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# Far Eastern Agriculture



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EVENTS 2022

July

6-8  
**Indo Livestock Expo & Forum**  
 Jakarta, Indonesia  
[www.indolivestock.com](http://www.indolivestock.com)

15-18  
**Agri Intex 2022**  
 Coimbatore, India  
[www.agriintex.codissia.com](http://www.agriintex.codissia.com)

AUGUST

3-5  
**Ildex Vietnam**  
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[www.ildex-vietnam.com](http://www.ildex-vietnam.com)

10-12  
**Livestock Malaysia**  
 Malacca, Malaysia  
[www.livestockmalaysia.com](http://www.livestockmalaysia.com)

24-26  
**Livestock Philippines 2022**  
 Manila, Philippines  
[www.livestockphilippines.com](http://www.livestockphilippines.com)

SEPTEMBER

7-9  
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 Bangkok, Thailand  
[www.victamasiam.com](http://www.victamasiam.com)

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**VIV Qingdao 2022**  
 Qingdao, Shandong, China  
[www.vivchina.nl](http://www.vivchina.nl)

# Solutions for modern crop production challenges at the DLG-Feldtage trade fair



Image Credit: DLG

Younger farm managers made up more than half of the visitors.

AFTER A BREAK due to the pandemic, the DLG Feldtage trade fair has underlined its position as a leading platform for international crop production.

Visitors, exhibitors and the DLG (German Agricultural Society), as organiser, are highly satisfied with the outcome of the outdoor trade fair, which took place on the fields of Kirschgartshausen, a Südzucker experimental farm near Mannheim, Germany, from 14-16 June, 2022. The event presented future strategies and solutions for the challenges of modern crop production.

The trade fair was particularly popular among young farm managers. With international visitors coming primarily from the Netherlands, Austria, Switzerland, Lithuania, France, Poland and the Czech

Republic, the event also attracted around 130 international arable journalists and agricultural bloggers, who benefitted from the overview of innovations regarded as strong drivers of the transformation of agriculture. DLG-Feldtage's special feature 'Organic Farming' incorporated a wealth of relevant information. This met with great interest among attendees, as reflected in the preliminary survey results among the trade fair visitors, with nearly one in three exploring this area.

"Exhibitors and visitors alike were highly satisfied with the DLG-Feldtage event. The DLG-Feldtage trade fair has rarely shown itself to be so diverse. It is the important information platform for the farms of the future," said D Reinhard Grandke, CEO of the DLG.

## Vietnam and China join hands in fishery release and conservation

CHINA AND VIETNAM recently held a fishery release activity for restocking in the Beibu Gulf in Beihai, Guangxi Zhuang Autonomous Region, China, and Halong, Quang Ninh, Vietnam. Nearly 64 million fry of fish and prawns, were released into the Beibu Gulf. China's vice-minister, Ministry of agriculture and rural affairs, Ma Youxiang and Phung Duc Tien, deputy minister of agriculture and rural development of Vietnam, attended the event via video conference. Fang Chunming, vice-chairman of Guangxi Zhuang Autonomous Region, attended the release event in Guangxi.

According to the Chinese ministry of agriculture, the country has released a total of over 150 million fry of various aquatic species, and has seen positive results in resource restocking, as the recapture rate remains at a high level of more than 5%.

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# FOOD OUTLOOK

THE FAO FOOD Price Index (FFPI) averaged 157.4 points in May 2022, down by 0.6% from April, marking the second consecutive monthly decline.

The FAO Cereal Price Index is up 2.2% from April. International wheat prices rose for a fourth consecutive month, up 5.6% in May. The increase was in response to an export ban announced by India and reduced production in Ukraine. International coarse grain prices declined by 2.1% in May. Quotations strengthened in all the major market segments, but monthly increases were least pronounced for the most widely traded Indica varieties, amid ample supplies, especially in India.

The FAO Vegetable Oil Price Index is down 3.5%, yet remaining markedly above its year-earlier level. The monthly decline mainly reflects lower prices across the palm, sunflower, soy, and rapeseed oils. Apart from demand rationing, the removal of Indonesia's export ban on palm oil exerted additional downward pressure on prices, although a further price drop was contained by lingering uncertainties over

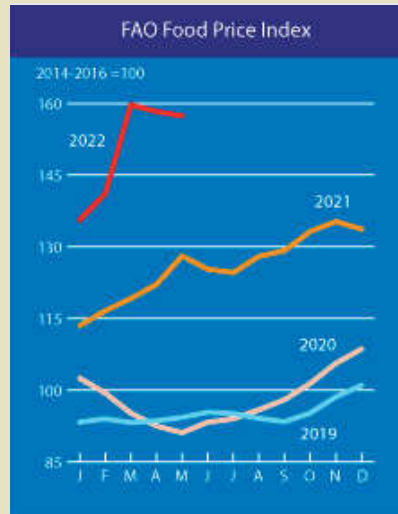


Image Credit: FAO

the country's export prospects.

The FAO Dairy Price Index is down 3.5%, marking the first decline after eight consecutive monthly increases. Prices of all milk products fell, underpinned by lower buying interests on market uncertainties in China. Butter prices dropped significantly due to weaker import demand in tandem with some improvements to supplies from Oceania.

The FAO Meat Price Index is up 0.5% from April, setting a new all-time high, driven by a steep rise in world poultry meat prices, more than offsetting declines in pig and ovine meat values. In May, poultry meat prices rose, reflecting the continued supply chain disruptions in Ukraine, Europe and the Middle East. International bovine meat prices were unaffected. International prices of ovine meat also dropped, reflecting the impact of currency movements.

The FAO Sugar Price Index is down 1.1%, marking the first decline after increases in the previous two months. The recent monthly decline in international sugar price quotations was triggered by limited global import demand and good global availability prospects, mostly stemming from a bumper crop in India. The weakening of the Brazilian Real against the US dollar and lower ethanol prices resulted in further downward pressure on world sugar prices. However, uncertainties over the current season's outturn in Brazil, the world's largest sugar exporter, prevented more substantial price declines.

## Rapid test created for deadly infections

RESEARCHERS AT THE McMaster University have developed a new form of a rapid test to detect infections in farm animals, responding to the rising threat of dangerous outbreaks. Science Daily reported that the prototype has been proven effective in detecting a devastating diarrheal infection in pigs and can be adapted to test for other pathogens, and in other animals.

The test, created by biochemist Yingfu Li and engineer Leyla Soleymani and their colleagues, uses a small sample of saliva to detect the chemical markers of infection. It uses technology similar to a form of test the same research team recently created to detect COVID and other infections in humans. The human test is now moving toward the marketplace with public research funding and corporate support.

## BASF solution to increase durability of aquaculture pontoons

BASF'S LIGHT STABILISER 'Tinuvin' has been applied by Fujian Atlantis Plastic Products Co. Ltd., a company specialising in the production and processing of plastic products for marine floats, to protect polypropylene (PP) pontoons used by fish farmers in Ningde, Fujian Province of China.

