

**PMAC weekly update 7th to 14th May**

1. **Government agencies**: MPI confirms discovery of invasive weed great willowherb in Canterbury; WTO Notifications; Agricultural production statistics: June 2017
2. **New Zealand News** Restoring New Zealand’s Foreign; Budget strengthens trade effort; Auckland Fresh Produce Recall Workshop; Record numbers would-be investors for NZ MMJ company ; Shortage of seasonal labour declared for BOP kiwifruit industry; Zespri moving closer to Chinese based production; Northport to make debut on Kiwi Express schedule; Lid is off Whakatu’s new $30m ‘black box’ apple juice drink factory; Tauranga startup signs global deal for robotic apple packers; Scales to sell cold storage unit to US-based Emergent Cold; Drought will bring more crop disease, New Zealand scientists warn; Govt breaching industry agreement — Guy; Tasmania: Government adds $20 million to fruit fly eradication program
3. **International news:** UK: Blockchain and global food production; China Quarantine Authority Orders Stepped-Up Inspections of US Fruit; USA: E.coli outbreak linked to romaine lettuce turns deadly; American E.coli outbreak highlights problem of traceability; Nordic and Mediterranean countries can make more of healthy cuisine

***Editors Comments***

*This week’s update has a number of articles that build on news items that have been in the media for some time . The seasonal labour problem is being addressed by the government allowing back packers to work and looking at lifting the amount of a benefit the unemployed can retain while working in a temporary job . Nicki Johnson however has rightly identified that providing full time work is what needed long term is. The article on Robotics plus is another part solution to this problem.*

*Also in the New Zealand section is an interesting article on Zespri’s plans for China. The first half of the article is a summary from an article in Fresh plaza and the second half from the China Fresh fruit and produce web site. The two give a complementary overview of Zespri’s efforts to use Chinese produced kiwifruit to complement New Zealand production while still retaining a difference between the products derived from the two countries.*

*In the International section there is a very good article on Blockchain and then an interesting article on the delays American produce are being subjected to at the Chinese border . It just shows how important a good bilateral relationship is. This is followed by a couple of articles about the E coli outbreak. It is over 2 months since the problem started . There has been one death only 121 people sick in the USA and internationally. And the cause of the outbreak has been identified to Romaine lettuce from one county but on which properties and as a consequence of which activities is unknown. This outbreak really shows the impact of powerful diagnostic tools that can identify the type of bacteria and link illness to a common cause so that a food poisoning event can be recognised. Unfortunately tracking systems are not as well developed and authorities have been unable to link produce sold in the shop with the contamination of a crop at some point in the past. Food safety is of increasing concern for consumers and yet another incident is a timely reminder of the importance of preventing the contamination in the first place.*

1. **Agency news**



* 1. **MPI confirms discovery of invasive weed great willowherb in Canterbury**

Biosecurity New Zealand (MPI) last week confirmed that the invasive weed, great willowherb (Epilobium hirsutum), has been found in 5 sites in Canterbury.

Great willowherb is characterised by its aggressive growth, and there is concern it may crowd out native wetland plants.  It can form dense stands, impeding water flow in waterways and wetlands. It may also spread to undisturbed damp areas and invade existing vegetation. At present there is no risk to freshwater fish or agriculture. MPI reports that once the extent of the incursion is understood, officials will be in a better position to determine what response actions can be carried out.

At this time of year, most of the flowers will be gone, and the plant will be partially covered in seed. Great willowherb reproduces by wind-dispersed seeds and spreads by its thick rhizomes (underground stems).  It tends to spread most rapidly in early autumn. The rhizomes can grow submerged in water or water-saturated soils, but can also spread into meadows and other upland areas.  [The original article includes greater details and has photographs of the plant. Full article available here](https://www.mpi.govt.nz/news-and-resources/media-releases/mpi-confirms-discovery-of-invasive-weed-great-willowherb-in-canterbury/)

* 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 include:

* Taiwan Draft Standards for Pesticide Residue Limits in Food
* United Arab emirates - This Ministerial Decree sets out the phytosanitary requirements governing the importation into the United Arab Emirates of Spodoptera frugiperda ( fell web worm) hosts originating in and coming from infected countries.
* USA MRL’s

