Director Bloomz New Zealand ltd.) adds: “We are happy to announce the sale of our Bloomz proprietary calla lily varieties and breeding pipeline to Dümmen Orange. We are confident that Dümmen Orange will take the innovative achievements of our programme and continue the quest for best of class for growers worldwide.  [Full article available here](http://www.floraldaily.com/article/16364/D%C3%BCmmen-Orange-acquires-New-Zealand-calla-assortment)

**Other**

* 1. **New Zealand robot to bring data to kiwifruit orchards**

A battery-powered fully-autonomous robot system, which can scan kiwifruit orchards and offer growers a full picture of their crop via accurate data, drew the interest of many in the horticultural industry at Fieldays. Currently most kiwifruit orchardists take a walk through their orchard, have a look at the crop flowering and guesstimate how much thinning they should undertake to increase their yield. This technology will provide , 100 per cent, full population count for every hectare on a kiwifruit orchard. This gives growers a full picture of their crop and allows them to make data-driven decisions to optimise yield and mitigate risks.” [Full article available here](http://www.freshplaza.com/article/198011/New-Zealand-robot-to-bring-data-to-kiwifruit-orchardshttps%3A/sunlive.co.nz/news/183836-robot-to-bring-accurate-data-to-kiwifruit-orchards.html%22%20%5Ct%20%22_blank)



1. **International news**

**Comment**

* 1. **GAIN reports**

Gain reports are from the “Global Agricultural Information Network” and are produced by the USDA. They are designed to provide timely information on the economy, products and issues in foreign countries that are likely to have an impact on United States agricultural production and trade. The information in them is written for USA exporters but the majority is equally relevant to New Zealand. With regard to import regulations for a particular market New Zealand exporters should first check the countries ICPR on MPI’s web site. These are collated specifically for New Zealand product. However the Gain reports often provide additional information that is useful e.g. on grading and labelling, economic profiles. This week see:

1. **Australia Retail Food Sector Report 2018|** Health, wellness, and the environment continue to be key purchasing factors for Australian consumers.   [Retail Foods\_Canberra\_Australia\_7-3-2018](http://gain.fas.usda.gov/Recent%20GAIN%20Publications/Retail%20Foods_Canberra_Australia_7-3-2018.pdf)
2. **EU- 28 Commission Roadmap for Endocrine Disruptors** Although this European Commission has already done a lot of work on endocrine disruptors, there remain many concerns regarding this issue. This roadmap should inform citizens and stakeholders about what the Commission has been doing so far. [Commission Roadmap for Endocrine Disruptors\_Brussels USEU\_EU-28\_7-6-2018](http://gain.fas.usda.gov/Recent%20GAIN%20Publications/Commission%20Roadmap%20for%20Endocrine%20Disruptors_Brussels%20USEU_EU-28_7-6-2018.pdf)
3. **EU- 28 Commission Briefing on New Origin Labeling Rules** The European Commission published Implementing Regulation 2018/775 setting out Country of Origin Labeling rules for the primary ingredient in prepacked foods.  [Commission Briefing on New Origin Labeling Rules\_Brussels USEU\_EU-28\_7-3-2018](http://gain.fas.usda.gov/Recent%20GAIN%20Publications/Commission%20Briefing%20on%20New%20Origin%20Labeling%20Rules_Brussels%20USEU_EU-28_7-3-2018.pdf)
4. **China Change and Opportunity Retail Foods** China remains one of the most dynamic retail markets in the world and offers great opportunities for U.S. food exporters. Exporters should be aware of several new trends that are changing China’s retail landscape.  Imported food consumption growth is shifting from China’s major coastal metropolitan areas (e.g., Shanghai and Beijing) to the dozens of Second-and-Third Tier cities throughout China.  China is experimenting with new retail models, such as 24-hour unstaffed [Retail Foods\_Beijing ATO\_China - Peoples Republic of\_7-5-2018](http://gain.fas.usda.gov/Recent%20GAIN%20Publications/Retail%20Foods_Beijing%20ATO_China%20-%20Peoples%20Republic%20of_7-5-2018.pdf)
5. **Hong Kong Macau Food and Agricultural Import Regulations and Standards Report** This report provides general background information on Macau’s Food Import Regulations. [Macau Food and Agricultural Import Regulations and Standards Report\_Hong Kong\_Hong Kong\_7-6-2018](http://gain.fas.usda.gov/Recent%20GAIN%20Publications/Macau%20Food%20and%20Agricultural%20Import%20Regulations%20and%20Standards%20Report_Hong%20Kong_Hong%20Kong_7-6-2018.pdf)
6. **Mongolia Exporter Guide** This guide serves as a resource for U.S. companies seeking to do business in Mongolia. .  The guide includes practical tips and information on local business practices, consumer preferences and trends, food standards and regulations, and import and inspection procedures.[Mongolia Exporter Guide\_Beijing ATO\_Mongolia\_7-5-2018](http://gain.fas.usda.gov/Recent%20GAIN%20Publications/Mongolia%20Exporter%20Guide_Beijing%20ATO_Mongolia_7-5-2018.pdf)
7. **Thailand Retail Report** [Retail Foods\_Bangkok\_Thailand\_7-2-2018](http://gain.fas.usda.gov/Recent%20GAIN%20Publications/Retail%20Foods_Bangkok_Thailand_7-2-2018.pdf)