According to BASF, like all plastics, PP is susceptible to UV light and heat, which can result in colour change, surface cracking, and ultimately, product failure. To make the pontoons resistant to intense sunlight, a light stabiliser such as Tinuvin is added to the polymer during manufacturing. Tinuvin protects the PP pontoons from the negative effects of prolonged exposure to UV light, thereby improving its weatherability and extending its lifetime from three years to more than five years.



Image Credit: BASF

*Improved service life helps to save resources and reduce costs for fish farmers.*

"Strong, durable, and safe – these are qualities that should always come to mind when employing a plastic floatation system," said Hermann Althoff, senior vice-president, Performance Chemicals Asia Pacific, BASF. "Our UV stabilisation products create a stress-crack-resistant platform that maintains the structural integrity of the plastic article for many years."

## Seed treatment by Syngenta to target nematodes and diseases



*Syngenta reports that the parasite can have a devastating impact, with yield losses of up to 12% globally per year.*

Image Credit: Adobe Stock

SYNGENTA CROP PROTECTION'S Seedcare business has recently unveiled VICTRATO, a novel technology with a combination of nematode and disease control for growers looking to increase the quality and yield of their crops and support the long-term health of their soil.

According to Syngenta, VICTRATO contains TYMIRIUM technology, which provides long-lasting protection against all plant-parasitic nematodes and key fungal diseases across major crops, including soybeans, corn, cereals, cotton, and rice. Nematodes – a parasitic species that feed on the root or the plant, to deplete it of nutrients – are present in almost all agricultural soils, attacking crops and opening a path to further fungal infection. The company reports that the parasite can have a devastating impact, with yield losses of up to 12% globally per year, equating to an estimated loss of US\$150bn every year.

VICTRATO enables plants to optimise water and nutrient uptake while increasing stress tolerance and yield, delivering a greater return on investment for the farmer. By protecting the roots, the said product plays a critical part in enabling no-tillage and conservation-tillage practices, and helps preserve biodiversity by not harming beneficial insects, pollinators and microflora. This favourable sustainability profile provides farmers with the option to replace older technologies.

The company's Seedcare is said to have screening capabilities and mapping systems that enable the detection of the presence of nematodes in key markets, including Brazil, the US, China and throughout APAC. This work, in combination with VICTRATO, aims to help farmers identify and address nematode problems to deliver productivity improvements.

## AGRITECHNICA ASIA and HORTI ASIA 2022 conclude successfully

THE AGRITECHNICA ASIA and HORTI ASIA 2022 trade fairs held in Bangkok, Thailand, have successfully concluded, attracting 8,326 expert participants from 59 countries, including Vietnam, this year's partner country.

Exhibitors welcomed the high international participation which underlined the trade fairs' leading agricultural machinery role in Southeast Asia. According to the organisers, numerous exhibitors have rebooked 60% of exhibitor space for the next edition in 2024, with companies citing buying intentions and the international profile of the visitors as top reasons.

Over the three exhibition days, speakers shared their expertise in 98 conferences, many held in a hybrid format. Attended by 4,326 onsite attendees and 2,881 online visitors, the conference programme accompanied the international trade fair for crop production and smart farming, which was co-hosted by the Thai Ministry of Agriculture and Cooperatives (MOAC).

Attendees at the region's largest trade exhibitions for smart agriculture and horticulture production were made up of trade visitors and farmers, as well as 350 large-scale buyers from Asia-Pacific countries taking part in an exclusive invitation programme.

## CP Foods pledges to protect marine ecosystem



Image Credit: CP Foods

*According to CP Foods, approximately 500 T-shirts from 7,900 bottles (over 120 kg) were produced from PET bottles.*

EXECUTIVE VICE-PRESIDENT FOR aquaculture business at CP Foods Pairoj Apiruknusi has said that the company, as a leading company in food businesses, has recognised the urgency of the ocean waste problem which severely threatens the marine ecosystem, the key source of the world's food security.

To tackle such a global issue, the company has continued to drive the sustainability of the aquaculture production chain that is socially responsible and environmentally conscious. The company is collaborating with multiple agencies across the world in a bid to protect the global marine environment by ensuring food security.

The company has worked with the Thai Sustainable Fisheries Roundtable (TSFR) to improve and develop sustainable trawl fisheries in the Gulf of Thailand, the source of raw materials for the production of fishmeal. CP Foods has sourced fishmeal and promoted sustainable fishmeal acquisition through the Fishery Improver Project (FIP) by setting up the Fishery Action Plan (FAP) of the project.



# Best practices at the heart of fish farming expansion



Image Credit: Adobe Stock

*The 13 marine sites will potentially and sustainably expand to a capacity of 30,000 tonnes of production annually.*

**Aquaculture is poised to be a major contributor to the world's food bank, and practising sustainability at an early stage can promise a safer future.**

**A**CCORDING TO A study by the World Bank, Aquaculture is projected to be the prime source of seafood by 2030, as demand grows from the global middle class and wild capture fisheries approach their maximum take. The organisation says that when practised responsibly, fish farming can help provide livelihoods and feed a global population that will reach nine billion by 2050.

Sustainable business and farm management practices seem to be the answer, along with measures such as effective biosecurity and disease control systems; minimal antibiotic and pharmaceutical use; microbial sanitation; maintaining global standards for hygiene; efficient and humane harvest and transport; accountable record-keeping and traceability and profitability.

Headquartered in Singapore, aquaculture company Barramundi aims to put fish from its new West Australian farm on international menus.

Barramundi Group Australia, the company's Australian operations has announced its 10-year project which is expected to have a capital spend of around US\$350mm, with significant expenditure on the local economy, including creating 350-400 direct jobs and local business opportunities for the region as production increases.

Barramundi Group chief executive officer Andreas von Scholten said the company had been collaborating with environmental consultants for several years

**Environmental custodianship leads to fantastic product quality, good fish welfare and consistent and sustainable production."**

to develop a strategy to sustainably grow production in the region over the next decade. The plan considers best management practices including following, biosecurity, and a scale-up process at a rate that allows adaptive management.

Andreas also said that the company has identified 13 marine sites that will ultimately allow it to sustainably expand to a capacity of 30,000 tonnes of production annually and are also proposing to develop three land-based fish nurseries and a processing facility in the region.

"A strategy underpinned by environmental custodianship leads to fantastic product quality, good fish welfare and consistent and sustainable production without compromising the pristine environment in which we operate," von Scholten furthered.

Barramundi also said that evolving practices, adaptive management and third-party certifications enable the company to gain confidence from the community about best practices in food safety, environmental responsibility, social accountability, and animal health and welfare. ■



# Developing green value chains for the continent

**C**OUNTRIES ACROSS ASIA and the Pacific are joining an initiative to promote and showcase the ‘best of the best’ of their special agricultural products – a move designed to ensure a high level of participation from smallholders to producers to exporters and others all along the value chain.

To help build momentum, the Food and Agriculture Organization of the United Nations (FAO) has launched the ‘Global Action on Green Development of Special Agricultural Products: One Country One Priority Product (OCOP) in Asia and the Pacific,’ encouraging countries of the region to join the initiative, developing green value chains and promoting their special agricultural products internationally.

Close to 250 participants from countries across Asia and the Pacific attended the virtual launch, including ministries of agriculture, senior government officials, technical experts, and representatives of development partners, research institutes, and the private sector. Specialists from other regions of the world also joined the event.

