

**PMAC weekly update 20th to 28th April**

1. **Government agencies**: ICPR Changes WTO Notifications
2. **New Zealand News:** Adapt quickly; An opportunity to tell the real story of NZ food; Zespri kicks of new kiwifruit season early in Europe; Kiwifruit labour proves patchy; Veg growers to work on emissions; Twice as many apples per hectare over traditional methods; Waikato's Matangi Berry Farm and director fined $120k; NZ’s top young Māori growers; Pesticide usage in New Zealand below Compliance Safety Guidance; Tasmania remains fruit fly free; Deadly olive tree disease across Europe 'could cost billions
3. **International news**: GAIN reports; China’s exports to accelerate; Pesticide residues in food: track trends with browsable charts; Freshcare's Quality Standard opening up global opportunities for growers after benchmarking; AUSVEG welcomes McDonald’s CoOL commitment; Don't waste any time protecting your IP rights in the international market; The Power of Branding; The use of ozone against Covid-19 in the sanitation field; India: a market on the move; Listeria in frozen vegetables: how to reduce risks; UK: What do the budget announcements mean for growers?; Ugandan flower farms and schools join forces to tackle HIV/AIDS; Robots weeding organic farms and patrolling for greenhouse pests; Environmental impact of edible flower production: A case study; Organic fruits grown in the EU: Spain and Italy at the top; New coating prevents bacterial cross-contamination in fresh produce

**Comment**

*Apologies for the late delivery of the update this week , A trip to the dentist derailed completion of the update .*

*A surprisingly lot of articles this week That I’ll let you explore on your own. Happy reading.*

1. **Agency news**



* 1. **ICPR changes**

The ICPR for French Polynesia has been updated with

* The addition of the word 'or' between phytosanitary certificate and treatment requirements for Potato (Solanum tuberosum) in section 4.1. and the requirement to add *'Synchitrium endobioticum'* to the additional declaration
* MPI strongly suggests referring to the ICPR. See in [Importing Countries Phytosanitary Requirements (ICPRs)](https://www.mpi.govt.nz/law-and-policy/requirements/icpr-importing-countries-phytosanitary-requirements/?utm_source=notification-email)
  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:

* Philippines will accept scanned copies of important documents (e.g. Phytosanitary Certificates, Treatment Certificates, and Health Certificates etc.,) given however, that an official notification from the exporting country will be provided to BPI. Scanned/PDF copies may be sent to this email address: [pqsbpi@yahoo.com](mailto:pqsbpi@yahoo.com).
* Taiwan Temporary alternative arrangements to the presentation of original veterinary or phytosanitary certificates

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

The TBT notification over the last week there has been the following announcements . Click on the adjacent link for full details:

* Eu Non renewal of mancozeb see [EN](https://agriculture.us12.list-manage.com/track/click?u=d7af3f807e82c63a8f495e991&id=afbf09e67a&e=dc41ca1864)
* EU non renewal of bromoxynil [EN](https://agriculture.us12.list-manage.com/track/click?u=d7af3f807e82c63a8f495e991&id=67d4455266&e=dc41ca1864)



1. **New Zealand News**

** Commentary**

* 1. **Adapt quickly**

KPMG’s Global Head of Agribusiness Ian Proudfoot has reported that traceable, trusted food will become increasingly important after lockdown. Mr Proudfoot reported that it is imperative that food producers adapt quickly to consumer behaviour changes. Mr Proudfoot partook in an AgriTech webinar, speaking on how food availability will no longer be taken for granted after empty shelves around the world, and how many citizens have been required to learn how to cook due to food service outlets being closed. As a result, Mr Proudfoot reports that governments globally will focus on increasing local production to feed their people and to provide food security.

On top of this global freight paths are changing and will need to be reinvented, which will require an outlay of costs. Mr Proudfoot stated that there is a need for the Government to invest in telling the NZ food story to overseas markets. Direct-to -consumer supply channels have been encouraged due to social isolation accelerating the use of digital solutions. Mr Proudfoot also commented on how non-essential food businesses may face challenges when reopening and a lot will depend on established relationships and experiences, with the need to creatively use digital platforms to draw customers in. [Full article available here](https://farmersweekly.co.nz/section/agribusiness/view/adapt-quickly)

* 1. **An opportunity to tell the real story of NZ food**

Agriculture minister Damien O’Connor believes the Covid situation is an opportunity for farmers – and others in the sector – to sell the story of how NZ produces our quality food. He believes this is an opportunity for farmers – and others in the sector – to sell the story of how we produce our quality food. [Full article available here](https://www.ruralnewsgroup.co.nz/rural-news/rural-general-news/an-opportunity-to-tell-the-real-story-of-nz-food)



* 1. **Zespri kicks of new kiwifruit season early in Europe**

Zespri will have an early kick-off to the new New Zealand season as the first vessel, the Crown Topaz, carrying just over 1.253 mio trays of SunGold Kiwifruit, reached Zeebrugge last Sunday. Green kiwifruit will follow in week 20.