**Regulatory**

* 1. **Regulatory status of non-GMO plant innovations under current EU law**

A new article on the latest plant breeding methods has been published in the latest issue of Bio-Science Law Review. *It provides an interesting comment on* the precautionary principle and the specific safeguard clauses in horizontal and sectoral legislation to justify and sufficiently guarantee the adoption of stricter risk management measures, in case previously unidentified risks arise.” [Full article available here](http://www.hortidaily.com/article/44611/Regulatory-status-of-non-GMO-plant-innovations-under-current-EU-law)

* 1. **UK: Impact calculator helps industry prepare for Brexit**

A new online calculator has been launched which will allow farmers and growers to see for the first time how they may be affected by potential Brexit scenarios. The Brexit Impact Calculator allows individuals( in the UK) to input their own data and see what effects the different Brexit scenarios might have on their business.

It considers the consequences of three possible Brexit scenarios:

* Scenario 1: Full and comprehensive free-trade agreement with the EU. Support payments stay at the current level.
* Scenario 2: No free-trade agreement with the EU but the UK unilaterally lowers all agricultural tariffs to zero. Level of support reduced by 50% and permanent labour costs rise.
* Scenario 3: No free-trade agreement with EU and the UK adopts current EU tariff levels on all agricultural trade. Level of support reduced by 75%. Permanent and casual labour costs rise.

The Brexit Impact Calculator can be found at <https://bic.ahdb.org.uk> and the wider toolkit is available at [https://ahdb.org.uk/brexit/brexit-toolkit.asp](https://ahdb.org.uk/brexit/brexit-toolkit.aspx) [Full article available here](http://www.hortidaily.com/article/44600/UK-Impact-calculator-helps-industry-prepare-for-Brexit)

* 1. **Customs tariffs for some US fruits exported to China increased by 400%**

After several months of back-and-forth between the Chinese and US governments, the Sino-US trade war officially began on July 6th, 2018. Customs tariffs on US fruit has increased 4 fold e.g. tariffs on apple exports to China increased from 10% to 50%.

One Chinese fruit importer hasstated that the new customs tariffs will greatly reduce the volume of US agricultural product export to China, in particular the seasonal US export cherries. The increased customs tariff is not the only problem. Stricter customs policies also delay import procedures.  [Full article available here](http://www.freshplaza.com/article/198007/Customs-tariffs-for-some-US-fruits-exported-to-China-increased-by-400-procent)

* 1. **US plans tariffs on 6000+ Chinese products**

The Trump administration has fired the latest shot in the ongoing trade war with China, highlighting another $200 billion worth of items that are eligible for a 10% tariff on products imported from China. The list is extensive, spanning 195 pages.