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

* 1. **Agricultural production statistics: June 2017**

Stats NZ has just released the final 2017 Agricultural( horticultural) production statistics which contains results for key livestock, forestry, and arable crops from the Agricultural Production Census. [Agricultural production statistics: June 2017 (final)](https://www.stats.govt.nz/assets/Uploads/Agricultural-production-statistics/Agricultural-production-statistics-June-2017-final/Download-data/agricultural-production-statistics-jun17-final-tables.xlsx)

#### It identifies that

* The overall planted area for kiwifruit increased to 11,700 hectares in 2017, a 7 percent increase from 2014. While the total canopy area of kiwifruit increased, the area in green kiwifruit dropped 4 percent in the same period.
* The ratio of green to gold continued to change. In 2007, 80 percent of the planted area in the Bay of Plenty region (which accounts for 77 percent of all kiwifruit planting) was for green kiwifruit. This proportion decreased to 62 percent in 2017.
* The planted area for both apples and avocados increased 2 percent between 2014 and 2017.
* At 42,000 hectares, the total area harvested for herbage and vegetable seeds reached its highest point since 2007.



1. **New Zealand News**



* 1. **Restoring New Zealand’s Foreign Service**

In a pre-Budget speech at Parliament, Mr Peters last week announced that MFAT will receive an operational expenditure increase of $150.4 million over the next four years, and an additional $40.3 million in capital expenditure. Funding will allow for an additional 50 foreign policy positions and the reopening of an embassy in Stockholm, Sweden.  “A key objective of the increase is to rebuild the resources the Ministry needs to ensure it can adequately engage with the world and advance our interests at a critical time,” he said. MFAT currently has 248 staff posted offshore spread over 58 posts, and 672 staff based in New Zealand. [Full article available here](https://www.beehive.govt.nz/release/first-steps-%E2%80%93-restoring-new-zealand%E2%80%99s-foreign-service)

* 1. **Budget strengthens trade effort**

Our ability to negotiate the best trade deals in the interests of all New Zealanders will be strengthened by a significant funding boost for the Ministry of Foreign Affairs and Trade, Trade and Export Growth Minister David Parker said. A rise in protectionist sentiment around the world and recent talk of trade wars make it more important than ever that New Zealand’s independent voice is heard and its diplomatic and negotiating presence is enhanced. “It will also mean more resources to help us uphold existing rules in the WTO and work directly with our free trade partners.”

The Government has an extensive negotiating agenda which requires more resources to deliver the best results for New Zealanders. That includes the Regional Comprehensive Economic Partnership, involving 16 countries with a total GDP of US $23 trillion, the Pacific Alliance trade bloc of Mexico, Peru, Chile and Colombia and making the case for a deal with the Mercosur free trade grouping of Brazil, Argentina, Paraguay and Uruguay. It is also hoped negotiations will start soon with the EU, which is our top trade priority. [Full article available here](https://www.beehive.govt.nz/release/budget-strengthens-trade-effort)

**General**

* 1. **Auckland Fresh Produce Recall Workshop**

This workshop will be held in Auckland 9 to 12 on the 1st June. The workshop will focus on understanding recall roles and responsibilities, costs and traceability - for the fresh produce industry. Cost $165 [Register here](https://www.eventbrite.com.au/e/auckland-fresh-produce-recall-workshop-tickets-45794845616?aff=mcivte)

* 1. **Record numbers would-be investors for NZ MMJ company**

Waiapu Investments has reached its $2 million public investment target for Hikurangi Cannabis Company. Based in Ruatorea, Hikurangi Cannabis aims to be the first producer of pharmaceutical grade cannabis in New Zealand, the first to conduct a clinical trial of a New Zealand made medical cannabis product and the first to export medical cannabis products from New Zealand.

