

**PMAC weekly update 19th February to 26th February**

1. **Government agencies**: WTO Notifications
2. **New Zealand News:**  Food Safety Law Reform Bill passed; CPTPP text and National Interest Analysis released for public scrutiny; Digital biosecurity officer starts at Auckland Airport; Man killed by potato harvester had been sent from India to study; Summerfruit sales for the 2017/18 summer; After large New Zealand kiwi fruit, small Italian ones followed; Italian kiwifruit growers visit New Zealand orchards; Avanza: successful trials of Active CA technology for avocados; Good weather and increased packing capacity positive for kiwiberry harvest; No obvious explanation or solution for stink bug finds; "Isolation not enough to protect New Zealand’s borders"; Climate model gets the measure of myrtle rust; Feared fruit fly spreads southwards in South Africa; Fruit fly zone expands again for Tasmania; Fruit fly infested fruit found in supermarket
3. **International news:** GAIN reports; US: Senators call on Trump for TPP reengagement; Russia behind cyber attack on Maersk and APM Terminals; Global trade in fresh fruit increased by 2 million tonnes per year in the past 10 years; Freshfel headlines; Articles about the Chinese market for fresh fruit and produce; China's first cross-border, e-commerce, smart robot warehouse; Chinese fruit industry faces several challenges; Death count in South Africa’s Listeria outbreak tops 100; Produce information articles ; Cosmetics company partners with breeder to develop skincare products ; Nanoparticles used for pesticide screening

***Editors comments***

*I’ve made a couple of changes to this week’s update . First I’ve added two new sections*

1. *Biosecurity. There are so many articles about biosecurity news in both New Zealand and other Southern hemisphere markets at the moment that I’ve started a section at the end of the New Zealand news section for them. Stink bug and the spread of Fruit fly in other countries are areas which could negatively impact our own biosecurity.*
2. *China. The number of article about China just seems to multiply next week. Many have little news value and are very wordy. I’ve started a new section for these and have only included the titles of the least substantial. Three facts are noticeable from this week’s articles, the prices of imported fruit is falling, only 1% of produce sold on ecommerce makes a profit and China's first cross-border e-commerce smart robot warehouse has been built in Beijing.*

*The other articles that are worth a mention this week come from the Beehive. For those who are interested the details of the CPTPP agreement ( replacement for TPP) and its potential national interest impacts have been made available. While for those producing food the news that the Food Safety Law Reform Bill was passed is interesting. It has paased regulations which includes a range of changes to strengthen responses to food safety incidents. Producers and retailers can expect to see changes in MPI’s expectations in these areas beginning to be announced over the next year.*

1. **Agency news**



* 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](mailto:Plant.exports@mpi.govt.nz) so that they can potentially make a submission to the notifying country. Changes notified over the last week includes:

* Chile regulations for plants that could carry stink bug
* Egypt vegetables and derived products
* South Korea Proposed Amendments to Border Inspection Regulation for Foods
* USA and China MRL’s

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





1. **New Zealand News**



* 1. **Food Safety Law Reform Bill passed**

The Food Safety Law Reform Bill was passed into law last week and addresses the recommendations from the Whey Protein Concentrate (WPC) Contamination (the infant formula botulism event in 2013).

The Bill amends the Animal Products Act 1999, Food Act 2014, and Wine Act 2003 so improvements, recommended by the dairy-focused WPC Inquiry. It will affect businesses that operate under these Acts.  The new law includes a range of changes to strengthen our responses to food safety incidents by.

* enables regulations to set the content and format of the parts of custom risk management programmes and plans that must be provided to MPI for registration, and allows the Director-General to require amendments to programmes and plans if they are not able to be easily understood;
* enables regulations to provide more-detailed traceability obligations;
* allows New Zealand to create regulations where food and medicines converge;
* adds enforcement tools currently in the 3 acts to help develop a more consistent and fair approach to enforcement for non-compliance across the food safety system;
* allows Government to require businesses and individuals that deliver services to food operators (for example, research and diagnostic laboratories) to provide information relevant to managing serious food safety incidents.
* clarifies that when recognised agencies and persons are providing verification and evaluation services, their primary accountability is to the regulator;
* modernises the legislation by harmonising the Acts to allow use of automated electronic systems for statutory functions, for example issuing export certifications;
* addresses the WPC Inquiry’s concern about the increased use of tertiary notices for dairy. [Full article available here](https://beehive.govt.nz/release/food-safety-law-reform-bill-passed)
  1. **CPTPP text and National Interest Analysis released for public scrutiny**