A breakdown of the main items within food and beverage items includes seafood, dairy products, wheat and grain, nuts, dried fruits, fruit juices, mineral water, and beer and wine products. Other categories covered are Chemicals, Electronics, Fabrics, Metals and machinery, Vehicles, Furniture and antiques. [Full article available here](http://www.freshplaza.com/article/198118/US-plans-tariffs-on-6000-Chinese-products)

* 1. **China and US already looking for new trade partners**

The price of such US products as cherries, pork, and whiskey rose sharply in China when the increased customs tariff came into effect on July 6th. This article looks at other countries China will look to replace this American produce .[Full article available here](http://www.freshplaza.com/article/197862/China-and-US-already-looking-for-new-trade-partners)

* 1. **Trade Wars are Good, and Easy to Win”**

A tradeworks article is available on the US announcing its intentions to impose tariffs on a further $200 billion of Chinese imports, adding to the $50 billion-worth already in train.

It states the latest round of [tariffs](https://ustr.gov/about-us/policy-offices/press-office/press-releases/2018/july/statement-us-trade-representative), scheduled to come into effect after August, is driven by US concerns over alleged Chinese appropriation of US technological know-how and policies intended to develop a strong Chinese high-tech sector; the US is at the same time taking steps to tighten controls on Chinese investment. Eight countries have launched WTO legal challenges against the US steel tariffs.   Many have also imposed or threatened retaliatory tariffs, accounting for roughly [13%](https://twitter.com/ChadBown/status/1016917674801102853) of US imports.

The article predicts short term effects on trade are likely to be modest. However, looking ahead, we can expect more volatility in export markets and disruption of familiar trade patterns. Of more serious concern, however, are the implications for the integrity of the rules-based global trading system.   There is no end in sight to the trade war: there are no bilateral US-China talks scheduled or underway, and there would not seem to be any specific action that China could take that would satisfy US complaints. It seems likely that we will see a ramping up of non-tariff barriers around the world, in addition to tariff mechanisms, in response to the tit-for-tat action and trade disruption – less visible but no less significant. Leaked reports last week suggested that President Trump has now asked his officials to look at pulling the US out of the WTO. [Full article here](http://www.tradeworks.org.nz/trade-wars-good-easy-win/)

**Business**

* 1. **US: Food companies launch Sustainable Food Policy Alliance**

Four of the largest food companies in the US have launched the Sustainable Food Policy Alliance, a new organization focused on driving progress in public policies that shape what people eat and how it impacts their health, communities, and the planet. Founding member companies include Danone North America; Mars, Incorporated; Nestlé USA; and Unilever United States.

As the Sustainable Food Policy Alliance (Alliance), member companies will prioritize U.S. public policy advocacy and action in five key areas:

* Consumer Transparency: Improving the quality and accessibility of information available to consumers about the food they purchase for themselves and their families.
* Environment: Advocating for innovative, science-based solutions to take action against the costly impacts of climate change, build more resilient communities, promote renewable energy, and further develop sustainable agriculture systems.
* Food Safety: Ensuring the quality and safety of food products and the global supply chain.
* Nutrition: Developing and advocating for policies that help people make better-informed food choices that contribute to healthy eating while supporting sustainable environmental practices.
* People and Communities: Advancing policies that promote a strong, diverse, and healthy workplace and support the supply chain, including rural economies.

At launch, two important policy areas the Alliance intends to engage immediately include nutrition labeling and carbon emissions.