OCOP was launched globally by the FAO director-general, QU Dongyu, in September 2021. The launch of this regional, Asia-Pacific global action of OCOP aims to develop green and sustainable value chains for special agricultural products, while supporting smallholders and family farmers to reap the full benefits of access to a global market, ultimately helping the transformation of current agri-food systems. The ultimate aim is to achieve better production, better nutrition, a better environment and a better life for all – leaving no one behind.

In an opening address, Beth Bechdol, FAO deputy director-general, outlined the many specialty agricultural products the region has to offer to the world. “The Asia-Pacific region is special, home to more than 50% of the world’s population, where agricultural development and rural livelihoods are a top priority – a region with a long and rich history of agricultural development,” she said, adding that participation in OCOP was a great opportunity for all countries in the region.

The regional OCOP launch event included the participation and presentations of government ministers from China, Indonesia, the Lao People’s Democratic Republic, Samoa and Thailand. Ministerial-level interventions were also made on behalf of their governments by participants from Bhutan and the Solomon Islands.

The attendees from Asia and the Pacific nations spoke highly of the special agricultural products their countries and sub-regions

**“The Asia-Pacific region is special, home to more than 50% of the world’s population, where agricultural development and rural livelihoods are a top priority.”**



Image Credit: Adobe Stock

*A greater focus on the export of produce through horticulture and cash crops was discussed.*

can offer the world – products that go well beyond the staple foods that most people consume. ■

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# Assuring health in farm animals through nutrition



Image Credit: Adobe Stock

*inneus aims to positively influence intestinal health in order to help the host better cope with physiological and sanitary challenges in poultry and pigs.*

**Nutrition provides farm animals with the ability to prosper and reproduce, and possess strong immunity to fend against diseases resulting in a healthy and profitable farm business.**

**D**ISEASES IN FARM animals cause enormous losses in terms of death and decreased value production. The impacts are direct and affect greatly the local economy and its food supply. Livestock is usually one of the most important sources of income in largely rural areas that span across the developing nations of Asia.

Asia houses close to 60% of the world's population, and the density is largely concentrated in the eastern part of the continent, according to the statistics website Worldometers. Much of the continent's dietary history and projection for the future involves meat, dairy and poultry products in a substantial way.

It is imperative to conclude that a region with a relentless demand for nutrition cannot afford interruptions to its food supply chain. One of the most important

factors of supply chain interruptions is diseases and ailments in farm conditions that result in disruptions at the production level.

Digestive health and intestinal integrity have become critical elements when it comes to managing a livestock farm. One way to ensure the animals maintain a clean bill of health is by introducing them to amino acid-based solutions.

#### Answers in amino acids

METEX NOOVISTAGO, an animal nutrition expert from France, has recently announced the launch of a new solution range: inneus for pig and poultry.

According to METEX, the inneus range of products, are solutions based on a synergistic combination of functional amino acids potentialised by specifically selected polyphenols.

INNEUS aims to positively influence

intestinal health in order to help the host better cope with physiological and sanitary challenges such as weaning for piglets, or coccidiosis for chickens. INNEUS is said to be the result of an intense and fruitful research and development programme at METEX, aiming to understand the role of the functional amino acids and their synergies in the support of digestive physiology of monogastric animals.

METEX said that its research and development team focused the effort on functional amino acids scientific concept, trying to design a complete solution, targeting the four main pillars of gut health, gut barrier function, immune fitness, oxidative status homeostasis, and microbiota balance.

Kostas Syriopoulos, brand in charge of inneus, explained, "It has been a really exciting challenge. From the literature and transcriptomic analysis of the intestine, we've been able to identify some key candidates and their roles. The objective was then to find the right combination and the right synergy, to end up with a



complete solution which can be implemented at a consistent dose, reaching all key aspects of digestive health.

“We’ve found out the need to potentialise the specific targeting of functional amino acids with a selected polyphenol, notably to reach the hindgut and be able to positively modulate the microbiota,” Kostas furthered.

METEX said that the results of this research and development programme have been disclosed through several scientific publications in congress such as JRP, DPP, and soon WPC. The company has made

**“ We’ve found out the need to potentialise the specific targeting of functional amino acids with a selected polyphenol.”**



Image Credit: Adobe Stock

*Evonik’s abstracts revolve around bettering dairy cow nutrition for improved overall results.*

available two inhouse solutions, one each for piglets and poultry.

Meanwhile, Evonik, a specialty chemicals company and its academic partners will deliver eight abstracts outlining their latest research findings in dairy cow nutrition solutions – with a particular focus on the essential amino acid, methionine – at this year’s American Dairy

Science Association (ADSA) Annual meeting.

The company has collaborated with several universities on abstracts such as meta-regression analyses of the relationship between plasma concentrations and duodenal flows of amino acids in dairy cows and measures of amino acids best associated with milk true protein. ■



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# Meat processing gets more efficient



Image Credit: Adobe Stock

*Meat processing plants choose streamlined solutions as efficiency becomes one of the most important factors across all industries.*

Smart and efficient solutions not only offer high-speed processing but also the opportunity to maximise profitability by choosing tailor-made equipment.

**T**HE FOOD AND Agriculture Organization of the UN (FAO) terms meat processing as tackling the price problems of meat products, while at the same time allowing the raw materials, such as carcass meat and by-products, to be classified as valuable and less-valuable products.

Processing machinery has only grown faster, and more efficient, and now offers meat companies the ability to integrate processing facilities that automate proceedings.

## Partnering solutions

Marel, the food processing equipment manufacturer and the company's partner in fish processing Curio, have together unveiled their new whitefish processing solution, ideal for small processors looking to increase automation in the face of labour shortages.

According to the company, the compact solution offers the equipment and technology needed for deheading, filleting,

trimming, grading and packing. The product is designed to help the operator improve efficiency, reduce costs and increase the quality of the final product.

The solution is said to be able to process multiple species of varying sizes and features a compact and flexible design, a capacity for high volume throughput, and full traceability to provide visibility of the whole process from start to finish in real-time.

As part of the line, the Curio Filletting Platform C-2011 is capable of filleting whitefish species ranging in size from as small as 400 g up to 8 kg. The dynamic and adaptable filletting platform offers a high level of flexibility while remaining easy to operate and maintain. Optimised deboning

Food processing company BAADER focused its participation in the International Production & Processing Expo(IPPE) 2022, in Atlanta, the USA on optimal deboning solutions for bigger bird sizes.

The BAADER booth featured the

automatic and flexible wing cutting for the cut-up line, the new Front Half Deboner 661 where automation technologies and human skills meet, the Poultry Skinner 625 for chicken breasts and the BAADER 608 Refiner for optimal resource efficiency.

Other equipment showcased by BAADER included Wing Segmenting for automatic and flexible wing cutting; Front Half Deboner 661 for breast filleting designed to replace the industry-standard double-sided manual deboning lines; Poultry Skinner 625 skinning machine with skin and undesired fat removal and the BAADERING Technology for a gentle method of product refinement.