"This season Europe will be supplied with around 55 mio trays of our premium Zespri kiwifruit across Europe. Our latest estimates show a supply of 20 mio trays of SunGold, and around 35 mio trays of Green this year." "In the coming months, 25 vessels will arrive in Zeebrugge on a weekly basis. The first three vessels will be reefers and the next 22 container ships.

It will be a special season with a completely new packhouse in Zeebrugge. There have been some delays due to COVID-19, but we still have the infrastructure from last year to start the season and we are planning to be fully operational in the new packhouse by mid-May. [Full article available here](https://www.freshplaza.com/article/9209661/zespri-kicks-of-new-kiwifruit-season-early-in-europe/)

* 1. **Kiwifruit labour proves patchy**

*This article has information from a range of Kiwifruit packhouses and companies . Their sentiments are best summed up in the following.*

Kiwifruit Growers chief executive Nikki Johnson confirmed there are still several hundred vacancies in the industry but efforts are in play to contact people who registered interest in working. The shortages experienced are often on specific sites, rather than generally.

Johnson confirmed churn rate is a problem this year, possibly because first-time workers are grappling with the physicality of the job and the longer shifts. Overall, however, she is optimistic the industry will manage through the busy two-week peak period and can then focus on how to fill winter pruning positions.  [Full article available here](https://farmersweekly.co.nz/section/horticulture/view/kiwifruit-labour-proves-patchy)

* 1. **Veg growers to work on emissions**

Potatoes New Zealand is seeking funding from the Ministry for Primary Industries for a nationwide project to transition crop production to more sustainable land management. The multi-stream project is designed to protect industries’ ability to grow, process and export products while meeting environmental standards and maintaining international competitiveness.

In February Potatoes NZ adopted a new strategic objective of zero net emissions by 2050.

It is now one of three central objectives for the sector including doubling export value by 2025 and increasing domestic value by 50% by 2025.In September PNZ launched the Emissions Taskforce, underpinned by a multi-workstream project knows as the Emissions Project PNZ 79.

Earlier this year the project expanded and became the Sustainable Vegetable Systems Project (SVS) to reflect its relevance to the whole vegetable sector. It included the expansion of industry stakeholders to include leafy greens, onions and brassicas and adjusted the focus of some workstreams with the goal of eventually extending the tools and outcomes to all in the vegetable sector. With Onions NZ, Vegetables NZ and Horticulture NZ on board with a funding contribution, PNZ is in the process of seeking for MPI Productive Sustainable Landuse Funding.

The project data will inform industry and MPI on practices and help develop new system strategies and tools to manage leaching. The project will analyse nitrate uptake and nutrient leaching, investigate nutrient modelling and validate Overseer predictions for potato and vegetable crops.

“This will result in a suite of tools to help growers implement good management practice and provide leaching assessments to regulators.

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It might also involve adapting existing tools, such as Overseer. Carroll said Overseer is not informed by empirical data specific to NZ vegetable crops, growing conditions and management practices used by growers of potatoes, onions, brassicas and other field crops. This lack of data limits the ability to reliably use Overseer in these systems and in turn affects the trust that growers and regulators alike can have that farm practices are environmentally and economically sustainable.”

The outcome of this project will be a greater understanding of nitrate and nutrient management and an informed means of measuring environmental impact based on sound scientific data.

Carroll said the potato industry has a strategic goal of doubling exports from $130m to $250m by 2025. To do this we need to have a social and regulatory licence to increase the area planted by 30%. The industry’s expansion is driven by the increased export of frozen French fries, a value-added market where NZ is the ninth largest exporter globally and is growing in emerging economies and regions such as southeast Asia. To meet the market growth farmers need access to another 2500 hectares of growing land and need to increase productivity. [Full article available here](https://farmersweekly.co.nz/section/horticulture/view/veg-growers-to-work-on-emissions)

* 1. **Twice as many apples per hectare over traditional methods**

New Zealand apple orchards are getting a makeover, thanks to Hawke's Bay Plant and Food scientists.  They have developed systems that grow up to twice as many apples per hectare over traditional methods. The secret is to design orchards that capture more sunlight through closer rows of trees that don't cast as much shade on themselves.