The Alliance will work to advance climate policies that are impactful for the environment, while accounting for the specific business imperatives of supply chains, including farmers, ranchers, and other producers. This will include:

* Urging U.S. policymakers to ensure the Farm Bill and other farm policies reflect the pressing need to increase the scale of actions to address water quality and water conservation issues, focus on improving soil health, and expand the deployment of renewable energy, particularly wind and solar. The Farm Bill should leverage all available tools, including research and public-private partnerships such as the Regional Conservation Partnership Program (RCPP), to make smart investments in conservation and sustainability.
* Exploring the economics of sustainability, including financial incentives to reduce emissions and transition to low-carbon alternatives, with a particular focus on ways to create value for farmers, ranchers, and others who are implementing leading-edge practices to cut greenhouse gas emissions.
* Advocating on behalf of smart, comprehensive energy and environmental policies at the state, national, and international levels, including the Paris Climate Agreement, the Clean Power Plan or other commitments that result in change necessary to reduce greenhouse gas emissions in line with what evidence-based science says is necessary.

"The Sustainable Food Policy Alliance was founded on the principle that food companies can and should be doing more to lead and drive positive policy action for customers, the people who supply them, and the planet on which we all rely.

Their recent media release states "As an Alliance, we commit first and foremost to leading by example. We are committed to a collaborative approach and to listen and learn about issues affecting all parts of our food system from the field to the store shelf and beyond. We understand that we don't have all the answers and will rely on the best available evidence-based science to inform our positions. We will be transparent about how we reach our decisions and what we hope to achieve.” [Full article available here](http://www.hortidaily.com/article/44687/US-Food-companies-launch-Sustainable-Food-Policy-Alliance)

* 1. **Carrefour uses blockchain technology for tomatoes**

French supermarket chain Carrefour has started to used blockchain technology for their Cauralina tomatoes. The tomatoes are farmed by 9 producers in Marmande and Roussillon without using weedkillers. By the end of the year they have committed to 8 products being traceable.  [Full article available here](http://www.hortidaily.com/article/44643/Carrefour-uses-blockchain-technology-for-tomatoes)

  **China**

* 1. **The smartphone is China's latest farming tool**

Smart greenhouses with watering and fertilizing controlled via mobile phone are all the rage in east China's Jiangxi Province. In a demonstration greenhouse covering 5,000 square meters in the city of Yingtan, most work is done by a system of perforated plastic pipes combined with sensors to monitor temperature, air humidity, mineral content and water content of the soil.

This and another 200 agriculture projects are backed up by a provincial cloud platform. According to the Jiangxi provincial agricultural department, 59 out of 100 county-level cities are covered by the network, which also helps the local government monitor food safety and rural e-commerce development. More than 20,000 rural families are registered at the platform. [Full article available here](http://www.hortidaily.com/article/44670/The-smartphone-is-Chinas-latest-farming-tool)

* 1. **China modernizes its kiwi industry to eradicate poverty**

The Government of China has set itself the goal of eradicating total poverty in that country by 2020, and, to achieve this it has put in place various strategies, including the modernization of that country's native products industry, such as kiwi. To this end the Government is investing in technology development to help with data management and assist with all parts of the process from growing to marketing [Full article available here](http://www.freshplaza.com/article/198153/China-modernizes-its-kiwi-industry-to-eradicate-poverty)

 **Marketing**

The Freshfel time is produced every two to three months by the European fresh producers association. The Headlines for the period June and July 2018 [can be found here](http://freshfel.org/fresh-times-3-2018/) and give an overview of the most recent Freshfel activities in the EU

This edition has background about the following initiatives

* Note from the editor: Healthy lifestyles all year round!
* France: Fruit and Veg 4 Health
* Italy: FRUIT24 coming to you
* Spain: Eat the Mediterranean way!
* Spain: Learning about healthy diets
* UK: Improving health one by one
* The Netherlands: The FoodFirst Network
* Germany: Our school, our garden
* Italy: A healthy F&V lifestyle
* U.S: Real kiwifruit for real people!
* Brazil: Apples are back!
* Spain: Looking good!