Other equipment showcased by BAADER included Wing Segmenting for automatic and flexible wing cutting; Front Half Deboner 661 for breast filleting designed to replace the industry-standard double-sided manual deboning lines; Poultry Skinner 625 skinning machine with skin and undesired fat removal and the BAADERING Technology for a gentle method of product refinement. ■



# Vietnam's agri sector gets a boost from other countries

Many countries have come forward to strengthen ties and continue lending cooperation to Vietnam's agriculture sector.

**V**IETNAM'S AGRICULTURAL SECTOR grew 2.85% in 2022 year-on-year and the figure is expected to reach more than US\$50bn this year, according to the country's Ministry of Agriculture and Rural Development (MARD).

Minister of Agriculture and Rural Development Le Minh Hoan said that it is necessary for the nation to shift from agricultural production to an agricultural economy. This is a strategy for the sustainable development of the sector, Hoan said during a session with the legislators, as part of the ongoing third meeting of the National Assembly.

Favouring the country's plans to boost the agriculture sector, many countries have come forward to extend their support and strengthen ties to continue cooperation.

## Uruguay's cooperation

Vietnam's deputy minister of Agriculture and Rural Development Le Quoc Doanh had conducted a meeting and worked with Raúl Juan Pollak Giampietro, Uruguayan ambassador in Vietnam. "The two sides made commitments to promote cooperation in the field of agriculture, especially exchange of science and technology," he said.

Ambassador Raúl Juan said special attention will be paid to the agricultural sector on the basis of the meeting of the Uruguay - Vietnam Joint Committee on economic cooperation, trade and investment. In the coming time, we hope to achieve positive results in agricultural trade cooperation between the two countries.

The Uruguayan ambassador committed that he is willing to share with Vietnam the most advanced production technologies and also looks forward to exchanging from Vietnam the strengths in science and technology. In the near future, the Uruguayan Food Institute will sign a Memorandum of



Many foreign corporations and companies want to invest in Vietnam's agricultural industry.

Image Credit: Adobe Stock

Understanding in cooperation with the Mekong Delta Rice Institute.

## Switzerland strengthens ties

Switzerland is an important trading partner and the sixth largest European investor in Vietnam, with investment focused on manufacturing industries.

During a meeting with Ivo Sieber, ambassador of Switzerland in Vietnam, Le Quoc Doanh said that Switzerland had supported many technical projects for the agricultural industry, bringing high efficiency. Sieber congratulated the Government of Vietnam on achieving many successes in many fields, especially agriculture. Many foreign corporations and companies still want to invest in Vietnam's agricultural industry. Currently, Vietnam and the European Free Trade Association (EVFTA, including Switzerland, Norway, Iceland and Liechtenstein) are negotiating to sign a Free Trade Agreement (FTA).

According to Sieber, Switzerland and Vietnam have a particularly effective cooperation relationship in the field of agriculture. The project 'Remote sensing information system and crop insurance in emerging economies, building a rice monitoring system for Vietnam' (RIICE)

helps Vietnam's agricultural sector adapt and move forward digital transformation in the horticulture industry. The project has helped to improve the capacity of management and technical staff. He expressed his hope that the project will continue to promote its effectiveness in the following years.

## Trade in agro-products with US to be strengthened

Meanwhile, even the United States of America has extended cooperation in promoting trade in agriculture, forestry and fishery in the future.

The minister emphasised that Vietnam wants to become a country responsible for food security and the global environment. Therefore, the ministry would like to see US ambassador Marc Knapper's interest in supporting financial and technical resources through specific initiatives and actions, so that Vietnam can strengthen its capacity and successfully implement cooperation projects with the US in the fields of agriculture, forestry and fishery, contributing to the implementation of Vietnam's commitments to the world.

Ambassador Marc Knapper said the US is proud of Vietnam's continuous efforts to reach the eighth position among the export markets of agricultural products to the US. ■

## Pre-registration now open for ILDEX Vietnam 2022

ILDEX VIETNAM, ONE of the biggest trade exhibitions and conferences for livestock, dairy, meat processing and aquaculture in Southeast Asia, returns to the events calendar from 3-5 August 2022 at the SECC, Ho Chi Minh City, Vietnam.

The event is known for serving the Vietnam and MARD market and according to the organisers, attracted more than 8,711 trade participants from 48 countries participating in the last edition.

According to VNU Asia Pacific, the organisers of the event, even though the world has been fighting against a pandemic over the last couple of years the livestock market demand in the Asia Pacific, including Vietnam, remains at a high level.

ILDEX Vietnam, will feature the following 20 leading international companies to present the new technology, product and equipment with a special deal to all buyers such as ABRA, Business



*Vietnam is now a fully open country for all business travellers with no COVID-19 test, quarantine or health declaration required.*

France, Kemin, Huali, Kutlusan, CTC Pigtek, Aviagen, Jamesway, SKOV, Emtech, Munters, Fitfarm, Foodmate, Marel, KSP, Hartmann, Nijhuis, Lubing, Inberg and Clearwater and many more onsite.

Interested parties can register now to skip the queue onsite to maximise business hours during the exhibition.

For registration and more information, visit [www.ildex-vietnam.com](http://www.ildex-vietnam.com).

Image Credit: VNU Exhibitions Asia Pacific

## Livestock Philippines opens in August 2022 with support from Department of Agriculture

INFORMA MARKETS IN the Philippines gets the support from the Department of Agriculture for the live event of Livestock Philippines from 24-26 August 2022 at the World Trade Centre Metro Manila, Pasay City, Philippines.

Livestock Philippines is the International Trade Fair for Innovative Production and Processing for Poultry and Livestock that brings together local and international exhibitors, and trade visitors with profiles such as but not limited to industry professionals, key stakeholders, owners, and decision makers integrators, farmers, feed millers, pre-mixers, meat processors, slaughterhouses, veterinarians, distributors, retailers, and others. The B2B show offers visitors cutting-edge technology and solutions available in the global market, attend educational technical seminars and conferences, and experience quality face-to-face networking with the potential market in the livestock industry.

The Department of Agriculture has recently expressed its support to Livestock Philippines five years later after its last edition in 2017. Together with the Livestock Philippines team, the said government agency has created a working committee to discuss and plan a collaboration which includes hosting an exclusive conference during the show, which will be attended by key important people within the livestock industry.

Livestock Philippines 2022 features new show highlights such as the Eggcellent Corner, Sustainability Square, and Innovation Zone to educate the visitors about certain causes that would help boost the livestock industry in the Philippines which is aligned with the programs of the Department of Agriculture. Furthermore, the event highlights different initiatives and approaches toward a more

sustainable event that would inspire and encourage exhibitors and visitors to be more environmentally and socially responsible.

“With the situation of pressuring on climate changes, this Livestock Philippines 2022 will return to markets after five years of effects by ASF and Pandemic with a stronger position. More than 150 international suppliers are confirmed to join the event. With collaboration and official support from the Department of Agriculture, we will make sure that visiting the show will be safe and no concern about ASF when you go back to your places. We will set up the biosecurity for all visitors at our best effort and practical for trade visitors. One of our highlights is that we will also focus on innovations and ways to conduct sustainable livestock farming covering both swine, poultry and dairy sector,” said Rungphech Chitanuwat, regional portfolio director – ASEAN.

