

# AGRICULTURE

TRADE MAGAZINE

YOUR GATEWAY TO THE MIDDLE EAST AGRIBUSINESS



REGISTRATIONS ARE  
OPEN FOR  
FLOWERTRIALS 2023

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# IMPROVER OF PLANT GROWTH

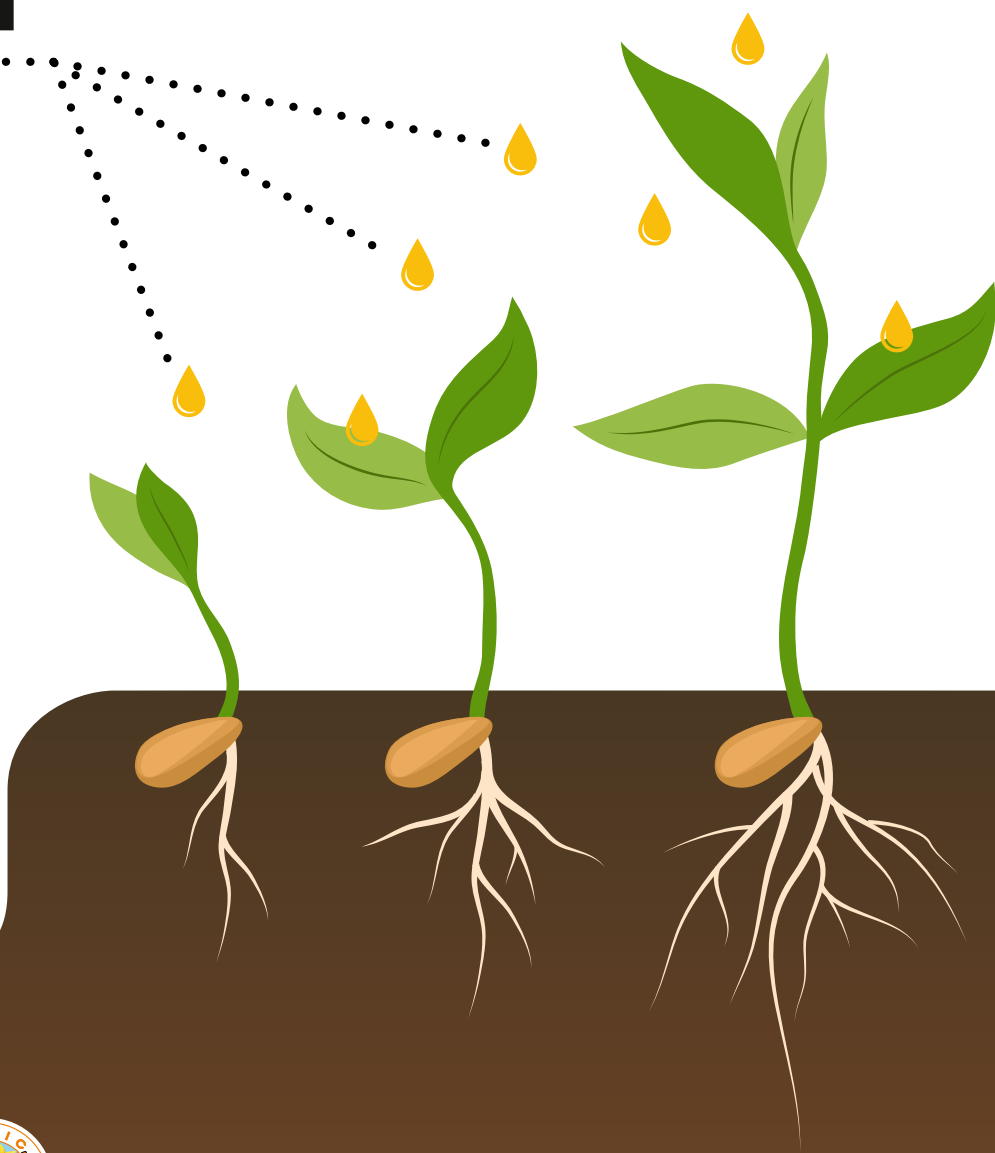


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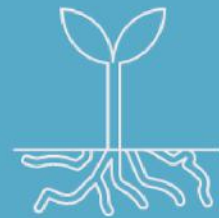
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cycles



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density & length



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**+33% Leafies Yield**



**+19% Strawberries Yield**



**+15% Tomatoes Yield**

\* Results based on Academic Research and Homeport Case Studies



Picture Taken in  
Dubai Municipality  
Nursery





## PIF AND AEROFARMS SIGN JOINT VENTURE AGREEMENT TO BUILD INDOOR VERTICAL FARMS IN SAUDI ARABIA AND THE WIDER MENA REGION

The Public Investment Fund ("PIF") signed a joint venture agreement with AeroFarms, a US-based commercial market leader in vertical farming, to establish a company in Riyadh to build and operate indoor vertical farms in Saudi Arabia and the wider Middle East and North Africa (MENA) region.

The agreement will optimize the utilization of natural resources, including water and agricultural lands, through the

implementation of indoor vertical farming, with no need for arable land, resulting in significantly higher yields and using up to 95% less water versus traditional field farming.

The partnership is expected to enable sustainable, local sourcing of high-quality crops all year round, grown using AeroFarms' proprietary smart agriculture technology ("AgTech") platform, which helps solve broader supply chain needs in the industry. The joint venture plans to build and operate several farms across the region in the next few years. The first farm in Saudi Arabia, which is expected to be the largest indoor vertical farm

of its kind in the MENA region, will have an annual production capacity of up to 1.1 million kgs of agricultural crops.

The partnership aligns with PIF's strategy, which focuses on developing and enabling the capabilities of key sectors, including food and agriculture, which will contribute to improving trade balance, localize technologies, develop industries and the overall growth and diversification of the Saudi economy. PIF is investing to localize new agricultural technologies that can benefit the local private sector, expanding its market reach & positioning Saudi Arabia as a leader in vertical farming.

## ADQ'S AGTECH PARK BEGINS ITS SUSTAINABLE AGRICULTURE JOURNEY WITH VERTICAL FARMING PROJECT



ADQ, an Abu Dhabi-based investment and holding company, announced the operational phase of its cutting-edge AgTech Park ecosystem with the launch of a vertical farming project in partnership with ZERO, a high-impact technology company headquartered in Italy. The ZERO project is the first of several controlled environment agricultural concepts that will be housed in the AgTech Park and will aim to enhance indoor farming locally, as well as explore and push the boundaries of desert-climate farming in the UAE.

The inaugural farming facility is situated in KEZAD (Khalifa Economic Zones Abu Dhabi Group), the UAE's largest operator and developer of fully integrated and specialized economic zones. KEZAD has a well-established ecosystem for food industries across the

entire value chain, thereby creating a strong base for growth, both for local producers and the food industry as a whole. Additional sites exploring different technologies will be launched in Al Ain Industrial City within the coming year.

Set to strengthen the local production of crops, fruits and vegetables for multiple applications including fresh food, nutraceuticals and biopharmaceuticals, the first joint project between ADQ and ZERO draws on the benefits of growing crops in vertical layers in a controlled environment, which

includes higher yield, shorter growing times and lower water usage, in addition to bringing the production of a wider variety of fresh produce geographically closer to the UAE's consumers.