The money raised by WIL through this equity crowdfunding campaign will be invested into Hikurangi Cannabis in order for the company to build a pharmaceuticals processing facility and plant growing operations in Ruatorea and to carry out phase one clinical trials for a New Zealand made medical cannabis product. [Full article available here](http://www.hortidaily.com/article/43145/Record-numbers-would-be-investors-for-NZ-MMJ-company)

**Industry news**

* 1. **Shortage of seasonal labour declared for BOP kiwifruit industry**

New Zealand Kiwifruit Growers Incorporated (NZKGI) supports the Ministry of Social Development’s (MSD) declaration of a labour shortage (for the period 7 May until 8 June 2018) for the kiwifruit industry in the Bay of Plenty. NZKGI estimates that there are 1,200 vacancies currently available for picking and packing kiwifruit in the Bay of Plenty”.   
  
Between January and April 2018, MSD has placed 1,032 job seekers into the kiwifruit industry but have been unable to fill all positions. The declaration of a seasonal labour shortage allows overseas visitors, who already hold visitor visas, to apply to vary the conditions of their visas for working in kiwifruit in the Bay of Plenty. [Full article available here](http://www.freshplaza.com/article/194170/Shortage-of-seasonal-labour-declared-for-BOP-kiwifruit-industry)

The harvesting work of the kiwi fruit is physically demanding, with a minimum salary of A $16.50 per hour (10.38 euro). It also requires workers to temporarily move from place of residence, which makes this employment option not too attractive for many New Zealanders, including those who live on social benefits. There are 6,000 people unemployed in the Bay of Plenty region while the kiwi sector needs to immediately incorporate 1,200 workers.

The general manager of the fruit company Apata, Stuart Weston, told Radio New Zealand that the situation was serious, and that raising wages wouldn't make a difference. "Inexplicably, people prefer to go hungry instead of working in a packing house," he said. "We are sending trucks to Murupara, Tokaroa, Whakatāne, and Rotorua, to try to attract more people who want to work," he added [Full article available here](http://www.freshplaza.com/article/194418/New-Zealand-Labour-shortages-threaten-kiwi-crops)

Social Development Minister Carmel Sepuloni said in a pre-Budget announcement that government was committed to lifting the abatement rates for kiwifruit-picking workers within the next three years.  
Abatement rates are the amounts cut from a person's benefit because of income that they receive.

However, NZKGI told Morning Report the biggest obstacle to fruit-picking employment was the seasonal nature of the work and not the financial aspect. "What we're asking people to do is come in for a short period of time and work really intensively and then to go back to whatever they were doing before and that makes it difficult to attract people who want full-time jobs," Ms Johnson said.  
  
"The pay rates we are paying this season, for picking in particular, are actually sitting at around $21 an hour and that is a reflection of both the need for us to attract workers and to a certain extent the inconsistency that can appear in the work when it's raining." "Our ultimate aim is to have New Zealanders working as much as possible in 12 months' work, where we can pull together seasonal work and activity across, say, 48 weeks of the year, that's the ideal situation for locals."  
  
Manawatu grower Russell Bowen, who harvests pumpkins and garlic near Bulls, said wages were an issue as he struggled to find labourers and paid at least $20 an hour to get more fruit-pickers.  
Growers who were paying the minimum wage only sought to maximise their margin while the industry suffered, despite the fact they could afford to pay more, Mr Bowen said. [Full article available here](https://www.radionz.co.nz/news/national/356954/labour-shortage-prompts-govt-to-rethink-abatement-rates)

* 1. **Zespri moving closer to Chinese based production**

Zespri says growing a commercial kiwifruit crop in China is a step closer, with pleasing results from an ongoing trial into producing fruit in the country. The trial is now in its third year, with the company's Corporate Affairs Manager in China, Ivan Kinsella, saying it will open the door for increased production volume, and a wider supply window.  
  
"At this stage it's all imported," he said. "During the New Zealand off season we also have Zespri fruit coming in from Italy, which has been steady at around 1.5million trays a year. What we have been doing over the past three years, is a trial to see whether we can source premium quality kiwifruit in China that meets Zespri’s requirements. The company is now doing final work surrounding the acceptability of Chinese-grown Zespri fruit to consumers. If that is successful Zespri expects to make decisions on suitable partners and move ahead with the plan by next year.

China accounts for well over half the world's commercial kiwifruit production, with a number of local green, gold and red varieties, but Mr Kinsella added that Zespri's main competition comes from other fruit varieties. "By the time our first fruit comes on the market in March, the only other southern hemisphere kiwifruit that's available is from Chile," he said. "Compared to New Zealand sales there are not a lot of volume coming out of Chile at this time, particularly gold kiwifruit, and as we go through the season, the main competitor is local Chinese summer fruits which come online July-August time."