This year, Livestock Philippines assures the stakeholders a safer, more convenient, and efficient trade show experience. Informa Markets has launched Informa AllSecure to provide enhanced health and safety standards following COVID-19 on top of the government and local authorities’ guidance. The Informa AllSecure standard guidelines raise the bar of a safer, hygienic, and well organised event to give everyone the confidence in doing business during the show.

Livestock Philippines expects more than 200 exhibitors and at least 10,000 trade visitors from various sectors of the livestock industry to attend in August. The event is also supported and endorsed by some industry associations like the Batangas Egg Producers Cooperative (BEPKO), Cold Chain Association of the Philippines (CCAP), and the Philippine Association of Meat Processors, Inc (PAMPI).



## Reviving Indonesia's livestock, fisheries and agri sector

THE 15TH INDO Livestock 2022 Expo & Forum will be held from 6 - 8 July 2022 at the Jakarta Convention Center (JCC), Jakarta - Indonesia. The international exhibition incorporates Indo Feed, Indo Dairy, Indo Agrotech, Indo Vet and Indo Fisheries 2022 Expo & Forum.

Managing director of PT Napindo Media Ashatama, Arya Seta Wiradipura said, "This year feels very special because this international exhibition will become the right platform for professionals and stakeholders to exchange information and technology. It will also showcase the latest development trends, where each sector will display various innovations including agricultural equipment, livestock, animal feed, milk processing, veterinary medicine, veterinary equipment, export and digitisation products."

Arya added, "We hope that this



Image Credit: Indo Livestock Expo and Forum

*The 15th Indo Livestock 2022 Expo & Forum will be held on 6 - 8 July at the Jakarta Convention Center.*

exhibition will be part of the revival of the MICE (meetings, incentives, conferences, and exhibitions) industry in Indonesia and play a key role in the economy's recovery."

Carrying the theme *Synergy to Maintain Food Security and Sovereignty Towards National Self-Sufficiency*, the Forum becomes more meaningful with the display of Sustainably Integrated Animal Industry Forum with the theme *PMK-Momentum Changing Livestock Development Strategies*; The Livestock Export Commodity Stand, which will be used as a forum for information and livestock products that have been exported; Reflection Award 2022 by Yayasan Pengembangan Peternakan Indonesia (YAPPI); socialisation of the importance of animal protein; Financial Inclusive Seminar and National Conference of Masyarakat Agribisnis Jagung; and KIVNAS by the Executive Board of the Indonesian Veterinary Medical Association (IVMA/ PB-PDHI).

*For more details, visit [www.indolivestock.com](http://www.indolivestock.com)*

## Livestock Malaysia to feature more than 200 exhibitors

LIVESTOCK MALAYSIA EXPO & Forum (formerly known as Livestock Asia), Malaysia's leading feed, livestock and meat industry show, will be returning for its 10th edition from 10-12 August 2022. The previous series received overwhelming support with 6,286 trade visitors, more than 200 exhibitors from international and local suppliers and 63 speakers with representatives from 31 countries.

Livestock Malaysia 2022 is ideal for importers and exporters targeting the dynamic Malaysian markets and is one of the biggest platform in the region that will provide access to crucial buyers and sellers from various segments of the industry.

Moving forward, Livestock Malaysia 2022 will be held at a new venue; the Melaka International Trade Centre (MITC), Malacca. This show is a crucial one for all players involved in the feed, livestock and meat industry.

The event will feature more than 200 exhibitors from 30 countries, led by international pavilions.

A major international conference and technical seminar programme will feature well-known speakers from around Asia and the world. The speakers are expected to



Image Credit: Informa Markets

*The event is a crucial one for all players involved in the feed, livestock and meat industry.*

share their experiences and knowledge, and whole value chain analysis to meet the challenges in the livestock market.

The prestigious 10th Malaysian Livestock Industry Awards at the event will recognise outstanding success of individuals and companies that have made an impact to Malaysia's livestock and meat processing sectors.

A vast exchange of information and expertise will be shared with guests,

participants and visitors at the Livestock Malaysia.

Led by renowned experts, government officials and academics, who will share their insights, experiences, ideas and priceless industry knowledge across a wide range of conferences which will cover aspects of poultry nutrition, poultry management and health, egg production and swine production, in order to increase overall productivity.

# Foliar feeding citrus from young trees to mature fruit



Image Credit: Dr Terry Mabbett

*Citrus grows through a series of foliar flushes which are ideal targets for foliar spraying of nutrients.*

Asia gave the world citrus and the world gave citrus a whole lot more to contend with, in crop nutrition and pests and diseases. Dr Terry Mabbett reports on ways to cultivate healthy citrus trees, from sapling to harvest.

**A**CCORDING TO NUMEROUS findings, with the exception of grapefruit, mainstream commercial citrus (orange, mandarin, lemon, lime and pomelo) appears to have originated and evolved in Asia. Citrus is now the most widely cultivated fruit crop in the world being grown in the steamy Equatorial tropics to countries with Mediterranean-type climates like Spain, South Africa and South Australia, and almost everywhere else in between.

Mainstream commercial citrus species, including orange, lemon, lime, mandarin, grapefruit and pomelo have evolved through natural hybridisation over thousands of years. More recent 'man-made' hybridisation, breeding and selection have produced a much greater number of specialist fruits of which tangelo and ugly fruit are just two examples. Such a wide range of types grown and produced over such a wide area means

nutrition, pest and disease incidence is clearly not a 'one type fits all situation'.

When a plant species is taken from its natural distribution, and for citrus in South East and East Asia, and grown somewhere completely different it is invariably faced with a novel set of pests and diseases which take advantage of a tree which is struggling with and adjusting to novel growing conditions.

As a globally-grown fruit tree crop, citrus trees will inevitably be planted in a wide spectrum of soil types each with its own intrinsic plusses and minuses. With

**Citrus is now the most widely cultivated fruit crop in the world."**

regard to minuses, the fact that citrus is an evergreen tree crop with a commercial life extending up to half a century or more, once the tree's roots are established in the ground any inherent soil problems like lockdown and plant unavailability of soil zinc, which is one the more 'essential' of the essential micronutrients required by citrus, is a long-term, ongoing problem.

However, citrus is a true evergreen tree which maintains 'full' foliar cover throughout the year. The leaves are large, broad and deep green when healthy and with longevity spanning several years. New leaves are typically generated in bursts or flushes in response to changing seasonal conditions and controlled by changing environmental conditions including rainfall and temperature. As such citrus leaves are in a 'good position' to 'tell' the grower if all is not right with plant nutrition, the uniformly dark-green foliage showing distinct changes in colouration in response to deficiencies of specific essential nutrients.

#### Focus on foliar feeding

By the same token, citrus with its compact



canopy and comprising large, broad leaves is the ideal target for foliar feeding through spray application of soluble nutrient formulations. And especially since flushes of new leaf growth on the outer canopy comprise leaves without fully-formed cuticles and wax blooms to permit the unobstructed and rapid entry of nutrients sprayed onto the leaves. Not only is citrus a commercial fruit tree crop that will benefit from foliar feeding but is the only logical way forward for a crop that is grown within an enormous range of soil and climatic conditions, and once in the soil with all its nutritional deficiencies is there for half a century or more.