The ZERO project is retrofitted in a 1,000 sqm warehouse and will achieve an initial production volume of approximately 10 tons per year at the proof-of-concept stage. This pilot phase is expected to conclude in the summer of 2023, following which a 40,000 sqm commercial phase of the vertical farm is envisaged to be launched in Al Ain, alongside other projects featuring controlled-environment technologies. At full scale, the 200-hectare AgTech Park will target production volumes of over 40 kilotons of fresh fruits and vegetables annually, which would account for up to 6 per cent and 12 per cent, respectively, of the UAE's total consumption and import of the produce grown within the park.



# MARTEX® PLANTING BAGS AND CONTAINERS

THE COMPANY FROM POLAND OFFERING PRODUCTS FOR NURSERY SECTOR, AND FOR ORNAMENTAL, FRUIT, FOREST PLANT RAISING OR RECULTIVATION

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Mulch mats for weed protection



Packing and transportation



Arrangement and transportation



Arrangement and transportation



Small mulch mats



Packing and transportation



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ARBO®-STRONG



Elastic mulch mat



ARBO®-SAUNA



100% jute container in 270-360 g/m² density



## MARTEX® - TEXTILE PRODUCTS FOR RAISING OF ORNAMENTAL, FRUIT, AND FOREST SEEDLINGS, OR FOR THE PURPOSE OF RECULTIVATION

Products commonly applied at nurseries, both in temperate and hot climate  
Used for raising trees in the forest, idle land, semi-desert area, steppe .....  
Excellent for tree planting by the road and highway, useful for the purpose of general cleaning works, composting, and in any similar applications.....



- ① Types of ARBO® containers available: -STANDARD;-STRONG; (-SAD; -FOREST; -TEX; -HOOD;-ALU; -OPENWORK;-PERF ...) -For planting, transportation, root ball thermal insulation in ground and on the ground, for application on terraces, balconies, etc.

- ② ARBO®-EKO container- made of jute for planting in the ground, decoration purposes or protection

- ③ KARO type jute clothing

- ④ Mat against weed -J+L and PP+PES models

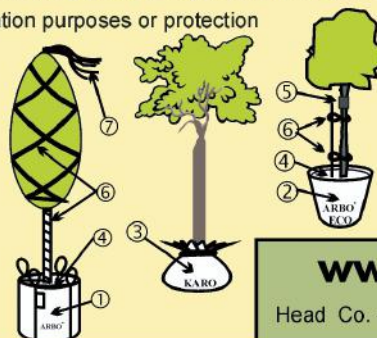
- ⑤ Protection of trunk and grafting points

- ⑥ Tape for connecting of tree and its support, trunk or crown wrapping

- ⑦ Tape-100% viscose product for marking of trees, portions of products, planting site and area

Other products:

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e-mail: [aridland@emirates.net.ae](mailto:aridland@emirates.net.ae)



## FAO PRAISES UAE'S ROLE IN PROMOTING SUSTAINABLE AGRICULTURE, DATE & DATE PRODUCTION, AND FIRST AGRICULTURAL INNOVATION

The United Nations Food and Agriculture Organization (FAO) praised the leading role played by the United Arab Emirates (UAE) and the Khalifa Award in promoting sustainable agriculture, date production, and agricultural innovation at both the regional and international levels. This was announced on March 15

in Abu Dhabi by the presence of Dr. Abdulkarim Al-Waer, Assistant Director-General of the FAO and Regional Representative for the Near East and North Africa.

Dr. Al-Waer praised the role of the award in encouraging more investment in this important sector and promoting the exchange of knowledge and best practices. He also confirmed that the FAO is committed to supporting sustainable agriculture and rural development, realizing the important role that date palm cultivation plays in achieving these goals.

Dr. Al-Waer stated during his welcoming remarks, that the global date production was around 2 million tons in the mid-1960s, whereas in 2021, it reached approximately 9.7 million tons produced in about 40 countries, with global trade reaching 1.74 million tons (1.16 million tons to Arab countries) valued at about \$2.3 billion. Despite the significant progress made, the palm and date industry still faces many challenges in terms of productivity, product quality, handling and processing, post-harvest, marketing, and trade. Dr. Al-Waer added that there

## AL BARAKAH DATES TO DRIVE INDIA EXPANSION WITH DUBAI INDUSTRIAL CITY FACTORY

In a move that reinforces the UAE's status as a global manufacturing and export hub, Al Barakah Dates announces plans to expand its presence in India. The market leading dates processor will process and export over 30,000 tonnes of bulk raw material from its factory in Dubai Industrial City, a member of TECOM Group PJSC, to promote UAE-farmed and produced dates and date derivatives.

The joint venture with India-based leading food processing firm Candor Foods Pvt Ltd was announced at a signing ceremony at Gulfood 2023. It comes on the back of the UAE-India Comprehensive Economic Partnership Agreement (CEPA) announced in May 2022 to enable greater market access through preferential tariff rates and benefits.

Al Barakah Dates factory in Dubai Industrial City is the world's largest privately-owned date factory. It is designed to process over 100,000 tonnes of date and date products annually – equivalent to almost half of the UAE's entire domestic harvest. The joint venture will

employ the factory's extended production capabilities and Dubai Industrial City's strategic connectivity via air, sea, road and soon Etihad Rail, to meet the demands of one of the world's biggest consumer markets.

Speaking on behalf of Dubai Industrial City, Saud Abu Alshawareb, Executive Vice President of Industrial Leasing – TECOM Group, said: "The UAE and India's trade history is coming full circle. The UAE is now an equal contributor to a long-standing

exchange of ideas, crafts, cuisine and culture. CEPA provides a mutually beneficial corridor for UAE-based manufacturers like Al Barakah Dates to export to a large and powerful consumer market. They are a formidable UAE-made brand, and one of our strategic partners. We are thrilled to see their factory and connectivity in Dubai Industrial City enable global expansion – it's a great step to drive up trade and investment, in line with the Dubai Economic Agenda and 'Make it in the Emirates'."





are many challenges facing this sector, including human development challenges, upgrading institutional environments, and keeping pace with policies and legislation, weak effective coordination at the national, regional, and international levels, lack of information about the sector, and lack of coordination of research. Additionally, pressure on natural resources, genetic erosion, and lack of biodiversity are among the sector's challenges. He also highlighted that climate change is causing water resource shortages, drought, and soil salinity, as well as contributing to the spread of pests and diseases such as the red palm weevil.

Finally, he emphasized the importance of regional cooperation and coordination organizations to exchange knowledge and expertise in this sector.

### THE US-UAE LED AIM FOR CLIMATE INITIATIVE ANNOUNCES THREE NEW GOVERNMENT PARTNERS

The Agriculture Innovation Mission for Climate (AIM for Climate), a global initiative by the United Arab Emirates and the United States, has announced three new Government Partners - India, Panama, and Paraguay - to support its mission to significantly increase investment in and support for climate-smart-agriculture and food systems innovation over the period of 2021 to 2025, and to address crises such as global hunger, food insecurity, and climate change.

The contributions of India,

Panama, and Paraguay reaffirm the importance of developing an inclusive initiative that supports smallholder farmers, especially women, and the interest of low-and-middle-income countries that are at the forefront of transformative agriculture and food systems innovations. Although they are most susceptible to the negative effects of climate change, they are equally part of the solutions to addressing

the climate crisis and building resilience to its impacts.

Since its inception, AIM for Climate partners have increased investments in agriculture and food systems innovation to more than \$8 billion and launched 30 innovation sprints, initiatives led and funded by AIM for Climate partners to achieve a specific outcome or output in agricultural innovation.