 **Food safety**

* 1. **Europe: Listeria outbreak causes retailers to remove frozen vegetables**

The latest listeria hysteria to hit the headlines is Greenyard Frozen UK recalling its frozen vegetables from all the major grocery retailers. Production is on hold at the Hungarian plant of the company with it being linked to a deadly outbreak of Listeria monocytogenes from frozen vegetables in five European countries. The outbreak has infected at least 47 and killed nine people in Finland, the United Kingdom, Sweden, Denmark and Austria. The suspected food source was initially believed to be just frozen corn but has now been expanded to include other frozen vegetables. As a result, it’s critical that food manufacturers have plans in place to mitigate these issues if, and when they occur.

Eighteen of the cases have been reported this year, with the most recent person becoming sick in May. The outbreak is believed to have begun in 2015. It is anticipated that new cases could still emerge due to the long incubation period of listeriosis (up to 70 days) and with the long shelf life of these frozen products. Food recalls generally in recent months have made consumers wary about certain food products and regulators are constantly looking to respond with newer, stricter laws to improve safety. With such serious health risks involved in foodborne illnesses, manufacturers cannot tread lightly when it comes to recall-related risks. [Full article available here](http://www.hortidaily.com/article/44634/Europe-Listeria-outbreak-causes-retailers-to-remove-frozen-vegetables)

* 1. ‘**Tasmanian vegetables are safe’**

Vegetable growers are urging Tasmanians to buy local as imported frozen vegetables are pulled from supermarket shelves across the country. Food Standards Australia said the recall, although “precautionary” was due to listeria contamination fears linked to a factory in Europe.  [Full article available here](http://www.freshplaza.com/article/198071/Tasmanian-vegetables-are-safe)

* 1. **CDC releases investigation update on multi-state outbreak of E. Coli**

A final CDC investigation update of the multi-state outbreak of E. coli O157:H7 infections linked to Romaine lettuce has been posted. The conclusions are as follows:

* As of June 28, 2018, this outbreak appears to be over.
* CDC laboratory testing identified the outbreak strain of E. coli O157:H7 in canal water samples taken from the Yuma growing region.
* The FDA is continuing to investigate the outbreak to learn more about how the E. coli bacteria could have entered the water and contaminated romaine lettuce. For the most recent information about that investigation, [visit the FDA website](http://https:/www.fda.gov/Food/RecallsOutbreaksEmergencies/Outbreaks/ucm604254.htm).
* As of June 1, 2018, 210 people f became ill in 36 states. This is the largest multistate outbreak of E. coli O157 infections since the 2006 outbreak linked to spinach.
* Some people who became sick did not report eating romaine lettuce, but had close contact with someone else who got sick from eating romaine lettuce.
* (48%) were hospitalized, including 27 who developed a type of kidney failure called hemolytic uremic syndrome.
* 5 deaths were reported [Full article available here](http://www.freshplaza.com/article/198275/CDC-releases-investigation-update-on-multi-state-outbreak-of-E.-Coli)

  **Health**

* 1. **An orange a day keeps macular degeneration away’**

A new study ( of 2000 people in Australia) has shown that people who eat oranges daily

had more than a 60% reduced risk of developing late macular degeneration 15 years later.

Even eating an orange once a week seems to offer significant benefits. The data shows that flavonoids found in oranges appear to help protect against the disease. Flavonoids are powerful antioxidants found in almost all fruits and vegetables, and they have important anti-inflammatory benefits for the immune system." [Full article available here](http://www.freshplaza.com/article/198259/An-orange-a-day-keeps-macular-degeneration-away)

 **Innovation**

* 1. **Technology promises to calculate "true" shelf life**

Zest Labs, a company based in San Jose, California have developed a technology that allows growers and shippers to know how long each pallet of their produce will remain fresh. Using IoT sensors placed in each pallet at the time of harvest and cloud-based analytics, Zest Fresh takes into consideration temperatures at time of harvest, cut-to-cool duration, as well as conditions at each point right up until the receiver, and based on this data, calculates what the "true" remaining shelf life is.