Foliar feeding has progressed a whole lot further. Soluble nutrient products and crop nutrition programmes based on foliar feeding are now well established for a wide range of crops, including tree crops, and not just for greenhouse fruit, flowers and vegetables which is often the perception for foliar feeding.

To learn more about how soluble nutrients and foliar feeding can benefit citrus, one of the world's most widely-grown fruit tree crops, *Far Eastern Agriculture* spoke with managing director Peter Prentis whose remit includes research, development and marketing of the company's products in Asia. Peter told *Far Eastern Agriculture* how Omex has developed a range of soluble nutrient products that will benefit citrus from the tree seedling stage in the nursery to the skin finish of mature fruit ready for harvest.

**Best place to start is at the beginning**

Peter was asked about a well-known Omex product called Omex Bio 20, which is a full complement of nutrients with a natural seaweed component to stimulate root growth and boost overall plant biomass.

“Omex Bio 20 gives plants a twin-boost by furnishing a full range of essential nutrients and a bio stimulatory effect to ensure maximum utilisation of the nutrients supplied. This highly concentrated emulsion product containing a full range of macro and micronutrients can be used at any time on citrus as a foliar spray at a concentration of 100 to 200 ml/100 l; 1.5 to 3.0 l/ha. However, Omex Bio 20 is especially useful for use on container-grown seedling plants in the citrus nursery and young trees newly planted in the field,” said Peter.

**Foliar growth and reproductive development**

Citrus trees are in the ground for a long time. First fruiting occurs within two to three years for grafted trees and five to seven years for trees grown from seed. Going forward, the grower can confidently expect many decades of good fruit production provided trees are well managed including good crop nutrition. Omex has a number of products which can be used throughout the seasons to ensure good flowering, fruit set and fruit development while maintaining foliar growth and leaf cover.

First on the agenda is a broad-based product to satisfy all the citrus tree's nutrient needs throughout the year. Called Omex 3X Emulsion, this water-soluble fluid emulsion fertiliser contains the three macronutrients, magnesium and the full range of micronutrients in chelated form. “We recommend up to four

**“A full range of essential nutrients and a bio stimulatory effect to ensure maximum utilisation of the nutrients supplied.”**



Image Credit: Dr Terry Mabbett

*Onset of flowering in citrus with applications of Omex 3X Emulsion already underway at 14-day intervals.*

applications, the first given before flowering and the others at 14-day intervals after flowering. Recommended rates are 1.5 to 3.0 l/ha with product sprayed at a concentration of 100 to 200 ml/100 l,” said Peter.

According to Peter, Omex Micromax, a water-soluble fluid emulsion containing chelated micronutrients, magnesium and sulphur is also used in this way. “Applications of Micromax provide the crop with a balanced range of micronutrients which can be readily absorbed through the leaves following foliar spraying,” he confirmed. Omex

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recommends a trio of applications from bud formation to second leaf flush at a concentration of 150 ml/100 l and at a rate of 1.5 l/ha.

Last but not least is a highly concentrated, water-soluble emulsion product called Omex NK60. The product contains nitrogen and a super concentration of potassium coming in at 39.0% weight/volume (w/v). According to Peter, potassium is the so-called ‘gatekeeper’ nutrient controlling water relations within the plant but also with an important role in photosynthesis and the translocation of sugars from the leaves. Omex recommends up to three applications at a concentration of 400 ml/100 l and a rate of 2.0 l/ha.

### Zinc and manganese

When it comes to micronutrients, each and every crop has its ‘problem’ partners. All micronutrients are essential but some are more essential than others depending on the crop. In the case of citrus, it is zinc and manganese which tend to be the two micronutrients that are the most difficult to supply in adequate amounts via soil-based nutrition. Peter Prentis told *Far Eastern Agriculture* about a specialist Omex product dedicated to citrus. “Omex Citromax 2.0 contains Zinc (3.80% w/v), manganese

(5.00% w/v) along with sulphur (4.9% w/v) and amino acids. We recommend multiple foliar sprays (300 to 500 ml/100 l and at a rate of 3.0 to 5.0 l/ha) during the spring and summer months,” he added.

### Fruit finish – citrus albedo breakdown

Harvest time trees may present themselves full of fruit but unmarketable if fruit quality is not up to standard. Citrus albedo breakdown is one of the biggest causes of poor fruit quality. Albedo is the specific name for the citrus fruit’s mesocarp which is the white spongy material found between the segments of the fruit and under the outer leather-like peel or flavedo. Albedo breakdown is caused by a loss of cohesion in the cells and this can lead to the rotting of the layer. Good calcium nutrition will minimise the risk of breakdown of the albedo tissue.

“The one we recommend for citrus is Omex CalMax Ultra containing a full range of nutrients including calcium at 21.80% w/v. We recommend citrus growers make one to four applications applied at intervals of 10-14 days during the trees’ fruit formation phase. The product is applied at a concentration of 100 to 200 ml/100 l and at a rate of 1.0 to 2.0 l/ha,” said Peter.

According to Peter, the divalent calcium

ion is notoriously ‘sluggish’ with inherent low mobility. Growers can boost the mobility of calcium by applying Omex Calmax Ultra in a tank mix with Omex DP 98. The product contains phosphorous as the phosphite ion which is known to assist the entry of calcium ions into the leaves and around the plant.

### Increasing disease resilience

Citrus is prone to a huge range of fungal or fungal-like pathogens of which Phytophthora is the most universally important. A number of these soil-borne Phytophthora species including *Phytophthora citrophthora* cause a range of disease symptoms in citrus including stem infections at the base of the tree exuding sap and called gummosis, and brown rot of low hanging citrus fruit. In both cases, the disease inoculum is splashed up from the soil and onto the citrus tree.

Phosphite ions are so-called elicitors which trigger the generation of natural chemicals in the tree to increase its resilience to infection and spread of Phytophthora disease. Peter Prentis said that the phosphite-containing Omex DP 98 can be applied in this capacity to citrus as multiple spray applications starting from the first foliar flush and repeated every 10 to 14 days – at a concentration of 400 ml/100 l and rate of 4.0 l/ha or during spring as a soil drench applied to the root area at a concentration of 400 ml/100 l.

Phytophthora pathogens cause huge amounts of damage to citrus around the world but there are a number of bacterial and viral pathogens which cause more havoc and terminal disease where the only option for growers is to grub out their trees.

One of these and particularly prevalent in Asia is Huanglongbing (yellow dragon disease), previously known as citrus greening, and one of the worst diseases of citrus trees in the world. It is a bacterial disease caused by the plant pathogenic bacterium *Candidatus Liberibacter asiaticus*, which spreads through the tree canopy, causing the decline and then the death of the tree. Peter Prentis said that work carried out in the United States indicates so-called ‘phosphate starvation’ is linked to this disease. Subsequent research in California has led to the recommendations for the use of phosphite-containing products to increase the resilience of citrus trees to this bacterial disease. ■



Image Credit: Dr Terry Mabbett

*Foliar feeding with a balanced profile of soluble nutrients is essential throughout the fruit growth and development phase and right up to fruit maturation.*





Image Credit: Adobe Stock

# Supporting the emerging egg market

Eggs are known to provide affordable nutrition in areas of nutritional concern but also requires a solid production chain to maintain its uninterrupted supply.