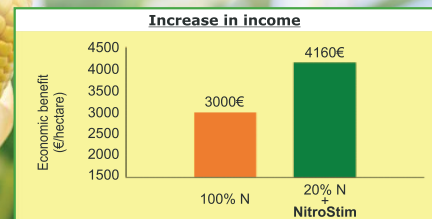
The total number of partners is over 300, which

## NitroStim

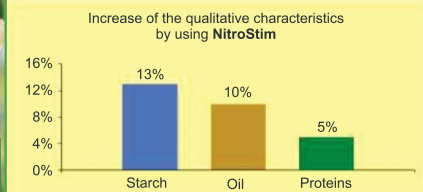
The alternative proposal of **Humofert** for maize nutrition brings great economic & environmental benefits

The field trial results from the application of **HUMOFERT's** microbial biostimulant **Nitrostim** on maize have shown that only one foliar application of **Nitrostim** at the rate of 5L/ha when the plant is 15-20cm tall is enough to achieve:

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- 39% income increase
- 80% reduction of chemical Nitrogen fertilizer application
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- 83% reduction of Nitrate pollution



The increased crop yield resulted in a 39% increase in revenue.



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now includes 45 Government Partners and more than 275 non-governmental partners, comprising businesses, academia, not-for-profits, philanthropies, think tanks, and others.

With AIM for Climate partners being fundamental to its growth and impact, the AIM for Climate Summit has been organized on May 8-10, 2023, in Washington D.C, to serve as a dynamic platform to raise ambition, build collaborations, and share knowledge on innovative solutions in the lead-up to COP28. Supported by the Foundation for Food &

Agriculture Research, some eminent keynote speakers include US Agriculture Secretary Tom Vilsack, Her Excellency Mariam bint Mohammed Almheiri, United Arab Emirates Minister of Climate Change and Environment, and former Vice President Al Gore.

## FRUIT LOGISTICA 2023 COMES TO A SUCCESSFUL CONCLUSION

63,470 trade visitors and buyers from over 140 countries as well as 2,610

exhibitors from 92 countries – this year, the leading trade fair for the global fruit trade was more international than ever and gathered the sector's key players.

Taking as its slogan 'All in One', Fruit Logistica celebrated its thirtieth anniversary and from 8 to 10 February showcased the entire value chain of the fresh produce sector. In 27 halls the focus was on the latest trends and innovations in the global fresh fruit trade.

Kai Mangelberger, project manager for Fruit Logistica: "We are very satisfied. Exhibitor and visitor numbers

## THE AROMA WHEEL DESCRIBES THE CHARACTER OF MARLENE® APPLES

Protected by its father, the mountain; cradled by its mother, the Mediterranean sun; grown and given strength by time, its teacher. This is how Marlene®, the Daughter of the Alps apple, develops its character: a multifaceted personality that is expressed in its varieties' rich flavours.

Narrating all the multifaceted versatility of Marlene® to customers and consumers is the Aroma Wheel, the first stage of an experiential journey that takes the apple to a higher level: a true guide to the flavours, aromas and textures of the Daughter of the Alps, showcased in a new and highly distinctive layout, consistent with the brand positioning. Created in collaboration with sensory analysis experts and presented with eye-catching and effective graphics, the Marlene® Aroma Wheel illustrates at a glance all the attributes of the brand's most popular varieties: Fuji, Golden Delicious, Royal Gala, Granny Smith and Red Delicious.

"With the arrival of spring, Marlene® blossoms in all its richness of aromas and flavours, thanks to a new tool that captures all the roundness and universe of values of the Daughter of the Alps apple at a glance," explains Hannes Tauber, Marketing Manager at VOG. "The Aroma Wheel represents a further step towards a new dimension for the apple. It enhances the positioning of the category and supports segmentation, in a process of consumer awareness akin to products. In the coming months we will be announcing new components of this project, the launch of which will coincide with the start of the next apple season and will take place over several years."

In the Aroma Wheel, the apples' properties are divided into three categories: structure, aroma and flavour. Structure takes in



characteristics such as crispness, juiciness and fineness of flesh, while flavour can vary from sweetness to acidity. Finally, aroma can be floral, fruity, as well as herbaceous, tropical, spicy and so on. Each of these elements corresponds to a shade of colour so that all the characteristics of each Marlene® apple can be identified at a glance.

are nearing pre-pandemic levels again. Over 40 national representations occupied displays larger than before the pandemic, including that of Spain. Particularly in economically challenging times, with the industry facing high energy prices, supply chain issues and inflation worldwide, it shows us we need face-to-face meetings. Fruit Logistica brings the sector together and facilitates dialogue, establishing contacts and finding out about market innovations."

The participants in this year's Fruit Logistica were more than satisfied too. According to the preliminary findings of an exhibitor and trade visitor survey, over 40 per cent of exhibitors polled had already concluded

business deals during the event. Moreover, nine out of ten respondents expected follow-up business to be 'satisfactory' to 'very good'. Accordingly, the overall view of exhibitors was very positive: around 90 per cent would recommend Fruit Logistica to others in their business circle, and the same percentage planned to take part in Fruit Logistica 2024.

### **TROUW NUTRITION LAUNCHES CUTTING- EDGE MOBILE NUTRITION TECHNOLOGY**

Those in Germany and Spain will be some of the first to access the powerful

technology, as it rolls out globally. The NutriOpt On-site Adviser gives farmers and feed producers the capability to access real-time raw materials data and nutritional expertise on-site, making it easier to hit production and profitability targets.

NutriOpt's parent company, animal nutrition specialist Trouw Nutrition, will be pushing out the technology further afield in the coming months, working with customers to drive further innovation of the product.

The NutriOpt On-site Adviser combines powerful near infrared (NIR) technology with NutriOpt's Nutritional Database, which is delivered through convenient mobile technology. It enables farmers and feed producers to decide



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how to optimise their ration within minutes, at the touch of a button.

Essential to the NutriOpt On-site Adviser is its hand-held device, developed by AgroCares, which uses NIR technology to scan samples of feedstuffs on the spot.

This scanned feed data is then plugged into NutriOpt's nutritional database, which is connected to current raw materials market conditions and powered by years of Trouw

Nutrition's nutritional experience. A detailed report is then delivered directly to the user's smartphone, which shows whether the samples meet optimal quality standards for poultry or ruminants.

The information enables farmers and feed producers to make an informed, immediate decision that best suits their systems. This gives control to the user and creates a more productive and cost-efficient process.

## **BIOFACH AND VIVANESS 2023: STRONG, POSITIVE PRESENTATION BY BOTH TRADE FAIR AND SECTOR**

BIOFACH and VIVANESS returned to their February slot with an impressive first in-person show following the one-off Summer Edition in 2022. During the four-day event from 14 to 17 February 2023, they attracted almost 36,000

## **BENEO EXTENDS ANIMAL NUTRITION PORTFOLIO WITH FABA BEAN INGREDIENTS**

BENEO, one of the leading manufacturers of functional ingredients, is pleased to announce the expansion of its product portfolio for aqua and livestock feed with the addition of the new faba bean ingredient range, including faba bean protein concentrate, starch-rich flour, and hulls. These pulse ingredients are non-GMO and represent sustainable sources of protein, starch, and fibre, enabling feed manufacturers to improve the nutritional profile of their products.