The Minister for Trade and Export Growth last week released the text of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP). The trade agreement will create new opportunities for international trade, including preferential access for the first time to Japan, Canada, Mexico and Peru. The full text of the CPTPP is available online at <https://www.mfat.govt.nz/en/about-us/who-we-are/treaties/cptpp>

MFAT also released the National Interest Analysis of the CPTPP (<https://www.mfat.govt.nz/cptpp>.), which assesses the likely costs and benefits for New Zealand of entering into the Agreement. “It estimates that the CPTPP will boost New Zealand’s economy by $1.2 billion to $4 billion a year once fully implemented. That’s a significant increase in a country where 620,000 jobs are dependent on exports.”

Public briefings and consultations on the CPTPP are continuing around the country. The CPTPP will be signed in Santiago, Chile, on 8 March. [Full article available here](https://beehive.govt.nz/release/cptpp-text-and-national-interest-analysis-released-public-scrutiny)

**General**

* 1. **Digital biosecurity officer starts at Auckland Airport**

A digital biosecurity officer will help international visitors arriving at Auckland Airport. Her name is Vai, which stands for Virtual Assistant Interface. Vai can answer simple biosecurity questions such as what items need to be declared for inspection and can provide help with directions around the airport.  
  
A proof-of-concept trial for the New Zealand developed technology was undertaken last week. It uses biometric technology to interact with passengers. Vai uses a database of queries and answers that is constantly updated through her interactions. The technology behind her human appearance is similar to what is used in the gaming and movie industry. [Full article available here](http://www.floraldaily.com/article/13963/New-Zealand-Digital-biosecurity-officer-starts-at-Auckland-Airport)

* 1. **Man killed by potato harvester had been sent from India to study**

A farm worker died on Saturday after becoming trapped in a potato harvester in Pukekohe. He was an Indian man who had moved to New Zealand to study. According to the Indian Weekender, some workers were on break and the tractor was turned off, but the machine was still working when the accident happened. His family had recently funded him to come to New Zealand from the Punjabi village of Talwandi Salbo. [Full article available here](http://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=11997068)

**Industry news**

* 1. **Summerfruit sales for the 2017/18 summer**

Summerfruit New Zealand says cherries have been ripening very quickly this season due to the warm temperatures, and while that has been a challenge for growers in getting them to market on time, the volumes of the fruit have been very pleasing. In fact, an export record was recently broken; 959 tonnes was the most cherries ever shipped in one week. To put it in context, that is nearly one quarter of the entire season in just seven days

"Consistent high temperatures during summer helped the fruit ripen faster than normal. New plantings are starting to come into production and coupled with a focus on new growing methods, the amount of fruit coming off the trees is increasing each year. The early start means that the season is coming to an end three weeks ahead of expected. Up until a fortnight ago, 5,803 tonnes were produced, with 4,233 tonnes exported and 1,569 sold domestically.

New Zealand exports to over 15 countries. Another change this season has been in the export country rankings, with China and Taiwan fluctuating as the main export market for New Zealand. At the end of last week, more than 1,373 tonnes were exported to China this season, just behind Taiwan with more than 1,375 tonnes. But China has made a major jump from last year, when only 829 tonnes were shipped there.

It has been a mixed season for stone fruit varieties. On the New Zealand market, sales of apricots, nectarines, peaches and plums aren’t as strong as last year, however, exports of nectarines, peaches and plums have improved on last season," she said. "The difficult weather conditions have been tough on apricots as they don’t respond well to extreme heat, and there were some reports of soft fruit, which affected exports. Additionally, the earlier season meant that our exports to Australia clashed with local production. [Full article available here](http://www.freshplaza.com/article/189723/Warmer-weather-helps-drive-New-Zealand-cherry-export-volumes)

**Crop news**

* 1. **After large New Zealand kiwi fruit, small Italian ones followed**

The contrast between the European and the New Zealand kiwi fruit season is large. New Zealand mostly harvested large sizes. The European kiwi fruit season is quite different characterised by small sizes and a smaller volume.