[Full article available here](http://www.freshplaza.com/article/194232/NZ-Zespri-moving-closer-to-Chinese-based-production)

And from an article in the China fresh fruit and produce news website "Think big, start small, scale quickly," says Zespri external relations manager Nick Kirton in explaining his company's philosophy about bringing locally sourced red and green Zespri brand kiwifruit to market in China.

"Think big" describes a long-term goal of Zespri, the world's largest kiwifruit supplier, to use Chinese-grown fruit to supply the Chinese market during the three to four months of the year when New Zealand kiwifruit is not available. " But China has a reputation as challenging environment for foreign companies to set up local fruit production. And it presents unique challenges to a business model such as Zespri's, in which the company does not own any orchards or postharvest facilities, but instead relies on strong partnerships with local farmers and industry.

"Start small" is evident in the fact that Zespri started this latest round of exploration into marketing domestic kiwifruit to Chinese consumers way back in 2015 when it signed an MOU with the government of Shaanxi province to set up trial production sites there along with a kiwifruit research and exchange centre. But Kirton will still not predict in what year domestic kiwifruit bearing the Zespri brand may actually come to market in China.

And "scale quickly" means that Zespri hopes that through a meticulous process of researching production sites and varieties, training local partners and building relationships with local industry and governments, when the time comes, all the pieces will be in place to fill off-season demand in China and grow supply at the same speed as demand.

Kirton confirmed in an interview with Produce Report that Zespri plans to use Chinese green and red varieties to source and market domestically in China. "We won't work with Hayward here in China," says Kirton. "We'll work with a couple of different varieties, and we're still working through that at the moment. There are some very good tasting Chinese varieties. What you'll find typically is they're not consistently good. And what the consumer wants is consistency. Having the Zespri brand on the fruit gives that promise."

 Zespri does not plan to trial or provide local growers in China its proprietary green Hayward, sweet green or yellow varieties. As part of the effort to identify promising local varieties and help local growing partners maintain quality and grow yield over time, Zespri has established what Kirton calls " innovation trial orchards" in Shaanxi and Sichuan provinces, two of China's two kiwifruit producing areas. These orchards will not be used to supply fruit to the market.

For potential commercial sourcing, Zespri has set up "trial production hubs" in Shaanxi and Henan provinces. Last year, Zespri conducted small-scale supply chain trials, using fruit sourced from Sichuan and Shaanxi and following it all the way from orchard to retailer. In that trial Kirton says Zespri found, "no insurmountable barriers" to bringing fruit to market that meets the company's quality standards.

This year, Zespri will use fruit from the Shaanxi and Henan trial production hubs to run more extensive trials focused more on what Kirton calls the, "commercial realities around what we're doing." This will include more consumer feedback as well as retail sales: "when we sell it, we'll be getting consumers' opinions about what they think," says Kirton. [Full article available here](http://www.producereport.com/article/zespri-conduct-commercial-trials-china-sourced-kiwifruit-2018)

* 1. **Northport to make debut on Kiwi Express schedule**

Friday last week marked Northport’s arrival on the New Zealand container port scene, when Mediterranean Shipping Company (MSC) made its first export loading on the newly-revamped Kiwi Express schedule. Coming as part of a larger service restructure, the new fortnightly call on the Singapore-Jakarta-Brisbane-Sydney-Auckland-Tauranga-Wellington-Napier-Auckland-Northport-Brisbane-Tanjung Pelepas-Singapore rotation has been predicated on fruit exports.  
  
Zespri, New Zealand’s kiwifruit industry co-operative, is a key backer of the development. Northland produces about 3.5m trays of kiwifruit each year and it has been estimated that exporting directly from Northport will potentially save NZ$66 of the NZ$102 cost per pallet of the alternative of transporting to the Port of Tauranga for despatch.