Typically very good orchards in our country are producing between 80 and 100 tonnes per hectare.”

"The project is in its seventh year. When our trees are fully mature we are hoping – and our date is projecting - that we will be somewhere in that range between 160 and 200 tonnes per hectare."

Two-dimensional trees have been around for several years but the trial's tree shape has brought further gains in addition to closer rows. [Full article available here](https://www.freshplaza.com/article/9210437/new-zealand-apple-orchards-to-take-a-big-leap-forward/)

* 1. **Waikato's Matangi Berry Farm and director fined $120k**

In a recent sentencing decision, a Waikato berry farm and its director have been fined $120,000 for multiple employment breaches relating to more than 200 migrant workers. Part of the fine, imposed on Matangi Berry Farm and its owner Jiubo Jiang by the Employment Court, will be paid to the affected employees. The penalties are in addition to $45,000 paid back last year after mediation before the Employment Relations Authority.

Matangi Berry Farm's offending related to holiday pay and minimum wage breaches, failure to keep accurate records and not providing and retaining employment agreements. Although the losses to individual staff were not significant – about $200 each for 207 employees – the company had received a 12 per cent commission for contracting them out to a local blueberry orchard, the Labour inspector said. Judge Bruce Corkill ordered Matangi Berry farm to pay $86,400 and Jiang to pay $40,800, with each of the employees receiving $200 and the balance to be paid to the Crown. The penalties would be paid in four equal quarterly instalments beginning on September 1.

[Full article available here](https://www.freshplaza.com/article/9210067/new-zealand-waikato-s-matangi-berry-farm-and-director-fined-120k/)

** Bits and pieces**

* 1. **NZ’s top young Māori growers**

The finalists in the inaugural Ahuwhenua Young Māori Grower Award have just been announced.

The finalists are:

• Twenty-four-year-old Brandon Darny Paora Ngamoki Cross, 24, works as trainee orchard manager for the large kiwifruit orchard management and post-harvest company Seeka.

• Maatutaera Tipoki Akonga, who is 26, works as a senior leading hand at Llewellyn Horticulture based in the Hastings area.

• Finnisha Nicola Letitia Tuhiwai, 25 who is a packhouse manager for Maungatapere Berries, located west of Whangarei.

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Long-time judge, Aaron Hunt, of Te Tumu Paeroa, speaking on behalf of the judging panel, says the standard of entrants in the inaugural competition for horticulture was very high and also reflects the number of young Māori who are making successful careers in horticulture. Sadly, due to current COVID-19 restrictions, it will not be possible to complete the finalist judging process and determine a winner for 2020 for a little while yet. [Full article available here](https://www.ruralnewsgroup.co.nz/hort-news/hort-general-news/nz-s-top-young-maori-growers?utm_source=Rural+News+Group+Weekly+E-Newsletter&utm_campaign=8b561822a9-RNG_21_APRIL_2020&utm_medium=email&utm_term=0_fb79f8bfe8-8b561822a9-59798541&ct=t(RNG_21_APRIL)

* 1. **Pesticide usage in New Zealand below Compliance Safety Guidance**

A survey released last week confirms that the Kiwi diet is safe and that any pesticide residues on food are extremely low, far below recommended safety levels. The Ministry for Primary Industries released results of the Food Residues Survey Programme which tests for residues in plant-based foods. The survey collected 591 fruit and vegetable samples over two years and shows compliance of greater than 99.9%. The survey tests residues from commonly used agrichemicals: insecticides, fungicides, and herbicides.

The samples were collected and analysed for more than 500 agrichemicals and their metabolites. Food safety risk assessments did not find any risk from dietary exposure. A total of 49 out of 311,469 results reported exceeded the relevant Maximum Residue Levels (MRLs) for the samples collected from 1 July 2017 to 30 June 2019. A number of these cases were due to the grower not understanding revised MRLs or using products off label. Agcarm recommends that growers regularly review MRLs and label changes. Minor crop producers have the challenge of finding the appropriate application rates and withholding period that will ensure compliance with the default New Zealand MRL of 0.1 mg per kg. The Food Residues Survey Programme Final Report can be found [on the MPI website](https://www.mpi.govt.nz/dmsdocument/40274-2017-2019-plant-based-foods-survey-final-report). [Full article available here](https://www.freshplaza.com/article/9210445/pesticide-usage-in-new-zealand-below-compliance-safety-guidance/)

 Biosecurity

* 1. **Tasmania remains fruit fly free**

Fruit Growers Tasmania has welcomed news that Tasmania’s fruit fly free status has been upheld.