In the EU the Zespri kiwi fruit mostly comes from Italy and France. The distinction has to be made that green kiwi fruit is bought, and SunGold is grown under licence. Last year 1,800 hectares worth of additional licences were granted by Zespri for SunGold in Europe for the 2017 to 2020 period. “That means Europeans can plant 600 hectares of SunGold every year for three years, and will result in the area being nearly 4,000 hectares in Europe by 2020.” Tests are being undertaken in other production regions, such as Portugal and Greece to see if they will be more suitable growing areas. [Full article available here](http://www.freshplaza.com/article/189299/After-large-New-Zealand-kiwi-fruit,-small-Italian-ones-followed)

* 1. **Italian kiwifruit growers visit New Zealand orchards**

An influx of Italian Zespri kiwifruit growers last week will soon finish up their tour of orchards around New Zealand. The 20 visitors are the first in a series of ‘technical tour’ groups that will bring 120 people from Korea, Japan, China, France and Italy to New Zealand orchards this year.  
  
Zespri has indicated this kind of face-to-face, practical, on-the-ground technical advice helps our overseas growers produce plenty of top-quality fruit and ensures Zespri’s standards are maintained throughout the supply chain. It also exposes NZ growers to new ideas and different ways of doing things, creating a catalyst for new thinking and innovation.”   
  
This kind of knowledge exchange is vital to Zespri’s global success, ensuring year-round supply of its high-quality kiwifruit internationally, allowing northern hemisphere orchardists to complement shortages in the New Zealand supply season.  
  
The Italians will have spent six days in New Zealand and a Korean group will arrive in March. Tours are tailored to meet the specific needs of each group typically focusing on rapid orchard establishment, producing high quality, and high taste fruit and optimising postharvest supply chains. [Full article available here](http://www.freshplaza.com/article/189895/Italian-kiwifruit-growers-visit-New-Zealand-orchards)

* 1. **Avanza: successful trials of Active CA technology for avocados**

Avanza, a supplier of premium Hass avocados, has completed a successful trial with Daikin Reefer, a global supplier of container refrigeration equipment. Using Daikin’s Active Controlled Atmosphere (CA) technology, Avanza trialled a proof of concept shipment of 6,500kg avocados between the ports of Tauranga, New Zealand, and Busan, Korea. The positive outcome now sees Daikin’s Active CA in pole position for transportation of next season’s avocados.  
  
Colin Partridge, technical manager and representative of Avanza, explained: “Controlled atmosphere reefer technology is essential to our business as avocados are a high respiring cargo and need precise optimal atmosphere levels throughout transit to safeguard quality over long distances. As the only active, rather than passive system in the market, we wanted to trial Daikin’s Active CA technology to see if the benefits of an active system are genuine. We’re delighted with the results and are now discussing the use of Daikin’s system for next season’s shipments. “[Full article available here](http://www.freshplaza.com/article/189885/New-Zealand-Avanza-successful-trials-of-Active-CA-technology-for-avocados)

* 1. **Good weather and increased packing capacity positive for kiwiberry harvest**

New Zealand's kiwiberry harvest started late last week and harvest is going well while the weather holds. Kiwiberry grower and packer Seeka are about 20% through the harvest of between 90-100,000 trays. Volumes are well up on last year when we struggled due to bad weather.  
  
The Australian market is the main market with both wholesale and retail served, though some are sent the USA and France. Half of the fruit packed by Seeka is sold by Freshmax which has extensive markets throughout Asia.   
  
"This year the kiwiberries are large and they have really good taste quality. In market demand is good and they are being well promoted by the retailers. They are positioned beside the berry fruit in the chilled section of fresh produce." [Full article available here](http://www.freshplaza.com/article/190008/NZ-Good-weather-and-increased-packing-capacity-positive-for-kiwiberry-harvest)

**Biosecurity**

* 1. **No obvious explanation or solution for stink bug finds**

MPI cannot explain the sharp rise in discoveries of stink bugs in imported cars. Nor is there an obvious solution to the problem. But a special work group set up last Thursday will try to find answers. MPI and Industry are very concerned about the noxious beetle called the Brown Marmorated Stink Bug is not indigenous to New Zealand. It inserts its fangs into fruit and vegetables, and sucks out the liquid. Toxins from its saliva can then cause the plant to rot from within. [Full article available here](https://www.radionz.co.nz/news/national/350691/no-obvious-explanation-or-solution-for-stink-bug-discoveries)

* 1. **"Isolation not enough to protect New Zealand’s borders"**

"New Zealand’s isolation from the rest of the world has, until recently, protected our country from many pests and diseases. By good luck and some good management we have kept a lot of the world’s pests and diseases out of New Zealand. In recent years, however, that situation has changed, and the consequences could be devastating", writes Mike Chapman, CEO of Horticulture New Zealand, in his latest column.  
  