Northport’s commercial manager David Finchett hopes the service will continue beyond the current fruit export season. “Our goal is to build cargo volumes to the point where the service becomes regular instead of seasonal,” he says. “If we can demonstrate consistent demand for this shipping link from Northland importers and exporters there is no reason why this should increase to a weekly service." [Full article available here](http://www.freshplaza.com/article/194332/NZ-Northport-to-make-debut-on-Kiwi-Express-schedule)

* 1. **Lid is off Whakatu’s new $30m ‘black box’ apple juice drink factory**

A new $30 million drinks factory in Whakatu was opened and hosts newly formed apple producer , The Apple Press. The company was founded by local apple grower and businessman, Ross Beaton. The plant employs 27 people and can produce thousands of bottles of juice per hour. Mr Beaton likened it as the bottling equivalent of a BMW. He said that it was exciting and they had fabulous ingredients, world leading technology, and they were making an outstanding product that could

take on the world. He added that they used apples that were blemished ugly fruit. He noted that they cold pressed the apples to capture all of the flavour and aromas of the apple. The facility had the ability to trace apples back to the orchards they came from and the bottles were 100 percent recyclable. [Full article available here](https://www.nzherald.co.nz/small-business-sme/news/article.cfm?c_id=85&objectid=12042950)

* 1. **Tauranga startup signs global deal for robotic apple packers**

New Zealand agricultural robotics and automation company Robotics Plus, last week announced it has signed an agency and distribution agreement with GlobalPac Technologies which will see the company’s robotic apple packers go global. The deal, which will initially target the US, Australian and New Zealand markets, is fuelling a period of accelerated growth for Robotics Plus as industry demand for its innovation grows.   
  
GlobalPac Technologies is a joint venture between United States company Van Doren Sales and New Zealand-owned Jenkins Group. Robotics Plus CEO Steve Saunders says between the two companies, Van Doren and Jenkins have a presence in almost every packhouse in New Zealand, Australia and the US.  
  
“Labour shortages are a major and growing concern in New Zealand and many other food producing countries. We see Robotics Plus and their packing technology as game-changing for the industry. It is a very exciting time to be involved in helping to affect this positive change.” The Robotics Plus apple packer identifies and places apples in their trays, and has the ability to safely handle up to 120 fruit per minute which is the equivalent of two people.   
  
The robotic apple packing technology was originally developed by Massey University graduates, Dr Alistair Scarfe and Kyle Peterson. Saunders saw the technology early on and agreed to provide investment that would lead to them to building their first commercial prototypes in 2016. Robotics Plus chief technical officer Dr Alistair Scarfe says Robotics Plus carried out our first commercial trials of the packer last season and was delighted with the results. The packers are the first of a suite of horticulture automation technologies in development by Robotics Plus, who recently secured investment from Yamaha Motor Co. (Japan). [Full article available here](http://www.freshplaza.com/article/194384/Tauranga-startup-signs-global-deal-for-robotic-apple-packers)

* 1. **Scales to sell cold storage unit to US-based Emergent Cold**

Scales Corp will sell its cold storage businesses to newly-incorporated US cold chain company Emergent Cold for $151.4 million as it shifts to a greater focus on pure agribusiness.  
  
"We have identified our strengths as (1) operating fully-vertically integrated agriculture businesses, (2) participating in businesses with an export focus, and (3) adding value through connections to the China market," said Chairman Tim Goodacre in a statement to the NZX. "In addition to being less aligned with our core strengths, the returns (measured as return on capital employed) from our storage activities are also lower relative to our other business divisions and broader opportunities available to the group," he said.  
  
The deal is subject to approval by the Overseas Investment Office. Goodacre said there are no plans to return to capital to shareholders but "the proceeds are intended to be used to pursue other attractive opportunities in New Zealand agribusiness, both currently and in the future." In April, chief executive Andy Borland told BusinessDesk that Scales is eyeing potential agribusiness acquisitions that would be complementary to its apple business.  
  
The cold storage businesses include Polarcold Stores Ltd and Whakatu Coldstores Ltd, which were merged on January 1 under the Polarcold brand. [Full article available here](http://www.freshplaza.com/article/194386/NZ-Scales-to-sell-cold-storage-unit-to-US-based-Emergent-Cold)

**Other**

* 1. **Drought will bring more crop disease, New Zealand scientists warn**

New Zealand’s land-based primary industries need to get ready for more, and more serious, crop disease as climate change causes more and longer droughts, according to new research. The probable negative effects of drought include “…a predisposition of hosts to infection through general weakening and/or suppressed disease resistance”. More frequent and more severe droughts could also lead to “emergence of enhanced or new diseases of plants that can reduce primary production”.  
  