Biosecurity Tasmania staff completed nine weeks of intensive surveillance, deploying additional traps in the community and inspecting fruit trees on surrounding properties after a single male fruit fly was detected in East Launceston in February. No further fruit flies were found. [Full article available here](https://www.freshplaza.com/article/9210579/tasmania-remains-fruit-fly-free/)

* 1. **Deadly olive tree disease across Europe 'could cost billions**

New research which developed an economic model show that *Xylella fastidiosa* disease could cost olive oil producing regions billions of euros and increase the cost of olive oil for consumers. The disease is spread by insects and has already killed large numbers of trees in Italy, after being first discovered in 2013. Crop yields have declined by 60 percent since it was first discovered. The researchers report that in a worst-case scenario in Italy costs could reach €5.2 billion (approx. NZD$9.3 billion).

The disease can also infect cherry, almond and plum trees and works by limiting the trees ability to move water and nutrients. The *Xylella bacterium* has also been found in Spain, France and Portugal. The researchers reported that further research is needed in cultivar resistance traits, as well as vector control and inoculum suppression to limit the disease’s spread. [Full article available here](https://www.standard.co.uk/news/world/europe-olive-trees-disease-spittlebugs-a4413686.html)



1. **International news**

**Comment**

**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. To see the full report go to the Gain web site (<https://gain.fas.usda.gov/>) and search for the country and any reports released in the last month. This week see:

1. ***Australian Government Provides Logistical Support to Exporters*** - the Government of Australia announced an AU$110 million program to help exporters get their products to international markets.
2. ***Czech Government Announced a Plan for Relaxing of Restrictive Measures*** to reopen slowly after the Covid 19 shutdown
3. ***Egypt's National Food Safety Authority Issues Risk Analysis for Food Regulations*** The resolution regulates the application of the principles of risk analysis and the determination of the control activities on foods based on their degree of risk.
4. ***Japan Provides Food Labeling Flexibility in Response to COVID-19*** Japan’s Consumer Affairs Agency will temporarily suspend the strict monitoring of non-critical food labeling information in response to COVID-19 related supply chain disruptions. For imported products, Japanese importers bear the sole responsibility for compliance with Japan’s Food Labeling Act.
5. ***Japan MAFF 2020 Supplementary Budget for COVID-19 Response*** MAFF is expected to receive a 545 billion yen ($5 billion) supplementary budget. Over 35 percent of MAFF's budget will be allocated for spending to support the food service and related industries
6. ***Kenya Exporter Guide*** Kenya’s imports of consumer-oriented food products grew at an average annual rate of 13 percent between calendar years 2014 and 2018.
7. ***Netherlands COVID-19 and its Impact on Dutch Agriculture***
8. ***Impact of COVID 19 on the Dutch Potato Industry*** Due to the temporary closure of restaurants and fast food chains worldwide, Dutch producers of potatoes and products are faced with full warehouses
9. ***Norway Extends Support to Businesses During the COVID-19 Crises***

 Business/ Industry

* 1. **China’s exports to accelerate**

A new report suggests the upgrading of Chinese agriculture will see the sector’s exports consistently grow in the next decade According to a report from Independent Online, The China Agricultural Outlook (2020-2029) released at the China Agricultural Outlook Conference 2020 on 20 April forecasts growth in the import and export of fruit and vegetables.

The report predicts the development of China’s agriculture, particularly a shift from increasing production to improving yield and quality, with a focus on green, ecological, high-quality and safe products. This is set to result in the average annual growth rate for exports over the next ten years of 5.9 per cent for fruits and 3.2 per cent for vegetables.

The report also notes the role China's partnerships will play in increasing trade. It sugguests China’s relationships with the United States, Brazil, Asean, the European Union, Australia and countries participating in the Belt and Road initiative will pay dividends. [Full article available here](http://www.fruitnet.com/asiafruit/article/181561/chinas-exports-to-accelerate)

* 1. **Pesticide residues in food: track trends with browsable charts**

EFSA has published its annual report on pesticide residues found in food in the European Union. The report is based on data from the official national control activities carried out by EU Member States, Iceland and Norway and includes both targeted and random sampling. A total of 91,015 samples were analysed in 2018, 95.5% of which fell within legally permitted levels. For the subset of 11,679 samples analysed as part of the EU-coordinated control programme (random collection), 98.6% of samples were within legal limits.