"Exports are vital for New Zealand’s economic survival. We need every competitive advantage we can get. We are the furthest trading nation from the world’s prime markets and so it is costly to get our produce to market. We have some of the world’s best growing conditions, so we produce the finest food found from anywhere in the world which is highly sought after. But we are not a cheap food producer. Environmental sustainability and paying competitive wages makes New Zealand a more expensive producer than some of our key trading rivals, such as Chile. Chile is closer to key markets and produces at about a third the cost of New Zealand.  
  
"One of our biggest and best advantages is being free from a lot of pests and diseases. For New Zealand to remain competitive in international markets and to bring back to New Zealand high export earnings, biosecurity is essential. If it establishes and breeds here, the brown marmorated stink bug would devastate New Zealand horticulture and invade many homes and backyards as well. Economists, NZIER have calculated that the cost to New Zealand would be a massive $4 billion a year. "Prevention is without a doubt without the best cure." [Full article available here](http://www.freshplaza.com/article/189846/Isolation-not-enough-to-protect-New-Zealands-borders)

* 1. **Climate model gets the measure of myrtle rust**

Plant & Food Research scientist Dr Rob Beresford, built the Myrtle Rust Risk Model last year specifically designed to understand and predict how myrtle rust will behave under New Zealand conditions. The model is already proving its worth, with MPI using it to help inform response activities, such as targeted surveillance for the disease.

The model warns when the weather is suitable for any spores in the air to infect susceptible plants; it predicts the time from when infection occurs to when rust symptoms may appear; and it assess the suitability of conditions for spores to be produced from infected plants that are showing symptoms.

The risk model is particularly unique for the fact that it simulates the biology of the disease at a fine scale of time and space. Additionally, thanks to NIWA’s sophisticated weather analysis and prediction maps, in combination with its climate-data mapping skills, the NIWA data can be factored into the model hourly, allowing for day-to-day measurability and reporting. The next step to further refine the model is to do more in-depth research into host plant susceptibility so they can tweak the model from reporting relative risk to something even more definitive. [Full article available here](https://www.plantandfood.co.nz/page/news/media-release/story/climate-model-gets-the-measure-of-myrtle-rust/?utm_source=Plant+%26+Food+Research+E-Newsletter&utm_campaign=1534715c3a-EMAIL_CAMPAIGN_2018_02_11&utm_medium=email&utm_term=0_5919b8ee23-1534715c3a-21882009)

* 1. **Feared fruit fly spreads southwards in South Africa**

The Oriental fruit fly, an invading fruit fly that has been present in South Africa since 2010, has been intercepted in the Western Cape for the first time. The Oriental fruit fly is already well-established in the subtropical regions in Mpumalanga, Limpopo and KwaZulu-Natal provinces, but until now the Western Cape was still an unaffected area. In November last year the Department of Agriculture, Forestry and Fisheries (DAFF) extended the description of the Oriental fruit fly’s distribution in South Africa in its measures, exactly with the aim of being better able to deal with new geographical interceptions of the notifiable pest. [Full article available here](http://www.freshplaza.com/article/189818/Feared-fruit-fly-spreads-southwards-in-South-Africa)

* 1. **Fruit fly zone expands again for Tasmania**

Following the detection of a single adult Queensland fruit fly in north-east Tasmania last week, intensive ongoing monitoring and surveillance in the region has located another four adult flies and larvae and Biosecurity Tasmania expanded the control zone across the north-west to the north-east of the State. [Full article available here](http://www.freshplaza.com/article/189811/Fruit-fly-zone-expands-again-for-Tasmania)

* 1. **Fruit fly infested fruit found in supermarket**

A nectarine certified as being "fruit fly free" was found infected with fruit fly larvae in a Tasmanian supermarket last week . The discovery immediately commenced *a* state-wide recall for all host produce imported from Victoria and certified through a specific accredited treatment facility.