But the news is not all bad. “Drought may reduce the severity of some diseases, such as Sclerotina rot of kiwifruit and red needle cast (RNC) of radiata pine,” they said. And in some cases it could “activate systemic defence mechanisms resulting in increased resistance to infection”.  
  
Lead author Dr Steve Wakelin, of the Bio-Protection Research Centre, said it was essential that more research was carried out so each industry could prepare for the effects of drought. “Many industries, such as agriculture and horticulture, may have time to gradually change over the next 20 or 30 years, to avoid the worst effects of drought or even take advantage of any opportunities the changing climate may bring. “It’s essential that primary industries with a long production cycle start assessing and addressing the risks and opportunities a much drier climate will bring. “Full

**Biosecurity**

* 1. **Govt breaching industry agreement — Guy**

Opposition agriculture spokesman Nathan Guy says it is chilling that the Government will force the cattle industry outside of an agreed mandate to pay to eradicate M. bovis. “In 2013 the National Government established the Government Industry Agreement (GIA) to set out a framework for cost-sharing between the Government of the day and 16 primary sector organisations as and when bio-security incursions arise,” says Guy.

 “That framework sets out that the industry should meet about 12% of the cost to eradicate this disease.  “However, Damien O’Connor has confirmed publicly today that he wants the industry to stump up 40% to 50% of a bill that’s estimated to cost between $500 million and $870 million.

 “The Minister justified this in a radio interview by effectively saying that the agriculture industry earns a lot of money and can afford it.”  “That Damien O’Connor is forcing farmers outside of an agreed mandate to pay for an incursion that the Government can easily cover – while they have to destroy their cattle herds and the banks are knocking on their doors – is disgraceful,” Guy says. [Full article available here](https://www.ruralnewsgroup.co.nz/rural-news/rural-general-news/govt-breaching-industry-agreement-guy?utm_source=Rural+News+Group+Weekly+E-Newsletter&utm_campaign=9bcff07880-Rural_News_Group_Bulletin_16_January_2018&utm_medium=email&utm_term=0_fb79f8bfe8-9bcff07880-59798541&ct=t(Rural_News_Group_Bulletin_16_January_2018))

* 1. **Tasmania: Government adds $20 million to fruit fly eradication program**

The federal government has announced it will spend $20 million on the war against fruit flies in Tasmania. Some, however, fear the money has come too late and will not be spent on the frontline workers needed to detect the pest. A fruit fly incursion was recorded in the state's north in January. The pest's larvae was detected at three sites on Flinders Island and a site near Spreyton in the state's northwest, and a fruit fly was also found at George Town. In response, biosecurity officers set up control zones at George Town and Spreyton. Fruit growers in those areas have been cut off from markets as they wait for the all clear.

The money will be spent on: increased inspection services; growers assistance package -on top of $2 million already committed and Sterile fruit flies [Full article available here](http://www.freshplaza.com/article/194191/Tasmania-Government-adds-20-million-to-fruit-fly-eradication-program)



1. **International news**

**Business**

* 1. **UK: Blockchain and global food production**

This article provides a good definition of Blockchain and identifies that the real value of blockchain is that data is shared in a secure manner providing transparency across the business process with the assurance that the data the ledger contains is indelible.  
International players in the food industry are already researching uses for blockchain technology. [Walmart is working with IBM in China](http://fortune.com/2016/10/19/walmart-ibm-blockchain-china-pork/) to develop ‘track-and-trace’ systems to trace each food item it stocks back through the supplier and distributor to the producer and enable rapid recalls.

To make this work, every individual package of produce must be uniquely identifiable. The global standards body, GS1, is leading the way in serialization efforts, offering unique codes called [GTINs](https://www.gs1uk.org/support/our-standards/standards-library/id-keys/global-trade-item-number) that can be applied to products. Then every participant in the supply chain must transfer the custody of these products to each other every step of the way so there is an unbroken record of the product’s journey.  
  