Faba bean ingredients are showing promising potential for aqua and livestock recipe formulations as they are a good source of protein, starch and dietary fibre. BENEO's faba bean protein concentrate, starch-rich flour and hull ingredients are produced from faba bean varieties

which are low in antinutritional factors (e.g., tannins, vicine and convicine) and are guaranteed to be non-GMO.

BENEO's faba bean starch-rich flour offers producers of livestock and aqua feed a good source of starch and energy, while still containing a significant residual amount of protein of approximately 20%. It is ideal for use in many applications, including for salmon and trout, as well as in broilers' starter. Also, thanks to its good solubility and rather low iron content, it could be applied in liquid feed like calf milk replacers.

BENEO's faba bean protein concentrate is a concentrated source of vegetal protein that serves as a good alternative to e.g., animal and soy proteins. It has excellent solubility in comparison

to other vegetal proteins and a good amino acid profile.

BENEO's faba bean hulls can be used to provide a source of insoluble fibres in feed for ruminants or gestating sows, while also offering certain protein and starch contents which increase its nutritional value. The faba bean hulls and protein concentrate are listed in the EU Catalogue of Feed Materials, while faba bean starch-rich flour is in the EU Feed Materials Register.

Karel Thurman, Commercial Director Animal Nutrition at BENEO comments: "Manufacturers of pet food and feed are increasingly faced with the challenge of finding ingredients that deliver the necessary nutrients for their formulas, whilst also complying with ambitious commitments towards sustainability. Our new

plant-based faba bean ingredients are a valuable addition to our portfolio, as they provide convincing sustainability credentials and offer producers in the livestock and aquafeed industries sound nutritional and technological alternatives for their feed recipes.



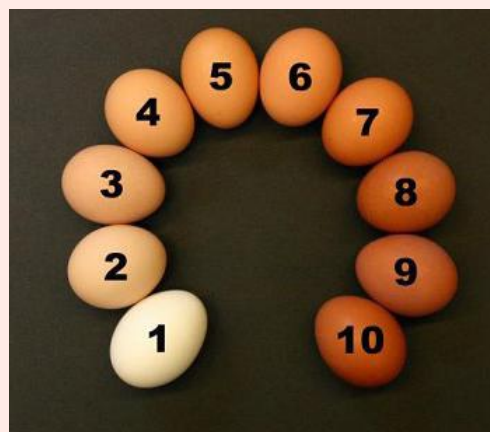
## BROWN DETECTION: GRADING EGGS ON SHELL COLOR

Eggs come in all kinds of shapes, sizes, and... colors. The color of the eggshell depends on the breed of the hen. A hen with red earlobes will likely lay brown eggs, whereas a hen with white earlobes will produce white eggs. Except for the difference in the eggshell color, brown and white eggs taste the same and have the same nutritional value.

Often packing stations are required to produce a uniform color for packed eggs. This can be purely for esthetic reasons or simply because different eggs are processed at the same time and need to be separated by color. To do the separation by hand would be time-consuming and nearly impossible. That is why Moba has developed the automatic brown detector, which is available as an add-on in Omnia graders equipped

with a blood detector.

How does Moba's brown detector separate white and brown eggshells? It is all about the measurement of reflection. White light is reflected by the eggshell and transmitted to color-sensitive sensors. Then the brown detector compares the different color levels on a scale from 1 to 10. If an egg is categorized as 1 this indicates a white egg, 2 means a very light brown egg and so on till 10, which is a very dark brown egg. By fine-tuning the software it is possible to determine per packing lane which shade of brown is required. This color data is then added to the product information. For example, one product (programmed on one or more packing lanes) can pack white



eggs while another product (positioned on other packing lanes) is packing all brown eggs. Another example is removing the extremes of light or dark eggs from batches to create a nice uniform color. Using a bar where numbers represent the different brown shades, a selection can be made of which shades of brown are allowed in a product.

trade visitors from 135 countries. 'Strong' and 'confident' describe the start to the year's international events for the organic foodstuffs and natural and organic personal care sector. The focus was on variety, networking and professional interaction, and the highly topical Congress theme of "Organic. Food Sovereignty. True Prices". The organic sector and the combined trade fair event proved crisis-resistant, as they demonstrated with revenues of €15.3 billion for the German organic market in 2022 (BÖLW) and €125 billion globally in 2021 (IFOAM/FiBL), in addition to an impressive total of 2,765 exhibitors from 95 countries at BIOFACH and VIVANESS 2023.

The BIOFACH and VIVANESS Congress, with a total of 120 professionally

polished individual sessions and high-calibre participants, attracted almost 8,000 delegates and once again proved to be a forward-looking forum for the sector. In addition to the keynote theme of "Organic. Food Sovereignty. True Prices", with up to 125 interested listeners and participants in the individual sessions, the focus was also on questions of current market developments and trends, as well as the political and legal framework. The session on the international market situation, "Global Organic Market Overview", as part of the BIOFACH Forum, drew the highest attendance in 2023 with 242 participants.

BIOFACH and VIVANESS 2024, the next event in the series, will take place at the Exhibition Centre Nuremberg

from 13 to 16 February 2024

### VOLAC INTENSIFIES FOCUS ON NET ZERO

Volac has launched a new Feed Additives division as it intensifies its focus on supporting the global animal feed industry meet the Net Zero challenge.

Head of Animal Nutrition Marketing and Sustainability, Sarah Banks, explained that the company's goal is to help the international feed industry advance efficiency. "This new Volac division will provide a platform for new product development, which will focus on improving rumen microbial fermentation, efficient livestock production and reducing emissions – allowing for greater alignment with future industry challenges. Our priority remains firmly focused



on providing technical advice, innovative products and added value services that enable the feed industry to improve livestock farming efficiency and sustainability,” said Ms Banks.

Rebecca O’Sullivan has been appointed Product Manager for Feed Additives, moving to the division from a technical business management role with Volac in Ireland.

Ms O’Sullivan will report to Ms Banks, taking on responsibility for the marketing and development of Volac’s growing range of feed additives.

“We now provide valuable scientific solutions for mycotoxin risk management, as well as pre and probiotic

yeasts, plus some exciting new products coming to the market, including phytogenics. These products will support good animal health, resilience and productivity in the ruminant and monogastric sectors, ultimately bringing improved profitability and sustainability to the feed industry,” said Ms O’Sullivan.

### AGRILEVANTE 2023: THE ORGANISATIONAL MACHINE IS UP AND RUNNING

Agrilevante returns to the international exhibition calendar and celebrates its seventh edition from 5 to 8 October at the Bari exhibition centre. The

exhibition's organising body, FederUnacoma surl, opened registration for exhibiting companies on the specially prepared on-line platform, thus starting the march towards the October event, one of the most important for the agricultural sector in the entire Mediterranean area. After the suspension of the 2021 edition due to the health emergency, the biennial Agrilevante - which has always been organised with the support of the Presidency and the Department of Agriculture of the Apulia Region and in collaboration with the Nuova Fiera del Levante - aims to confirm the results of the 2019 edition, when the number of exhibiting companies

## PURE HARVEST SMART FARMS’ FRESH PRODUCE RANGE ACHIEVES ‘PRODUCT OF THE YEAR’ ENDORSEMENT

Pure Harvest Smart Farms (Pure Harvest), a world-leading, sustainable technology-enabled agribusiness, is proud to announce receipt of the Gulf region’s ‘Product of the Year Award 2023’. The award is granted by the regional arm of the world’s most respected and comprehensive consumer research survey, conducted by researcher

partner Nielsen IQ.