This year EFSA has translated the results of the coordinated programme into [browsable charts and graphs](http://www.efsa.europa.eu/en/annual-pesticides-report-2018), to make the data more accessible to non-specialists.

EFSA carried out a dietary risk assessment as part of its analysis of the results. This suggested that the food commodities analysed in 2018 are unlikely to pose a concern for consumer health. However, a number of recommendations are proposed to increase the efficiency of European control systems, thereby continuing to ensure a high level of consumer protection. [Full article available here](https://www.hortidaily.com/article/9205598/pesticide-residues-in-food-track-trends-with-browsable-charts/)

* 1. **Freshcare's Quality Standard opening up global opportunities for growers after benchmarking**

The recognition of Freshcare's Global Food Safety Initiative (GFSI) now reflects global best practice in food safety management and provides Australian growers and packers with better access to international markets, according to the team co-ordinating Australia's on-farm food safety program.

From February 2020, the fresh produce industry’s own assurance program, Freshcare’s Food Safety & Quality Standard – Edition 4.1 meets the needs of Australian producers in fulfilling both domestic and global market requirements. [Full article available here](https://www.freshplaza.com/article/9209797/freshcare-s-quality-standard-opening-up-global-opportunities-for-growers-after-benchmarking/)

* 1. **AUSVEG welcomes McDonald’s CoOL commitment**

AUSVEG, the peak industry body for Australia’s vegetable and potato growers, has welcomed McDonald’s commitment to display the country of origin of the ingredients in their products and calls on other fast food outlets to follow suit so that Australian consumers can know where their food comes from. [Full article available here](https://www.hortidaily.com/article/9210939/ausveg-welcomes-mcdonald-s-cool-commitment-urges-other-fast-food-outlets-to-follow-suit/)

* 1. **Don't waste any time protecting your IP rights in the international market**

Australian growers and producers are being encouraged to register any new Intellectual Property (IP) and trademarks as quickly as possible, before entering international markets. David Bennett, Councillor (Intellectual Property) at the Australian Embassy in Beijing, provides advice for growers entering the Chinese market, to ensure that their rights are being protected. With the most common types of protections being trademarks and plant breeders’ rights (PBR), he warns that they are private, meaning that it is up to individual businesses to enforce any breaches.

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The first step that I would emphasise is registering IP Rights, that's the minimum you should do, so you have enforceable rights you can use in the case of an infringement," Mr Bennett said. "The next level up is monitoring and enforcing; your IP is only really as good as your enforcement - if you don't enforce it, the right doesn't have any meaning. The IP owners are responsible for their own enforcement, this isn't something the government does on behalf of owners - it's an individual responsibility."

He highlighted one company who he believes has done an excellent job in protecting their fruit variety; Zespri, and the Gold3 variety, which is known for its resistance to Psa, as well as a number of key distinctive taste and appearance characteristics. Mr Bennett says they first registered PBR and licenced it to growers in New Zealand and Italy, then developed a brand SunGold. This was then protected it by registering trademarks and the company actively enforces these rights internationally to ensure the kiwifruit is considered a premium product in the markets.

*This article contains a lot of detail about IP protection and is worth reading if you are new to this area* [Full article available here](https://www.freshplaza.com/article/9210931/don-t-waste-any-time-protecting-your-ip-rights-in-the-international-market/)

* 1. **The Power of Branding**

*An outline by Dole about the importance of branding* *worth a look at if you are interested their approach to branding* “True brands have values and personalities that consumers can relate to. Consumers will always see brands like Del Monte that are true to their values and build strong bonds and preference with their target consumers. With Del Monte, consumers know they’re also getting fruits and vegetables produced in a socially and environmentally responsible manner.

The strong brand values, combined with our steadfast commitment to quality, innovation and responsible business practices, allows us to consistently exceed expectations of our trade partners.” [Full article available here](https://www.supermarketperimeter.com/articles/5010-the-power-of-branding-in-the-produce-category)

* 1. **The use of ozone against Covid-19 in the sanitation field**

The attempts made to curb the spread of Covid-19 highlight the importance of sanitation and, in particular, the role of the ozone in this field. At a time when information, suppositions and fake news are spreading, it is necessary to shed some light on real and concrete data in order to convey the right information for those working in the field at this delicate time. We discussed the topic with Daniele Simonelli of [SAIM SERVICE](https://www.saimimpianti.com/home?locale=en), specialized in post-harvest technologies and ozone sanitation.