[IBM European Blockchain Marketing Leader, Bob Yelland](http://www.ibmbigdatahub.com/blog/author/bob-yelland) said: "Blockchain will transform business transactions across networks of companies, particularly across international boundaries, and open up new business models and closer co-operation within any supply chain where traceability and provenance are critical".

Blockchains won’t just be used to find out where a product has been. They can also be used to tell a consumer how it was made. Also using Internet-of-things (IoT) sensors the storage conditions of a product can be recorded. This is currently very important to consumers in countries like China where there have been frequent food scares, and a real distrust of food that has been produced in-country.  
  
Currently [consumers in China can trace an individual steak](https://www.fastcompany.com/40515999/in-china-you-can-track-your-chicken-on-you-guessed-it-the-blockchain) in a supermarket back to the farm and specific animal it came from by scanning a code and looking at the results online. And it is likely they will use a mobile phone app for in-store scanning. As health warnings have encouraged consumers to look for more information about the food they are eating, many consumers now want to know what each individual ingredient is and where it came from.  
  
There is growing consumer demand worldwide for more transparency about food production supply chains and increased verification for food marketing claims, including proof of terms like ‘organic’, ‘free range’, ‘fair trade’, or ‘locally produced’. Existing certifications and facility audit reports could soon be registered on blockchain to prove claims. If consumers know a company’s labelling is backed by a traceable blockchain that can’t be altered, this knowledge is likely to influence consumer behaviour.  
  
However, as a note of caution, a blockchain is only as good as the information in it and the ability to reliably associate a physical product with its digital record. Third-party verification of food chain information will be a growing industry in the very near future.  
  
The potential benefits of using blockchain aren’t all a one-way street for consumers. [Block Commodities](https://www.bloomberg.com/news/articles/2017-11-28/blockchain-venture-wants-to-change-african-farming-forever) and the Global Markets Exchange Group International have created a blockchain-based platform for African commodity markets. The platform helps connect farmers in sub-Saharan Africa with buyers and brokers, enabling farmers to get better prices for their crops, as well as reduced-rate loans. The goal is to democratize finance by providing farmers with up-to-date information about loan interest rates and commodities prices, which will be registered and logged on a blockchain.  
  
Dutch coffee company, Moyee Coffee, is a small start up committed to what it calls ‘Fairchain’. Using a bext360 blockchain platform, Moyee gives all stakeholders – farmers, roasters, and consumers – access to data across the entire supply chain. This provides unprecedented levels of transparency around the origin and quality of the coffee; allowing the coffee drinker to access the blockchain data to see exactly where the coffee came from and even how much the farmer was paid for the beans. [Full article available here](http://www.hortidaily.com/article/43033/UK-Blockchain-and-global-food-production)

  **China**

* 1. **China Quarantine Authority Orders Stepped-Up Inspections of US Fruit**

The Quarantine Supervision Department of China's General Administration of Customs (GACC) on Friday posted on its website advisory directing quarantine personnel to strengthen inspection and quarantine of apples and unprocessed timber arriving from the United States. According to the advisory, quarantine inspection personnel at ports in Shanghai, Shenzhen, Qingdao, Xiamen and other cities have recently intercepted shipments of apples and logs originating from the US that contained six different types fungus and insects that could pose a threat to China's forestry and agriculture industries if they gain a foothold here.

Prior to November 1, 2017, all shipments of fresh fruit arriving in China from any country were subject to on-site inspections, as well as a smaller number of shipments being subject to random laboratory testing. Then AQSIQ enacted a new set of procedures effective November 1. Under the new procedures, in normal circumstances and for fruit being imported under bilateral quarantine protocols, 30% of shipments would be subject to on-site inspection—with potential further lab testing if problems were found during the on-site inspection—and 3% subject to random lab testing.

Since the new procedures went into effect, the Quarantine Supervision Department has in some cases rolled them back in response to specific quarantine threats. For example, the on-site inspection rate for Australian fresh fruit entering China was increased back to 100% due to a fruit fly outbreak in Tasmania and Western Australia earlier this year.