**A**CCORDING TO THE United Nations World Food Programme (WFP) executive director David Beasley, every night, approximately 690 million people around the world go to bed hungry, with 270 million rapidly marching toward starvation.

According to a UN nutrition report, leading experts explain that the nutrients eggs provide are more efficiently absorbed by the body than plant-based alternatives, helping address undernourishment which causes stunting in approximately 22% of young children worldwide.

Food and Agriculture Organization of the United Nations (FAO) said in a Poultry Development Review that chicken meat and eggs are the best sources of quality protein, and are the best solutions available to counter the malnourishment issues, in parts of Southern Asia.

A new knowledge-driven production manual has been launched to support emerging commercial egg producers

(ECEPs) to adopt best practices and achieve the long-term business productivity and stability needed for a sustained supply of quality eggs in a demanding market.

Produced and designed by the International Egg Foundation (IEF), the manual delivers practical, actionable guidance on fundamental areas of egg production, based on extensive experience and expert knowledge from within the poultry and egg industries.

Topics include the importance of biosecurity, farm set-up, farm management and egg management, and are aimed at

**“To enable those in need to improve the lives of their families and local communities, today and in the future.”**

medium-sized layer farms.

IEF chairman, Tim Lambert, said “Our main aim as a charity is to enable those in need to improve the lives of their families and local communities, today and in the future.

“Through our Global Egg Schools programme, we have identified fundamental areas where knowledge is commonly limited, such as biosecurity and layer management. It has been our experience that once best practices in these areas are shared, farmers have been able to significantly improve their outputs and profits.

Lambert also said that providing knowledge and know-how will help egg producers produce more efficiently, and their families gain direct access to high-quality nutrition through the consumption of a portion of their output. The model is designed in a way to support the nutritional status of their local community through egg sales. ■

## EICHER launches PRIMA G3 range of tractors

EICHER TRACTORS, PART of Tractors and Farm Equipment Limited, (TAFE) has announced the launch of the PRIMA G3 Series - a new range of premium tractors for the sub-continent. The new model is a new series of tractors in the 40 - 60 hp range, that according to EICHER, offers progressive technology and comfort.

According to EICHER, the new PRIMA G3 boasts a modern design with an aerodynamic hood, that offers easy access to the engine with its one-touch front-open, single-piece bonnet. The new grille with high-intensity 3D cooling technology, wrap-around headlamps, and Digi NXT Dashboard provides higher cross-air flow and long hours of continuous operation. The sporty steering wheel with a spinner knob offers effortless control.

The PRIMA G3 is engineered with state-of-the-art customer-centric technology, and the range comes with the High Torque-Fuel Saver (HT-FS) liquid-cooled engine, which provides greater efficiency for higher productivity. The CombiTorq Transmission offers a perfect pairing of the engine and the transaxle to deliver maximum power, torque and productivity. The new multispeed PTO provides four different PTO modes, making the tractor compatible with multiple agricultural and commercial applications.

The tractor's ergonomically designed elevated 'Comfy Luxe' seating provides a clear all-round view for easy manoeuvring of the tractor while its spacious platform represents a best-in-class operating environment. In addition to comfort, the EICHER PRIMA G3 is designed for the utmost safety, be it day or night. The 'Lead Me Home' feature provides an illuminated path at night, ensuring safety and convenience.

Sandeep Sinha, CEO of TAFE said, "We are delighted to launch



Image Credit: EICHER

*The new model is a new series of tractors in the 40 - 60 hp range, which offers progressive technology and operator comfort.*

the new PRIMA G3 series with a world-class styling and international technology. The model is a reflection of Eicher's hallmark durability and reliability. The PRIMA G3 is equipped with ergonomic operator stations, and new steering controls for comfortable, safe and long hours of productive use. We will ensure that our customers have easy access to the new series."

Dr Lakshmi Venu, DMD, TAFE Motors and Tractors Limited (TMTL) said, "Young and progressive farmers of India are seeking to maximise returns from farming operations while focusing on technology and agri-tech solutions, and the PRIMA G3 would be the ideal partner in creating an ecosystem that will revolutionize agriculture."

## Case IH offers enhancements to Maxxum and Puma ranges

CASE IH, THE agriculture machinery company owned by CNH industrial, has announced operator comfort and convenience updates to the company's Maxxum and Puma ranges.

The new Puma standard-wheelbase models (150hp to 180hp) now feature CVT transmission options to complement the existing Powershift offering. Upgrades to the Model Year 2022 Maxxum and Puma standard-wheelbase tractors include a low-mounted front screen wiper with an increased sweep area for better visibility; new high-performance LED safety lighting features; an improved entrance area with aluminium steps; and an integrated cool box.

Seamus said a number of standard vehicle modifications were also aimed at providing enhanced performance and connectivity for customers. A new electronic joystick and improved telematics with additional display functionality allow greater efficiency and precision.

"Obviously, when the operator is more comfortable in the cab, this can only help to reduce fatigue and increase productivity in the field. The Maxxum and Puma are among Case IH's most versatile tractors, and with these upgrades, this versatility is enhanced and customer experience improved," said Seamus McCarthy, Case IH Australia/New Zealand product manager for mid horsepower and compact tractors.

Other updates to the model year 2022 Maxxum and Puma standard-wheelbase series tractors include a new monitor bar with USB outlets, gas strut covers at the door and rear window, a new rearview mirror, an



Image Credit: CNH Industrial

*CASE IH believes the upgrades offer enhanced versatility to the tractors along with an improved customer experience.*

advanced loader joystick with reverser, a premium leather-wrapped steering wheel in continuously variable transmission (CVT) models, improved acceleration/deceleration behaviour, enhanced drive pedal sensitivity and cruise control pedal overdrive.

"Fast and reliable in-field connectivity is critical in realising the full potential of precision agriculture, with a direct result of that being an improvement in the profitability of farming operations, and Case IH is working hard to deliver that potential across our lower horse-power ranges," Seamus added.



## Fliegl's trailing shoe distributor bags approval from DLG

THE FLIEGL SKATE 150 trailing shoe distributor with the known Fliegl auger distributor was put through its paces by the German Agricultural Society (DLG) and achieved impressive results with top scores achieved in all test criteria.

The manure distributor SKATE 150 mounted to a PFW Jumbo Line Plus 18000 was put through its paces on Fliegl's own test bench. The modules 'Function and operating principle' as well as 'Handling, operation and maintenance were thoroughly assessed.

According to the agricultural trailer manufacturer Fliegl Agrartechnik, the first module includes the quality of the lateral distribution of cattle and pig manure and the determination of the time it takes for the manure to reach all outlets at the beginning of an application run. The second module evaluates how and with what effort the typical operating steps and more frequent maintenance work can be carried out.