Pure Harvest’s award of ‘Product of the Year’ accreditation for the entire product range is unprecedented, recognizing excellence in twenty-six (26) varieties of tomatoes, four (4) varieties of strawberries and over eight (8) varieties of leafy greens, with several new products soon to

hit the market from its newest smart farms, including capsicums, melons, blackberries and raspberries. Pure Harvest is the first-ever Controlled Environment Agriculture (CEA) company to receive the Gulf region’s award, and the only fruit and vegetable brand awarded the title in 2023.

Almost 4,000 consumers across the region participated in this Nielsen IQ panel and voted based on perceived innovation, attractiveness and purchase intention. As a symbol of its achievement and to signal to consumers the uniqueness of its products, Pure Harvest will be permitted to utilize the Product of the Year accredited stamp to support marketing its products for the next twelve (12) months. Consumers can look forward to seeing Pure Harvest’s range of products in leading retailers, hotels and restaurants across the UAE and KSA.



## GROUND-BREAKING PARTNERSHIP BETWEEN NEW HOLLAND AND EFTA

New Holland Agriculture, a brand of CNH Industrial, partnered with EFTA (Equity for Tanzania) for the acquisition of 200 tractors to assist the mechanisation of smallholder farmers in Tanzania.

A ground-breaking collaboration between the brand and the leasing company regulated by the Bank of Tanzania with the mission of financing equipment without collateral for farmers that cannot access bank financing.

The operation led to the delivery of 200 TT75 4WD tractors, to help supporting the country's 2025 vision for mechanisation, increase agricultural production and improve food security.

The transaction has been facilitated thanks to Hughes Agriculture Tanzania Ltd (HAT), New Holland Agriculture's local distributor in Tanzania, and CRDB, one of Tanzania's leading banks. HAT and EFTA have been working in partnership for over five years, but this is the first time a broader

partnership, including New Holland Agriculture and CRDB, has been formed to significantly scale up tractor access by smallholder farmers.

It is expected to be the beginning of an ongoing partnership to grow mechanization in East Africa, including in Kenya.

After the delivery of the machines, an official training program for farmers has been launched at the end of February and will continue until the end of April 2023 across several districts of Tanzania, to provide the farmers with the technical support they need to raise the bar on productivity and profitability.

Özkan Eren, New Holland Business Director, Middle East and Africa, stated "New Holland has built a strong presence in Tanzania and constantly providing crucial product improvement feedbacks. This plays a



key role to enhance New Holland's commitment to continue innovating and adapting to market demands. Through this partnership, our common objective is to provide the best possible products like TT75 tractor model and services to increase the mechanisation level of smallholder farmers in Tanzania and we are also committed to train the farmers and provide technical support they need to raise the bar on their productivity and profitability together with EFTA. It is certain that we will continue to invest in Tanzania in support of our local partners"

reached 360, representing 19 countries, and visitors from 65 countries exceeded 80 thousand. The international character is the strong point of this exhibition, which includes the active collaboration of the ICE Agency for the organisation of foreign delegations, and which offers technologies for all the main production chains of the Mediterranean and African regions: grains, olive oil, fruit and vegetables, livestock, and non-food and energy raw materials. Operators from Southern Europe, the Balkans, the Middle East, North and Sub-Saharan Africa will find a vast selection of tractors, harvesting machines, equipment, irrigation and treatment systems, and

advanced electronic devices for every type of processing and every model of agriculture in the Fiera del Levante pavilions. Along with the more than 8,000 models of machinery and equipment, significant interest will be aroused by the exhibition of prized breeds of cattle, horses, sheep, goats and poultry breeds.

### TYSON VENTURES INVESTS IN ATHIAN'S CLOUD-BASED CARBON CREDIT MARKETPLACE FOR LIVESTOCK SECTOR

Athian (athian.ai), the world's first cloud-based carbon marketplace for the livestock

industry, announces a seed investment from Tyson Ventures, the venture capital arm of Tyson Foods, Inc., one of the world's largest food companies and a recognized leader in protein. This latest investment from Tyson Ventures, along with previous investments from Elanco Animal Health Incorporated (NYSE: ELAN) and Newtrient LLC, will fast-track the launch of the first-of-its kind transactional carbon credit inset program for the livestock sector that will provide producers economic incentives for on-farm sustainability practices, while helping improve the sustainability of the food system and reduce climate warming.



“This investment from Tyson Ventures propels the development of our carbon marketplace platform forward,” said Paul Myer, CEO of Athian. “We now have investors from each segment of the livestock production value chain – farmers, packers, processors, and animal health companies – supporting sustainability practices, including the economic aspect of sustainability, which has been left out of the conversation for far too long. While no single company can solve the challenge of climate change alone, we can work together to make meaningful impacts. We will launch Athian’s carbon credit insetting platform in the second half of 2023 so that livestock farmers who prioritize measurable carbon

management practices will be able to, for the first time, earn revenue to fund those practices.”

Athian’s key mission is to help the beef and dairy value chains capture and claim carbon credits earned through sustainability efforts by aggregating, validating, and certifying, greenhouse gas (GHG) reductions, and monetizing those reductions through the sale of carbon credits. Athian aggregates data for producers of all sizes through a connected carbon marketplace, allowing beef and dairy producers to monetize and capture value from sustainability efforts, such as GHG reductions. When it goes to market later this year, Athian’s carbon credit insetting platform will allow livestock farmers who implement sustainable practices the ability to earn revenue to fund those practices.

## TADWEER AND SULO PARTNER TO DRIVE SUSTAINABLE WASTE MANAGEMENT IN ABU DHABI

The Abu Dhabi Waste Management Company (Tadweer), the sole custodian of waste management in the Emirate of Abu Dhabi, signed a collaboration agreement with SULO, one of the world’s largest producers of waste containers and smart waste solutions, with roots in France, Germany and Sweden, to explore potential opportunities to drive sustainable waste management in Abu Dhabi and beyond.

Under the terms of the agreement, the two parties will support the development of Abu Dhabi’s integrated waste management system and explore the use of recycled materials in manufacturing. The collaboration agreement

## ENHANCED CONNECTIVITY FOR REMOTE WATER LEVEL LOGGER

OTT HydroMet has added additional communication options to its water level and temperature logger, the OTT ecoLog 1000. Now equipped with low-power LTE-M (CAT M1) connectivity, the device provides water professionals with simple, fast access to their water level data.

LTE-M is a type of low-power wide area network communication technology standard for a wide range of cellular devices and services in machine (M2M) and IoT applications, such as networks of groundwater monitoring sites. LTE-M has 5G compatibility making it future proof as cellular networks evolve. Mobile devices, smart phones, and tablets operating with Android, iOS or Windows 10 are all

supported. In addition, simple local communication is available via Bluetooth.

By supporting 4G and cellular IoT transmission, LTE-M increases the speed and lowers the cost of data transmission, enabling users to conduct remote two-way operations such as configuration, network management, data download or the viewing of real-time data.

Robust, simple to install, and running on low-power with a 10-year battery life, the ecoLog 1000 has been designed specifically for long-term, unattended deployment. Enhanced connectivity further reduces the requirement for site visits, and lowers the cost of ownership.



aims to support the UAE's journey towards adopting a circular economy through providing waste pre-collection services in the UAE and other MENA markets and utilising the latest technologies. Tadweer is actively implementing future-ready waste management strategies that align with the UAE's sustainability agenda, such as deploying world-class waste management infrastructure, streamlined waste collection solutions and recycling services. Tadweer will continue to carry out on-ground activities in Abu Dhabi to foster and bolster a culture of recycling and disposing waste among communities and entities.