Officials will be undertaking further investigations with interstate authorities, including any relationship between this Victorian treatment facility and other Tasmanian detections of fruit fly this summer. "[Full article available here](http://www.freshplaza.com/article/189900/Fruit-fly-infested-fruit-found-in-supermarket)



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. **China Food and Agricultural Import Regulations and Standards – Certification** This report lists the major export certificates required by the Chinese government for imports of food and agricultural products.
2. **China Food and Agricultural Import Regulations and Standards – Narrative** China’s food regulatory regime continues to evolve.  In 2017, China issued numerous new regulations and measures to reflect the requirements introduced under the 2015 Food Safety Law. [Food and Agricultural Import Regulations and Standards - Narrative\_Beijing\_China - Peoples Republic of\_1-11-2018](http://gain.fas.usda.gov/Recent%20GAIN%20Publications/Food%20and%20Agricultural%20Import%20Regulations%20and%20Standards%20-%20Narrative_Beijing_China%20-%20Peoples%20Republic%20of_1-11-2018.pdf)
3. **China- Importing Foods without National Food Safety Standards** Article 93 of the Food Safety Law provides that in the case of importing food for which national food safety standards are not available, overseas exporters, overseas producing enterprises, or their entrusted importers should submit their implemented national (regional) standards or international standards to the National Health and Family Planning Commission (NHFPC). [Importing Foods without National Food Safety Standards\_Beijing\_China - Peoples Republic of\_2-1-2018](http://gain.fas.usda.gov/Recent%20GAIN%20Publications/Importing%20Foods%20without%20National%20Food%20Safety%20Standards_Beijing_China%20-%20Peoples%20Republic%20of_2-1-2018.pdf)
4. **China Notifies Measures for the Inspection and Supervision** On January 9, 2018, China notified the Measures for the Inspection and Supervision of Import and Export Prepackaged Food Labeling as TBT/CHN/1246. [China Notifies Measures for the Inspection and Supervision\_Beijing\_China - Peoples Republic of\_2-17-2018](http://gain.fas.usda.gov/Recent%20GAIN%20Publications/China%20Notifies%20Measures%20for%20the%20Inspection%20and%20Supervision_Beijing_China%20-%20Peoples%20Republic%20of_2-17-2018.pdf)
5. **Italy Food and Agricultural Import Regulations and Standards - Narrative**  
   This report is intended to supplement the FAS U.S. Mission to the EU’s Food & Agricultural Import Regulations and Standards (FAIRS) report with Italy-specific information.  [Food and Agricultural Import Regulations and Standards - Narrative\_Rome\_Italy\_12-14-2017](http://gain.fas.usda.gov/Recent%20GAIN%20Publications/Food%20and%20Agricultural%20Import%20Regulations%20and%20Standards%20-%20Narrative_Rome_Italy_12-14-2017.pdf)
6. **Italy Fresh Deciduous Fruit Annual 2017** With approximately 1.7 million metric tons (MMT), Italy provides approximately 19 percent of the EU-28 apple production.  Italy’s marketing year (MY) 2017/18 apple production is forecast to drop significantly (-23 percent) from the previous campaign [Fresh Deciduous Fruit Annual 2017\_Rome\_Italy\_1-19-2018](http://gain.fas.usda.gov/Recent%20GAIN%20Publications/Fresh%20Deciduous%20Fruit%20Annual%202017_Rome_Italy_1-19-2018.pdf)

**Regulatory**

* 1. **US: Senators call on Trump for TPP reengagement**

U.S. Senator Steve Daines led 25 senators in sending a letter to President Trump urging the President to act on his recent statements expressing interest in reconsidering an improved Trans-Pacific Partnership (TPP).   [The full text of the letter can be read here. Full article available here](http://www.hortidaily.com/article/41333/US-Senators-call-on-Trump-for-TPP-reengagement)

**Business**

* 1. **Russia behind cyber attack on Maersk and APM Terminals**

The virus that brought a number of large companies in Europe to a halt, including APM Terminals and Maersk Line, last summer, was spread by Russia. The malware first showed up in the Ukraine and spread to Europe from there. The British government is now saying that the virus comes from the Russian army, according to [NOS](http://nos.nl/artikel/2217357-londen-moskou-zat-achter-gijzelsoftware-die-bedrijven-platlegde.html). According to the British the Russians wanted to cause chaos in the Ukraine with the attack. [Full article available here](http://www.hortidaily.com/article/41247/Russia-behind-cyber-attack-on-Maersk-and-APM-Terminals)

* 1. **Global trade in fresh fruit increased by 2 million tonnes per year in the past 10 years**

The international trade in fresh fruit increased by an average of 2 million tonnes per year to about 80 million tonnes in the past 10 years. For comparison: in fresh vegetables, this figure is 40 million tonnes. In percentage terms, the global trade in fresh fruit grew by more than a third in the 2006/16 period. The global trade in fresh fruit has a value of 75 billion dollar nowadays, whereas that figure for fresh vegetables is 40 billion dollar.