The SKATE 150 features a working width of 15 metres. Two Fliegl screw distributors, each with 30 outlets, are installed along with it. The inner diameter of the hoses is 40 mm. Due to the special frame and distributor construction, the SKATE convinces stability but with low dead weight. The company claims that the distributor is designed in such a way that the entire distributor rests on the floor and therefore, no vertical load is lost. In addition,



Image Credit: Fliegl Agrartechnik

The FLIEGL SKATE 150 trailing shoe distributor being put through its paces.

automatic slope compensation is integrated as standard.

The trailing shoe distributor SKATE is said to have impressed DLG with excellent distribution qualities, best times and easy and convenient maintenance work and was awarded the 'DLG-APPROVED' test mark.

## Massey Ferguson celebrates milestone tractor production

AGCO CORPORATION, A global leader in the design, manufacture and distribution of agricultural machinery and precision AG technology, celebrated the production of the one millionth tractor at its Massey Ferguson Beauvais Plant.

This milestone coincides with the company's 175th anniversary. Massey Ferguson has been manufacturing tractors in Beauvais, France since November 20, 1960.

"The year 2022 is of milestone celebrations for Massey Ferguson," said Darren Parker, vice president of Massey Ferguson, North America. "We applaud the hard work and dedication of our colleagues in Beauvais to produce our one-millionth tractor. We're also excited to celebrate Massey Ferguson's 175 years of straightforward, dependable equipment innovation this year. These dual milestones prove our status as agricultural problem solvers dedicated to providing the right equipment, at the right price, for individual farming operations. Our equipment, just like our customers, is born to farm."

Thierry Lhotte, vice president and managing director, Massey Ferguson EAME, and president of AGCO in France presented the one-millionth tractor produced in Beauvais – a brand-new MF



Image Credit: Massey Ferguson

The milestone coincides with the company's 175th anniversary.

8S.305 Dyna-VT – to Thierry Aubrée, an arable farmer and contractor from the village of La Chapelle des Fougeretz in Brittany, France. "On behalf of all our employees and dealers, I want to thank our customers for their steadfast trust," said Lhotte. The new 8S adds to Aubrée's expanding Massey Ferguson fleet that already includes four tractors, three combines, and two large balers.

Boussad Bouaouli, vice president, manufacturing Beauvais, emphasized employee commitment on the Beauvais MF campus development. "From 1960, there have always been people who kept the site

moving, always with the right farmer-first focus to address challenges of the times and, above all, with a clear view to the future," Bouaouli said.

It all started with the MF 825 in 1960. Since then, the site grew continuously, producing iconic tractors driven by innovation, including: MF 3000 Series in 1986, the first tractor with onboard electronics, MF 8600 in 2008, introducing the efficient power concept, which reduces environmental impact, courtesy of the first use of SCR technology on an ag machine and the MF 8S Series in 2020, with its award-winning Protect-U concept.

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## Greenlabs and RDA to accelerate digital innovation

GREENLABS, AN AGTECH startup has announced the signing of an MoU with the South Korean Rural Development Administration (RDA) on the disclosure and utilisation of public agricultural data. Greenlabs said that the MoU was signed to promote cooperation between the two organisations, encouraging the use of shared agricultural data collected from both public and private sectors. The MoU aims for close cooperation in building an agricultural data ecosystem for digital expansion in agriculture, disclosing agricultural data to create new services and solve pending agricultural issues and developing an agricultural data analysis cloud to promote data usage organising joint projects.

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<input type="checkbox"/> 01 Government: municipal services, diplomatic, (UN, International Agencies)	<input type="checkbox"/> 02 Educational/Research Institutes	<input type="checkbox"/> 03 Fruit	<input type="checkbox"/> 04 Cocoa
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<input type="checkbox"/> 07 Farms and Plantations	<input type="checkbox"/> 08 Food Processing: poultry, dairy, cereal, fruit, vegetables, etc	<input type="checkbox"/> 09 Rubber	<input type="checkbox"/> 10 Palm Oil
<input type="checkbox"/> 09 Aid Organizations	<input type="checkbox"/> 10 Agricultural Equipment and Material Manufacturers: irrigation, agro-chemicals	<input type="checkbox"/> 11 Palm Kernels	<input type="checkbox"/> 12 Sugar Cane
<input type="checkbox"/> 11 Others: please specify:		<input type="checkbox"/> 13 Rice	<input type="checkbox"/> 14 Grain
		<input type="checkbox"/> 15 Feedstuffs	<input type="checkbox"/> 16 Groundnuts
		<input type="checkbox"/> 17 Vegetables	<input type="checkbox"/> 18 Cassava
		<input type="checkbox"/> 19 Dairy Cattle	<input type="checkbox"/> 20 Beef Cattle
		<input type="checkbox"/> 21 Sheep/Goats	<input type="checkbox"/> 22 Pigs
		<input type="checkbox"/> 23 Poultry	<input type="checkbox"/> 24 Fisheries



# Relying on renewables

Finding greener pastures with zero carbon emissions by using wind power and solar energy.



*Future Crops' multilevel indoor vertical farm facility grows a broad portfolio of pesticide-free leafy green vegetables and herbs.*

Image Credit: Future Crops

**A**GRICULTURE USES A significant chunk of the global energy produced and is notoriously known for its emission rates, dangerously high carbon footprint and its overall effects to the earth.

Companies like Future Crops aim to take their agriculture technologies one step further by switching to 100% renewable energy.

Harnessing the natural green powers of solar and wind energy, the company is also solving the primary hurdle to bringing the industry to a substantially greater carbon-neutral position, all while advancing its sustainability goals.

Over the past decade, vertical farms have been cropping up as a creative method of boosting food resilience and bringing food sources closer to home. Multistory indoor farming optimises land use by growing food from the ground up in designated horticultural regions or even within dense

urban localities. However, this method of growing crops in a controlled indoor environment can be energy-intensive.

Future Crops operates a state-of-the-art, multilevel indoor vertical farm in ABC Westland, Netherlands, the greenhouse hub of Europe. The facility grows a broad portfolio of pesticide-free leafy green vegetables and herbs. While many such facilities rely on hydroponics, the scale-up developed a unique, proprietary soil substrate in which to grow crops, bringing the vertical farm concept closer to nature and the earth.

Future Crops began operations in 2018 with ambitions to completely “green up” the entire process and reach zero carbon emissions. This spurred the company to choose a site that was already crowned with an impressive structure of 18,000 solar panels that could substantially limit its reliance on conventional fossil fuel.

In 2019, the company also started

exploiting wind energy generated by local farming communities, bringing reliance on renewable energy to 100%. The success of these measures was reflected in a recently conducted projection-based analysis.

“We bolstered our farm’s infrastructure and insulation capabilities,” explains Gary Grinspan, co-founder and CEO of Future Crops. “We also sought solutions to further improve our cultivation processes to be more energy-efficient, including boosting yields. At the same time, we began a gradual migration to renewable energy.”

Future Crops also said that all its resources are reused and recycled, including 97% of water used. Soil substrate that has undergone several growth cycles is sold to other growers who treat and reuse it. The company’s commitment even goes to overcoming food waste. Produce that does not meet the visual specifications for retail is sold to food producers. ■

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