*This article describes how ozone acts on bacteria and virus and suggests that ozone should be used to provide visrus free product and to sanitise work environments* ,  [Full article available here](https://www.freshplaza.com/article/9209586/the-use-of-ozone-against-covid-19-in-the-sanitation-field/)

* 1. **India: a market on the move**

The following information is from a Fresh Produce India Live webinar for 650 registered listeners tuning in. A session on marketing to India’s 1.3bn consumers homed in on how suppliers are approaching the country’s complex, multi-channel retail landscape.

While core import lines – such as Washington apples and Northwest pears – have long taken hold in major cities such as Mumbai and Delhi, demand from second- and third-tier cities is now starting to grow, as evident by a case study shown on Indore, a city of 2m people in west-central India.

“It’s these second- and third-tier cities that are pushing demand and volumes, as demand in the bigger cities plateaus,”

Also the varietal profile of India’s import mix was also widening. “Apples are still the backbone [of the import trade] but other products are gaining momentum. Citrus is number two, then there’s pears and kiwifruit.” While there appears to be potential to develop a foothold for small-sized fruit lines such as cherries and berries in India, a lack of cool chain infrastructure has made it difficult to establish large-scale import programmes for these short shelf-life products.

“Apples are seen as a safe bet because people know they can store. “It’s harder for products like cherries and berries because of the logistics.”

Further emphasising his point, t the transit time from Chile – a key Southern Hemisphere cherry producer – to India by sea is in excess of 40 days. Comparatively, the transit time from Chile to China – a market where Chilean cherries have developed an enviable reputation – is less than 20 days.

Even still, the Chilean cherry programmes last spring was highly successful. “The appetite for cherries in India has gone ballistic,” Despite the long transit time, the returns (for Chilean growers) are almost the same as China.”

Where Indian consumers are purchasing their fresh produce from. “Modern retail has around a 7 per cent share of the market, meaning over 90 per cent of Indian consumers still shop via traditional avenues.” While modern food retailing – centred on supermarkets and hypermarkets – may only account for a small slice of the retail pie in India the sector has come a long way in the last ten years.  In addition; there is rising interest in online retailing and improving the in-store shopping experience offered to consumers, with increasing attention being placed on store lay-outs, displays and the use of refrigerated cabinets.

One gap still to be closed, especially for imported produce, again relates to the cold chain, a lack of cool rooms in most stores. [Full article available here](http://www.fruitnet.com/asiafruit/article/181583/india-a-market-on-the-move)

 Food safety

* 1. **Listeria in frozen vegetables: how to reduce risks**

EFSA has assessed the [risks to public health from Listeria contamination](https://www.efsa.europa.eu/en/efsajournal/pub/6092) of vegetables that are blanched – scalded in hot water or steam for a short time – before they are frozen. They conclude that the risks associated with the consumption of these products is lower than for ready-to-eat foods such as smoked fish, cooked meat, sausages, pâté, soft cheese – which are usually associated with listeria contamination.

EFSA’s experts identified relevant control activities that food business operators can implement to lower the risks of contamination of frozen vegetables. These range from cleaning and disinfection of the food producing environment to water, time and temperature control at different processing steps, and accurate labelling. They stress the importance of monitoring the food producing environment for Listeria monocytogenes. This is because Listeria can persist in the food processing environment from which it can contaminate food.

EFSA also makes recommendations on how to reduce risks at home. This work was triggered by a [multi-country outbreak](https://www.efsa.europa.eu/en/press/news/180703) that affected 53 people and caused 10 deaths between 2015 and 2018.

According to the latest [European Union One Health Zoonoses Report](https://www.efsa.europa.eu/en/news/salmonella-most-common-cause-foodborne-outbreaks-european-union) from EFSA and the European Centre for Disease Prevention and Control (ECDC), the number of people affected by listeriosis in 2018 is similar to 2017 (2,549 cases reported in the EU in 2018 against 2,480 the previous year). However, the trend has gone up over the past ten years.

[Full article available here](https://www.efsa.europa.eu/en/news/listeria-frozen-vegetables-how-reduce-risks) Full article available here



* 1. **UK: What do the budget announcements mean for growers?**

On the 13 March 2020, the chancellor Rishi Sunak stood up and announced his first budget. However, it’s easy to forget this since so much has happened in the UK since then….The budget itself was a really positive one for renewable energy/green projects and users with a number of key announcements about how financial incentives and disincentives will increase uptake and supply of renewable energy whilst discouraging use of fossil fuel energies.