The rest of this article provides an indication of the changes in trade flows over the last decade between major trading regions and gives an indication of re-exported produce within the EU. [Full article available here](http://www.freshplaza.com/article/189566/Global-trade-in-fresh-fruit-increased-by-2-million-tonnes-per-year-in-the-past-10-years)

* 1. **Freshfel headlines**

The Freshfel time is produced every two to three months by the European fresh producers association

The Freshfel Headlines number 1 of 2018 [can be found here](http://freshfel.org/freshfel-headlines-1-2018/). The Headlines give an overview of the most recent Freshfel activities. In this edition:

* Freshfel Europe attends Fruit Logistic in Berlin
* Freshfel Europe, Environmental health News and European Public Health Alliance call for triple-win action on environment, economy and health
* Freshfel Europe organised Conference on Research and Innovation
* Freshfel Europe participates in trade faro for specialty crops presenting opportunities for fresh apples
* Freshfel Europe assisted a trade facilitation project in the Central European Free trade agreement region
* Freshfel Europe Food and Plant Safety Meeting
* Freshfel Europe Sustainability Meeting

All the latest headlines of Freshfel can be found at <http://freshfel.org/newsroom/headlines/>

  **China**

* 1. **Articles about the Chinese market for fresh fruit and produce**

# *There are more and more articles about the produce market in China. They seldom say more than their title and they are often very wordy. However it’s worth knowing what is being put in the public space . This week’s articles include*

# Differences between domestic and imported fruit prices grows smaller [Full article available here](http://www.freshplaza.com/article/189830/China-Differences-between-domestic-and-imported-fruit-prices-grows-smaller)

# Some Chinese fruit and vegetable traders are moving plantations overseas [Full article available here](http://www.freshplaza.com/article/189906/Some-Chinese-fruit-and-vegetable-traders-are-moving-plantations-overseas)

# Prices in second and third tier cities higher than in first tier cities [Full article available here](http://www.freshplaza.com/article/190062/China-Prices-in-second-and-third-tier-cities-higher-than-in-first-tier-cities)

# E-commerce benefits both sides, but there is hidden danger ( product is not always as advertised in the online pictures and delivery can take up to a week. [Full article available here](http://www.freshplaza.com/article/190053/China-E-commerce-benefits-both-sides,-but-there-is-hidden-danger)

* 1. **China's first cross-border, e-commerce, smart robot warehouse**

China's first cross-border e-commerce smart robot warehouse (called Smart One) has been put into use in Yichang, Beijing. The Smart One warehouse has an area of 10,000 square meters, including the robot area, the identification area, the tally area, the sorting and packing area, the human-machine handover area, the declaration area and other functional areas.

Smart One is equipped with full-view and high-definition video surveillance, as well as X-ray inspection equipment and sorting equipment used by customs and the China Entry-Exit Inspection and Quarantine Bureau (CIQ).

Their own intellectual property is the highlight of Smart One warehouse. Although the appearance of the robot is as ordinary as a little box, each robot has its own 'brain', and can complete a range of intelligent operations including receiving, shelving, storage, sorting, inspection and delivery.

The Smart One warehouse can process more than 300,000 packages per day and deploy more than 10,000 robots to work in the monitoring area. Each Smart One robot can handle 10,000 packages during an eight-hour working time per day, which is four times more efficient than human labour in a traditional warehouse. [Full article available here](http://www.freshplaza.com/article/189986/Chinas-first-cross-border,-e-commerce,-smart-robot-warehouse)

* 1. **Chinese fruit industry faces several challenges**

China is both the largest fruit producer and the largest fruit consumer in the world. In various segments of the production chain, however, there are still many problems.