Recently, Tadweer signed five operations contracts with a value of over AED 2 billion on the sidelines of EcoWASTE 2023 Exhibition and Forum. These partnerships will play a key role in establishing the UAE's position as a leader in environmental conservation and resource management and support the country in creating a sustainable future for the new generations.

## **BALANCED BREEDING BRINGS IMPROVED PRODUCTIVITY & SUSTAINABILITY TO THE BROILER INDUSTRY**

Through balanced breeding and innovation, Aviagen® has delivered improved productivity and sustainability to the broiler

industry for the past two decades, and is committed to continue these efforts into the future. The company has just released an animation 'Delivering Improved Productivity and Sustainability for the Broiler Industry over the past 20 years' outlining these improvements and their concrete sustainability benefits. These breeding advantages also contribute to the achievement of the United Nations 'Sustainable Development Goals' (SDG) prioritized by the International Poultry Council, which align to Aviagen's Top Five Commitments.

The United Nations predicts a global population of 9.8 billion by 2050. The food and agriculture industry will have the responsibility to produce enough to feed our growing societies without overwhelming the planet. Poultry is a vital low-fat, high-protein, and nutrient-rich food source needed by people everywhere.

Due to great strides in biological efficiency over the years, today, fewer "inputs" than ever before are required to yield greater "output." As an example from the animation, because modern flocks are more biologically efficient, less feed is needed to grow robust birds. Since feed represents 60-70% of the cost of a poultry business, producers now can enjoy greater economic sustainability.

In addition, a better Feed Conversion leads to better nutrient utilization,

# TUTTOFOOD MILANO

## International Food Exhibition



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resulting in a 28% reduction of nitrates and phosphate excretion, thus decreasing harmful pollutants.

"Aviagen is committed to helping our customers meet the needs of an increasing population in a responsible way that is gentler on our natural environment," explained Tim Burnside, Global VP of Welfare, Sustainability and Compliance for Aviagen Group. "We invest heavily in research and development, and due to

ongoing genetic selection and field testing, gains in feed efficiency will continue, sustaining the businesses of our customers, their local societies and the planet for decades to come."

### EVONIK LAUNCHES FIRST PLANT-BASED PREMIX

Evonik aims to help keep laying hens and dairy cows healthy with a new plant-based product. The product, called

PhytriCare® IM, consists of selected plant extracts with a high flavonoid content. Flavonoids are known for their anti-inflammatory effects. The product is available immediately throughout the EU. Approvals in other countries have been initiated.

"Healthy animals are in the interest of us all," says Dr. Gaetano Blanda, head of the Animal Nutrition business line at Evonik. "The farmer benefits from higher productivity, and the consumer can enjoy meat,

## DR. FRANK HILLER TO BECOME CHAIRMAN OF THE BIG DUTCHMAN BOARD OF MANAGEMENT

After 31 years as CEO, Bernd Meerpohl decided together with the Supervisory Board and the family shareholders of Big Dutchman that the time is right for a change in top management of the Big Dutchman group. Dr. Frank Hiller will bring new and external stimuli to complement the stable and proven management team. With Bernd Meerpohl taking over as Chairman of the Supervisory Board, not only will this position in itself be secured, but Big Dutchman will visibly remain a family enterprise.

"In the past decades, Bernd Meerpohl has shaped the development of Big Dutchman and set the course for the group's future. He always had all stakeholders in mind and was incredibly committed

and dedicated to advancing the family business. The Supervisory Board and the family shareholders want to thank Bernd for all the time and effort he invested in the company and the staff to make Big Dutchman the world leader in livestock farming technology. We are very happy that Bernd will continue to share his knowledge and remain responsible for the company as Chairman of the Supervisory Board, starting 1 January 2024 after a short hiatus. The outlook for our industry is complex, but promising. Against this backdrop, we have found an experienced and competent CEO in Dr.-Ing. Frank Hiller. He will successfully lead our globally active company in the next phase," says Jürgen Steinemann, current

Chairman of the Supervisory Board.

Bernd Meerpohl explains: "Taking over my father's responsibility as CEO 31 years ago was an honour, as was advancing the company for the benefit of our customers all over the world and for the

benefit of our staff and their families. The Meerpohl family, my closest colleagues, the Supervisory Board and I believe that someone new should now take over the operational business of Big Dutchman to integrate new stimuli from the outside. Dr. Hiller's grounded approach fits us very well. With his doctor's degree in Mechanical Engineering, he brings along a more than solid foundation. In the course of his career, which included positions with some of the leaders of the mechanical engineering industry, for example Meiller, Leoni and, most recently, as CEO of Deutz AG, Dr. Hiller has gained extensive knowledge and proved that he is a team player who is very capable of leading an international company. I would like to thank Jürgen Steinemann, the Chairman of our Supervisory Board, for actively accompanying me personally as well as Big Dutchman in general these past years. I am very pleased that he will remain part of the Supervisory Board as deputy chairman. Personally, I will continue to support the company in my new position, as much as I can and in close cooperation with Dr. Hiller."



## P&G STRENGTHENS FOREST FOR GOOD INITIATIVE WITH TREE-PLANTING CAMPAIGN IN THE UAE

Procter & Gamble (P&G) accelerated its commitment to environmental sustainability at a tree planting activity attended by more than 75 employees at the P&G Dubai Mangrove Forest in Jebel Ali Wildlife Sanctuary. The event



is the latest in a series of innovative ecological initiatives as part of P&G's Forest for Good initiative in line with the Dubai 2040 Urban Master Plan which aims to expand green spaces to enhance the population's well-being.

Himani Maharshi, HR Head, Middle East, Global Entrepreneur Markets & Sub-Sahara Africa at P&G said: "We are excited to participate in a tree planting event as a team and help bring nature back to life. P&G has undertaken multiple initiatives to help protect, improve and restore nature around the world. The #ForestsForGood program aims to inspire a movement to guide, educate and call for sustained action

when it comes to environmental consciousness. P&G is committed to making a difference across its environmental footprint including becoming carbon neutral within this decade."

Since last year, P&G has accelerated its commitment to strengthen progress towards its global Ambition 2030 goals. So far, we have planted over 34 forestation programs across the UAE, with more planned in future and across the region. This latest endeavour aims at engaging employees via the program to create a wider footprint for a greener future. Forests for Good is P&G's initiative to actively protect nature by planting trees that

help improve local ecosystems in line with the company's global Ambition 2030 goals.

P&G has also set an ambition to achieve net zero greenhouse gas (GHG) emissions across its operations and supply chain, from raw material to retailer, by 2040 globally. Its Climate Transition Action Plan covers the entire lifecycle emissions of its products and packaging, across supply chain, operations, consumer use of our products, and product end of life. This includes dedicated interim goals for 2030 to make meaningful progress this decade across P&G's operations and consumer use phase of its products.

eggs, or dairy products safe in the knowledge it is coming from healthy animals."

Since the prophylactic use of antibiotics has been banned in Europe, many farmers are looking for alternative solutions to keep their animals healthy and productive. In addition to probiotics, various other product classes have become established, including phytochemicals. Evonik Animal Nutrition adds plant-based PhytriCare® IM to its probiotics-based Gut Health Solutions portfolio.