This article contains information about

* The Renewable Heat Incentive (RHI). It is expected this will be weighted towards large scale biomass, heat pumps and biomethane to the grid.
* There is also £270m allocated to a green heat network fund to run from 2022 – 2025. Which follows on from the Heat Network Investment Project (HNIP) currently in place and will help fund the extension of existing heat distribution systems so more people can benefit from renewable heat.
* A doubling of Energy Innovation research and development funding to £1bn .
* Limited extensions of some schemes – including the continuation of zero allowances for low carbon vehicles and an extension to Climate Change Agreements and Climate Change Levy (CCL) reduction scheme.
* On top of this, the UK government expects to apply an ambitious carbon price (probably in the region of £15 - £20/tonne) to help progress to achieve a net-zero state by 2050.
* Finally, there were some limited environmental announcements. The government intend to introduce a so-called Nature for Climate Fund, this will invest up to £640m in tree planting and peatland restoration in England and hopes to increase the rate of tree planting by up to 600% over the next five years. In addition, a Nature Recovery Network Fund will help to support and ‘restore’ existing habitats and wildlife. Finally, a Natural Environment Impact Fund will help to provide green projects that could be suitable for commercial investment – a private carbon trading scheme perhaps?!

So, in all, a good number of announcements about how the government aims to accelerate the UK as low carbon and will become a net-zero economy, which will have some immediate impact to agricultural business. [Full article available here](https://www.hortidaily.com/article/9205631/uk-what-do-the-budget-announcements-mean-for-growers/)

* 1. **Ugandan flower farms and schools join forces to tackle HIV/AIDS**

At first, it might seem like an unusual combination: twinning schools with flower farms to tackle sexual harassment and HIV/AIDS. However, the Blooming Schools and Workplaces project under the Women@Work Campaign has proven to be very effective. Currently, they have twinned 10 flower farms with 11 schools. “The basis for targeting schools and surrounding communities is a study done by Hivos. It established that once pupils in schools in the vicinity of the flower farms reached employment age, they were more likely to get employment from these flower farms,” says Ms. Agwang. Hence, tackling HIV/AIDS and sexual harassment at the workplace starts in school.

The project has so far reached more than 15,000 pupils and 6,426 flower farm workers. “As a result, we have increased management awareness and sensitivity to gender issues in the flower farms,” explains Ms. Agwang. “Furthermore, although many flower farms had policies on HIV/AIDS and sexual harassment, these issues weren’t addressed in depth. Thanks to our work, the participating flower farms have improved their own policies to address HIV/AIDS and sexual harassment at the workplace.” [Full article available here](https://www.floraldaily.com/article/9210538/ugandan-flower-farms-and-schools-join-forces-to-tackle-hiv-aids/)

* 1. **Robots weeding organic farms and patrolling for greenhouse pests**

Robots that use artificial intelligence to recognise the health of fruit and vegetable crops and when they’re ready to harvest are being trialled to help small, organic and greenhouse farmers with weeding and patrolling for pests. These robots can take on arduous tasks and help farmers save time. By spotting disease or pests early on, they can help cut down on the use of pesticides and reduce plant losses. These robots have been designed for use on smaller properties and greenhouses

The roving wheeled ‘ROMI’ has one arm for weeding small vegetable farms. Organic farmers spend about one-fifth of their time weeding, says Minchin, so developing a robot that could relieve people of this task was a key aim. To benefit small farmers, the robot had to be inexpensive and lightweight. ROMI’s developers worked to keep its costs down by fitting it with off-the-shelf electric wheelchair motors and relying on open source hardware and software for AI and navigation, for instance. Once available, it should cost €5,000 or less.

Scientists in the project use lots of imaging and mapping data with AI to identify and model plants. Dr Godin and computer scientist Dr Peter Hanappe, at the Sony Computer Science Laboratories in Paris, are working with the weeding robot in France. It has visual software that lets it capture 2D images. "Once it takes a picture it must then interpret ‘this soup of pixels’", says Dr Godin. These images are used to create 3D computer models that the robot then uses to better understand or manipulate its environment. They want to teach the robot to understand what is a leaf, a stem, a fruit and so on.

Dr Godin wants to improve the computer image analysis so that plant scientists can use the data collected by the robot to study crop varieties in growth experiments.