The data is collected continuously and is read at pre-determined waypoints, such as being placed in the cooler, in the truck, moving out of the warehouse, arrival at the receiver, etc. This produces a dynamic shelf life, updated at each interval to give the most accurate shelf life at any one time."  It also means growers can use the data to monitor their processes to ensure they're being adhered to, adjusting procedures accordingly. "

To help with the monitoring process, Zest Fresh collects, stores and displays all the data in a unique, automatically-generated code, called the "ZIPR Code" which stands for Zest Intelligent Pallet Routing, the industry’s first freshness metric. The ZIPR Code references the dynamic remaining shelf-life of individual pallets and then users can view and manage that pallet's information. The ZIPR Code ensures that customer shipments are loaded correctly, and that quality is tracked through actual delivery – providing the grower with visibility of delivered quality."

"The IoT sensors are about the same size as a deck of cards and are placed in the pallet in the field or at any point along the way. "They are reusable and can also be used for certain segments. The software to view information is cloud-based, with the desktop and mobile tags operated by access points. [Full article available here](http://www.freshplaza.com/article/197959/Technology-promises-to-calculate-true-shelf-life)

* 1. **Effect of low-frequency electromagnetism on root-knot nematodes**

Plant-eating nematodes thrive mostly in moist earth: a single gram of soil can contain more than 1,000 plant-parasitic nematodes. While they can play a role in weed control by preventing them from germinating , they generally rank among the most persistent pest a grower or farmer can face – by feeding on the roots, they reduce a plant’s uptake of water and nutrients, simultaneously reducing its tolerance to stresses such as drought. It is estimated that annually up to 12.3% of worldwide yields ($157 billion dollars) are lost due to nematodes,

In industrial agriculture, the most common solution up to now has been using chemical pesticides. Indeed, all the big chemical players manufacture such nematicides, including Monsanto, Bayer, BASF and Dow, with nematicides in three categories: organophosphates, carbamates and bio-nematicides.

Electromagnetic solutions may be an alternative. Aboveground, different electromagnetic signals are generated by the plant . For example there is or isn’t nectar in the flowers, which attracts or rejects the bees. Underground, a similar principle seems to apply with regards to the attraction or rejection of migratory nematodes by the root system of the plant. Nematodes are attracted to plant roots “via soluble and gaseous attractants produced by the root itself or by attendant rhizosphere micro-organisms” . So, if it is possible to subtly interfere with these signals, the root-knot nematodes would simply no longer be interested and would stay clear of the rhizosphere, solving the problem without directly attacking the nematodes themselves.

Aqua-4D’s is a new technology using low-frequency signals which are applied to the water before irrigation. This has a positive effect on the innate structure of the water, making the minerals within more soluble, improving overall soil quality and eliminating biofilm. But at the same time, studies since 2004 have shown that root-knot nematodes exposed to this electromagnetically-treated water become stressed, disorientated, and lay fewer eggs, meaning they stay away from the root zone. Aqua-4D technology floods the soil with electromagnetic charges diluting the ones of the exudates, making it difficult for the nematodes to find the concentrations of exudates”.

Experts and nematologists agree that nematodes are virtually impossible to eliminate, so the sustainable and chemical-free solutions provided by the Aqua-4D system offer the next best thing: making root-knot nematodes disinterested and disorientated, keeping them away from the rhizosphere so that they no longer lay their eggs or pose a threat. [Full article available here](http://www.floraldaily.com/article/16419/Effect-of-low-frequency-electromagnetism-on-root-knot-nematodes)

**Subscribe/ Unsubscribe** If you no longer wish to receive this email please send a note to info@pmac.co.nz asking to be added/ removed and providing the nominated email address

**Disclaimer** Please note this information has been accessed from emails that have been forwarded to info@PMAC.co.nz and are distributed as a weekly update. If you intend using this information please sight the original document to ensure you are aware of the context within which any changes have been made and to guard against any transcription changes