* Unmarketable products the main reason that some fruits are unmarketable is that the linkup between production levels and retail channels is not smooth..
* The threat of imported fruit In recent years the volume of imported fruit has greatly increased. Fruit exports, however, have decreased, affecting the favourable trade balance of China.
* Lack of standardization Each segment of this production chain needs relevant standardized regulations to provide high quality fruit. Up until now, however, the conditions are chaotic and uniform standards are difficult to achieve.
* Sources of high-quality fruit are difficult to locate Fruit dealers find it difficult to locate and control sources of high-quality fruit.
* Limited use of refrigerated distribution.
* E-commerce of fresh produce has limited profits According to relevant data, only 1% of the several thousand e-commerce fresh produce dealers make a healthy profit.

[Full article available here](http://www.freshplaza.com/article/189939/Chinese-fruit-industry-faces-several-challenges)

 **Food safety**

* 1. **Death count in South Africa’s Listeria outbreak tops 100**

The death count in South Africa’s listeriosis outbreak — the worst documented outbreak from Listeria monocytogenes in global history — has topped 100. The death rate, based on the outcome data for 355 cases for which details are available, sits at 30 percent, according to the South African news website

The source of the South Africa outbreak that started in January 2017 is thought to be a food product or range of products from one company, but that is still just a theory. The DNA of Listeria monocytogenes samples sequenced at the National Institute of Communicable Diseases identifies the virulent strain as ST6, or sequence type 6.

Before the South African situation, the world’s largest listeriosis outbreaks were in the United States in 2011 and in Italy in 1997. The Italian outbreak was traced to cold corn and tuna salad. The 2011 U.S. outbreak to cantaloupes from Jensen Farms in Colorado. [Full article available here](http://www.foodsafetynews.com/2018/02/death-count-in-south-africa-listeriosis-outbreak-tops-100/#.WnzcAExuKM8)

  **Health**

* 1. **Produce information articles**

# *Four interesting articles this week for this section but all are just of general interest. No real new insights . They include*

# 10 Health Benefits Of Eating Apples You Never Knew [Full article available here](https://doctor.ndtv.com/living-healthy/10-health-benefits-of-eating-apples-you-never-knew-1814534)

# Keeping fresh produce in your refrigerator but watch the humidity! A particularly good list on what to refrigerate, what not to put together and what best on the bench [Full article available here](http://www.freshplaza.com/article/189771/Keeping-fresh-produce-in-your-refrigerator-but-watch-the-humidity)

# Vegetable Names: 93 Vegetables You Would Love To Try – a very impressive list with abrief description of each vegetable Fu[ll article here](https://food.ndtv.com/food-drinks/vegetable-names-93-vegetables-you-would-love-to-try-1814567)

 **Innovation**

* 1. **Cosmetics** **company partners with breeder to develop skincare products**

Venn Skincare, a San Francisco-based company that researches, develops and produces skincare products featuring advanced science, technology and non-toxic ingredients announced partnership via MoU agreement with Asia Seed, a South Korea-based company that researches, develops and produces vegetables, including functional hybrid vegetables, and vegetable seeds.  
  
Asia Seed will work together with Venn Skincare to research and develop functional hybrid vegetables and vegetable seeds specifically engineered to provide high concentrations of more potent skincare ingredients. [Full article available here](http://www.hortidaily.com/article/41257/Cosmetics-company-partners-with-breeder-to-develop-skincare-products)

* 1. **Nanoparticles used for pesticide screening**

Previously undetectable traces of a common vegetable pesticide have been extracted by Singaporean researchers using a new screening technique. The new method is 10 times more sensitive than conventional methods and can detect concentrations of the pesticide of as low as 0.02 nanograms in vegetables. His team studied the use of nanoparticles to detect traces of the pesticide in vegetable oil and 10 types of vegetables, such as lettuce. After blending the vegetable samples, the liquid portion of the mixture was extracted and mixed with the nanoparticles. The nanoparticles, which can be reused about 30 times, act as "micro magnets", attracting and separating the pyrethroid molecules from other molecules for analysis.

Next, the team is looking at designing nanoparticles that can home in on other molecules, including toxins produced by fungus, said PhD student Yu Xi, who was also involved in the research. The team is currently in talks with vegetable farmers, distributors and a food safety facility on commercialising the technique. [Full article available here](http://www.freshplaza.com/article/189890/University-of-Singapore-Nanoparticles-used-for-pesticide-screening)

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