The robot can also be trained on the main pest and diseases of tomato and pepper, as those are the highest value crops, and is being tested in greenhouses in northern Spain. Farmers can access an online application to see the robot’s status and a map of healthy and infected zones with recommended actions. "The robot uses AI and image libraries to spot pest invaders and also harmless insects. ‘It is able to distinguish the degree of infestation and tell if it is an egg, or a larva, or full adult insect,’ said Campo-Cossío Gutiérrez. It can then send growers real-time heat map updates of insect infestations to their smartphones.  [Full article available here](https://www.hortidaily.com/article/9210497/robots-weeding-organic-farms-and-patrolling-for-greenhouse-pests/)

* 1. **Environmental impact of edible flower production: A case study**

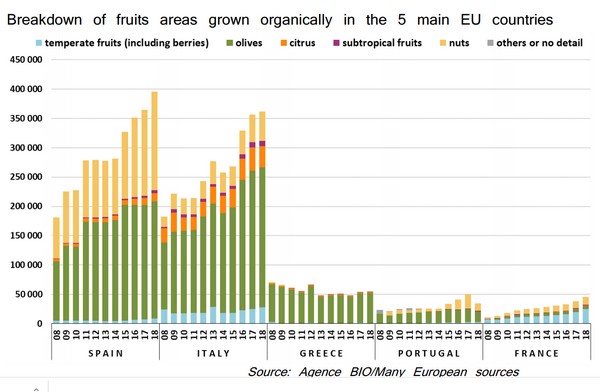
Nowadays the heightened awareness of the critical trend in resource depletion impels to improve the eco − sustainability of any productive process. The research presented in a new paper aims to quantify the environmental impact of the emerging productive process of edible flowers in Italy focusing on two model species, i.e., Begonia x semperflorens − cultorum hort and Viola cornuta L., and two types of product, i.e., flowering potted plants sold in plastic vases and packaged flowers ready to be consumed.

The most impactful phase was the propagation, accounting on average for 42% of the total emissions. Overall, the findings highlighted a higher environmental load for the production of both begonias and violas packaged flowers, especially if in small containers, rather than as potted plants, with an emission percentage increase from 8% to 17% among the impact categories.

[Access the full study at Agronomy.](https://www.mdpi.com/2073-4395/10/4/579) [Full article available here](https://www.floraldaily.com/article/9209751/environmental-impact-of-edible-flower-production-a-case-study/)

* 1. **Organic fruits grown in the EU: Spain and Italy at the top**

The EU area of fruits grown organically amounted to almost 985,500 ha in 2017 (+6% vs 2016). According to recent estimates, they exceeded 1 million ha in 2018, increasing by almost 5%. In 2018, areas dedicated to fruit represented 7.5% of EU organically grown areas.

[](https://www.freshplaza.com/web/2/article/create/#img1)  
[Click here for a larger image.](https://agfstorage.blob.core.windows.net/misc/FP_com/2020/04/23/Aorg9.jpg)

As for vegetables, the organic share varies greatly from one country to another. Austria and France stood out with 34% and 23.3% in 2018. [Click here for the comprehensive report.](https://agfstorage.blob.core.windows.net/misc/FP_com/2020/04/23/Aorg.pdf)

** Innovation**

* 1. **New coating prevents bacterial cross-contamination in fresh produce**

Over the course of their journey from the open fields to the produce displays at grocery stores, fresh vegetables and fruits can sometimes become contaminated by microorganisms. These items can then spoil other produce, spreading the contamination further and increasing the number of food items that can cause illnesses.

To prevent cross-contamination between fresh produce, researchers at Texas A&M University have created a coating that can be applied to food-contact surfaces like conveyor belts, rollers and collection buckets. In addition to being germicidal, the researchers have designed their coating to be extremely water-repellent. The researchers said without water, bacteria can’t stick or multiply on surfaces, thereby drastically curbing contamination from one piece of produce to another.

In their study, they show that the new dual-function coating — one that can both repel and kill bacteria — can greatly mitigate bacterial spread, averting cross-contamination.”

Despite the high efficacy of their coating in preventing bacterial spread, the researchers said that more investigation is needed to determine if the coating works equally well for mitigating viral cross-contamination. Although longer-lasting than other coatings, they noted that their coating too would need to be reapplied after a certain amount of use. Thus, as a next step, Akbulut and his team are working on developing more permanent, dual functionality coatings. [Full article available here](https://www.freshplaza.com/article/9210472/new-coating-prevents-bacterial-cross-contamination-in-fresh-produce/)

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