Friday's advisory used the Latin names to identify three rot-causing fungi (Neofabraea perennans, Phacidiopycnis washingtonensis, and Sphaeropsis pyriputrescens) and three insects (Ips grandicollis, Curculionidae, spp., and larvae of Cerambycinae, spp.) found in shipments of US apples and logs. Fruit rotting fungi were discovered in shipments of French, Polish and US apples entering China in 2016 to 2017, also prompting an advisory from the Quarantine Supervision Department.

According to industry sources in Shanghai and Shenzhen, as far as those sources can ascertain, all shipments of US fruits entering port in those two cities are currently being subjected to on-site inspections, which typically take no more than a day. Additionally, in Shenzhen, as far as the source there has seen, all shipments of US fresh fruits are being subjected to laboratory testing. The source in Shenzhen said that in a departure from past practice, quarantine officials are holding US fresh fruits at port while the laboratory tests are completed—a process that typically takes five to seven days. Normal practice in the past for shipments chosen for random laboratory inspections has been for quarantine officials to release the shipment immediately, without waiting to see the results of the laboratory tests.

The uncertainty and risk of losses associated with the stepped-up inspections has traders on the edges of their seats. California strawberries are currently arriving and the California cherry season is just getting underway. Both fruits are more delicate than some other major US fresh fruit exports to China such as citrus and apples—and are therefore more sensitive to quarantine delays. [Full article available here](http://www.producereport.com/article/china-quarantine-authority-orders-stepped-inspections-us-fruit)

 **Food safety**

* 1. **USA: E.coli outbreak linked to romaine lettuce turns deadly**

One person has died from the E. coli outbreak linked to romaine lettuce from the Yuma, Arizona. This is the first death from this outbreak. The CDC reported 23 additional cases of illness, bringing the total number of cases to 121 since the outbreak began in March. Fifty-two individuals have been hospitalized. Health officials are continuing to investigate the source of the ongoing outbreak but still have not been able to identify a single grower, farm, manufacturer, supplier or brand. [Full article available here](http://www.freshplaza.com/article/194002/USA-E.coli-outbreak-linked-to-romaine-lettuce-turns-deadly)

* 1. **American E.coli outbreak highlights problem of traceability**

With an outbreak of E. coli hitting a major part of the US romaine lettuce supply, the challenges of tracing produce in the food chain are quickly growing more apparent. The recent E. coli outbreak involving romaine lettuce put a lot of consumers and retailers in a difficult, often confusing position.  
  
Now the industry that represents producers of romaine lettuce is ready to take away some important lessons from this episode - among them, the importance of traceability.  
  
In recent years, the United Fresh Produce Association, the Produce Marketing Association (PMA) and other groups have sponsored an initiative to improve the tracking of produce. The Produce Traceability Initiative (PTI) aims to create universal standards that the industry can use to track the spread of products. The voluntary nature of PTI, for one thing, has made it difficult to get everyone on the same page, with some growers concerned about added costs. [Full article available here](http://www.freshplaza.com/article/194259/American-E.coli-outbreak-highlights-problem-of-traceability)

  **Health**

* 1. **Nordic and Mediterranean countries can make more of healthy cuisine**

A new report from World Health Organization Europe looks into the health-promoting properties of Mediterranean and the Nordic diets, which have won acclaim for helping to prevent cardiovascular disease, cancer, type 2 diabetes and in reducing the risk of Alzheimer’s and Parkinson’s diseases.

The traditional Mediterranean diet, originating in the olive-growing areas of southern Europe, is characterized by a high intake of plant-based foods and olive oil; a moderate intake of fish and poultry; and a low intake of dairy products, red meat, processed meats and sweets. Shared eating practices, post-meal siestas and lengthy meal times are also thought to contribute to the attributed positive health effects recorded in the Mediterranean region, according to the WHO.  
  
The New Nordic diet shares many characteristics with the Mediterranean diet but comprises foods traditionally sourced in Denmark, Finland, Iceland, Norway and Sweden, like berries and fruits, fatty fish, lean fish, legumes, vegetables and whole grain cereals.  
  
The report states traditional diets, notably the Nordic and Mediterranean, can have a positive impact on health, environment and well-being," [Full article available here](http://www.freshplaza.com/article/194270/Nordic-and-Mediterranean-countries-can-make-more-of-healthy-cuisine)

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