Farm animals - like all living creatures - are exposed to a

variety of stress factors and respond by activating the body's defense mechanisms. If the stress continues at a higher level for a longer period, it can lead to chronic inflammation. As a result, animal welfare suffers. The animal then uses an increased share of its energy and nutrients for the immune system rather than for beneficial activities, such as growth and performance - sometimes for months or years. Consequently, production efficiency decreases and the animal's ecological footprint increases.

"PhytriCare® IM was

developed to prevent an overshooting of inflammatory reactions in laying hens and dairy cows," adds Nicholas Guthrie, head of EMEA Region & Global Key Accounts at Animal Nutrition. "After all, female animals are particularly stressed by reproductive processes anyway."

Evonik and Dr. Eckel rely on the natural anti-inflammatory effect of flavonoids in PhytriCare® IM. Some of these secondary plant constituents, numbering around 8,000, have been shown to influence certain biochemical processes in animals that are associated



with inflammation.

PhytriCare® IM is a blend of carefully selected plant extracts covering a wide range of flavonoid subclasses. This blend targets a broad spectrum of inflammatory pathways to modulate, but not suppress, the inflammatory response.

### NOVUS ACQUIRES BIOTECH COMPANY AGRVIDA TO DEVELOP NEW FEED ADDITIVES

Global animal health and nutrition company Novus International, Inc., announced its acquisition of biotech company Agrivida Inc. Through the purchase, Novus takes ownership of the proprietary INTERIUS™ technology Agrivida developed to embed feed additives inside grain.

This move by Novus comes two years after it began a

commercial partnership with Agrivida to support the sale of the start-up's flagship product, GRAINZYME®.

"Since December 2020, we've taken the time to understand and explore what INTERIUS™ technology is capable of," says Novus President and CEO Dan Meagher. "With this technology we believe we can revolutionize the feed additive industry through the expression of high-value, functional proteins inside grain, providing new products that are sustainable, both environmentally and operationally."

While the category of functional proteins includes enzymes, which Agrivida has already accomplished through GRAINZYME®, the Novus Innovation team is expanding the product offerings to include antibodies embedded in grain.

"Single-domain antibodies present an opportunity to naturally address the health challenges producers face in antibiotic-reduced and antibiotic-free production. These antibodies are a challenge to produce cost-effectively and deliver to the animal in a sustainable way," says Novus Vice President and Chief Innovation Officer Al Zimmerman. "INTERIUS™ technology addresses these challenges by removing costly fermentation and coating processes as well as offers the potential to stack different antibodies and/or enzymes in a single corn product solution for the animal. Traditionally these efforts would require blended products, which would mean more processing and cost. The INTERIUS™ technology delivers this benefit in a single ingredient - corn."

## 34,000 VISITORS TO 2<sup>ND</sup> SEASON OF FARMERS' SOUQ INITIATIVE

Dubai Municipality concluded the second edition of Farmers' Souq Initiative with a total of 33,921 visitors. The event, which was organised at the Nakheel Park between November 19, 2022, and March 18, 2023, served as an agricultural and investment platform that brought together all the Emirati farmers under one roof to sell locally produced farm products directly to consumers. Through this initiative, Dubai Municipality aimed to boost customers' trust and confidence in local agricultural products as well as draw attention to the development achieved by the local agricultural sector.

Ahmed Al Zarooni, Director of the Department of Public Parks and Recreational Facilities in Dubai Municipality, highlighted the crucial role of Emirati farmers and small and medium-enterprise owners (SMEs) in making the second edition of the Farmers' Souq Initiative

successful.

Al Zarooni emphasised that this initiative reflects the Municipality's efforts to support the agricultural sector by offering diverse opportunities for the participants to trade.

"The initiative further aimed at raising awareness on the agricultural diversity in the Emirate, significance of food security of the city of Dubai, as well as the need to work continuously to achieve it and support it on the widest scale. This comes in light of the wise leadership's continuous support for agriculture and local production in the emirate, in order to enhance the sustainability of the sector, and increase the farmers' contribution to increasing the market share of local products," he



said.

A total of 50 farmers and SME owners participated in the event and displayed their goods which included vegetables, fruits, dairy products, honey, dates, and other household products. The Souq also featured around 30 kiosks to sell food and beverages.

Furthermore, the initiative held 69 workshops and activities throughout the four months of the Souq, including musical and other entertainment performances.





# REGISTRATIONS ARE OPEN FOR FLOWERTRIALS 2023

MUST-VISIT EVENT FOR POT AND BEDDING PLANT PROFESSIONALS

**F**lowerTrials® once again welcomes ornamental horticulture professionals from around the world in week 24. From 13 to 16 June, no fewer than 60 breeders of pot and bedding plants will present their innovations, impressive product ranges and creative concepts. For growers, FlowerTrials® showcases the latest novelties for the upcoming season with experts on hand to provide cultural support. For wholesalers and retailers, the event is an outstanding opportunity to meet the breeders, examine the top varieties and have the opportunity to view and influence trends.

Everyone planning to visit FlowerTrials should register in advance at [www.flowertrials.com](http://www.flowertrials.com). One central registration covers all locations. Registered visitors will receive regular information and newsletters with the latest breeding innovations.

## Iconic event thanks to open-house concept

FlowerTrials® remains a key event in the pot and bedding plant scene: in 2022 it attracted visitors from 89 countries. The success of the event is due to its informal open-house concept: breeders will open their doors at 29 different locations. Each venue is home to a single exhibitor or a group of companies sharing joint facilities.

## Worldwide pot and bedding plant industry represented

The following companies will once again be present at FlowerTrials®:

### Middle Region (Netherlands)

ABZ Seeds, Agriom, AllPlant Young Plants, Benary Samenzucht, Brandkamp, Cohen Propagation Nurseries, De Zonnebloem, Decock Plants, Dümmer Orange, Elsner pac Vertriebsgesellschaft, Graff Breeding, Gruppo Padana, Hem Genetics,

HilverdaFlorist, Hishtil, HM. Clause, HOKO Breeding, Hortinno, Jaldety Plant Propagation Nurseries, Kientzler Jungpflanzen, Koppe Begonia, Lazzeri, Marathon Plants, Meilland International, MNP / Suntory, Morel Diffusion, Prudac, Royal van Zanten, Schoneveld Breeding, Takii Europe, Vitroflora, Volmary, Walter Blom Plants.

### South Region (Netherlands)

Anthura, Beekenkamp Plants, Danziger – Imperial plants, Evanthis, Floranova, Florensis, Floritec, Graines Voltz, Green Works, Hendriks Young Plants, HiBreeding, Jonge Planten Grünwald, KP Holland, P. v.d. Haak Handelskwekerij, PanAmerican Seed, Queen® Genetics, Sakata, Schneider youngplants, Selecta one, Sentier, Syngenta Flowers, Van den Bos Flowerbulbs.

### German Region (Germany)

Bruno Nebelung GmbH, Danziger – Bongartz, Dümmer Orange, Hassinger Orchideen, Westhoff.

**"EVERYONE PLANNING TO VISIT FLOWERTRIALS SHOULD REGISTER IN ADVANCE AT [WWW.FLOWERTRIALS.COM](http://WWW.FLOWERTRIALS.COM)"**





## AFTER THREE YEARS WITHOUT IPM ESSEN: THE WORLD'S LEADING TRADE FAIR FOR HORTICULTURE INSPIRED THE INTERNATIONAL GREEN SECTOR



“The joy that IPM ESSEN could finally take place again could be felt in every hall and at every stand”, Oliver P. Kuhrt, CEO of Messe Essen, sums up. The reunion of the green sector turned out to be more international than expected. Over 40,000 trade visitors from more than 100 countries came to Messe Essen to exchange information and to place orders. There was a wide range of products: 1,330 companies from 46 nations presented their innovations and new products in the fields of plants, technology, floristry and garden features from 24 to 27 January. Climate plants, environmentally friendly packaging and peat alternatives were particularly on trend.

“The importance of IPM ESSEN for the global green industry remains high even after the pandemic. The internationality of the trade audience is close to the 2020 level. In view of the dynamic



market situation of the last few years and the travel restrictions that are still noticeable, this is a great result”, continues the tradeshow CEO Kuhrt. The proportion of trade visitors from abroad was 33 percent (2020: 40). At 66 per cent, the proportion of exhibiting companies from abroad was even four percentage points higher than in 2020. Eva Kähler-Theuerkauf, President of the North Rhine-Westphalia



Horticultural Association and Chairwoman of the IPM Advisory Board added: “IPM ESSEN 2023 was a complete success. It was good to meet again in our gardening family. The fair also met with great interest internationally. Anyone who was there neither as an exhibitor nor as a visitor definitely missed out a lot.”

The 39<sup>th</sup> International Plant Fair in Essen once again proved to be a high profile





ordering platform: around 30 percent of visitors placed orders directly, and more than two thirds plan to conclude deals after the fair on the basis of the contacts made and information received.

"We look back on intensive and successful days at the fair. In all halls, one could vividly experience what horticultural entrepreneurship is all about – be it new technology, new varieties or

new business ideas. This is how we can tackle the challenges of the industry. For the ZVG, after the pandemic break, it was an absolute must to be there. The reunion was important for everyone", summarises Jürgen Mertz, President of the Central Horticultural Association (ZVG), the conceptual sponsor of IPM ESSEN.

Anniversary in 2024, 90 per cent of the trade visitors

were satisfied with the range of products and services at IPM ESSEN 2023. 91 per cent are planning a repeat visit, 92 per cent recommend IPM ESSEN to others. On the part of the exhibitors, 95 percent plan to participate again. The next opportunity will be from 23 to 26 January 2024, when the 40<sup>th</sup> IPM ESSEN will be launched at Messe Essen with a special anniversary programme.





## VIV ASIA 2023: A RESOUNDING SUCCESS UNDERPINNING THE LEADING MARKET POSITION

The event delivered a dynamic, expansive marketplace to 47,527 attendees which featured Feed to Food products and services from more than 1,186 global manufacturers and suppliers representing over 57 countries.

**V**IV Asia 2023 concluded successfully, as a robust platform for B2B international business. Over three days, the show facilitated face-to-face interactions, networking, knowledge-sharing, and a lively marketplace at Bangkok, Thailand. With 47,527 visitors from 112 countries, the event maintained its stable attendance and even slightly exceeded the previous edition. Despite the global circumstances and the past three long years of Covid 19 restrictions, the show's international appeal for the Feed to Food industry remained evident, confirming its significance as a World Expo.

The event featured more than 1,186 exhibitors from 57 countries,

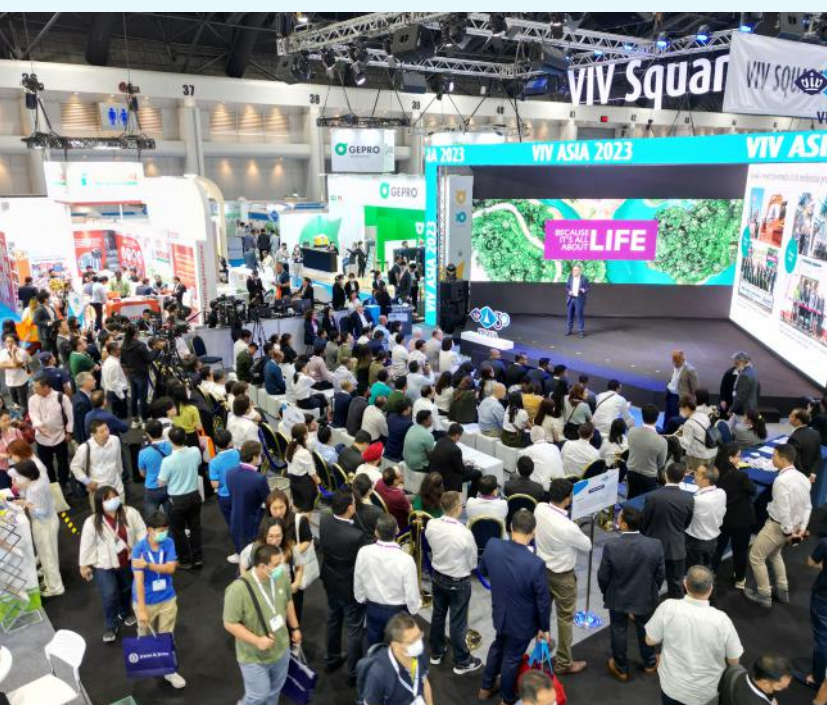
representing five continents, showcasing the latest developments in their respective sectors in the three Challenger halls at Thailand's mega-venue IMPACT, in a collective of more than 31,544sqm exhibiting space. In addition, the co-location with Meat Pro Asia, the premier trade platform for processing and packaging solution in the meat industry consolidating the Feed to Food industry under one roof. The animal protein sector responded positively to this powerful co-location, resulting in high attendance. This achievement represents another significant milestone in the VIV global series of events. "VIV Asia is the

first VIV show in 2023 and it represents – and rightfully so – our goal to connect the markets, and enhance industry trade both locally and globally," stated Birgit Horn, Managing Director of VIV Worldwide, during the event.

"It's always pleasing when a new trade fair is warmly received, and this was certainly the case with this first edition of Meat Pro Asia," adds Mr Richard Li, Executive Director, Messe Frankfurt (HK) Ltd. "More importantly, however, it was encouraging to see a high number of energetic business discussions taking place throughout the fairground. From the feedback we've







received, it's clear that holding these two fairs concurrently is popular among buyers and exhibitors alike – it consolidates so many resources together in one place. I think everybody will conclude that Meat Pro Asia is a valuable new addition to the trade fair calendar in South East Asia.”

Looking ahead, VIV Asia will return 12-14 March, 2025, carrying on the tradition of providing a premier platform for the animal protein industry to connect, learn, and innovate. VIV Asia will undoubtedly be another landmark event in the VIV series of events around the world, with a strong commitment to delivering a top-quality trade show and knowledge programs.





*The Italian Minister of Agriculture, Food Sovereignty and Forests, H.E. Francesco Lollobrigida, and Matteo Zoppas, newly elected President of the Italian Trade Agency, inaugurated the Italy Pavilion at Gulfood*

## ITALIAN AGRI-FOOD EXPORTS TO THE UAE GREW BY 46% REACHING A RECORD VALUE

**T**he Italy Pavilion and the Italian Food Lab at Gulfood 2023 were inaugurated by Matteo Zoppas, President of the Italian Trade Agency, together with H.E. Francesco Lollobrigida, Italian Minister of Agriculture, Food Sovereignty and Forests.

During the inauguration Matteo Zoppas said: "we are very proud that the export of Italian agri-food products to the UAE have reached double digit growth in 2022, with the larger increase among the whole products exported by Italy to the UAE: + 46%.

With the motto Sustainability is SustainabITALY, this year we are committed to boost even more "sustainable Italy-UAE partnerships" also in the food sector. This would represent also be one of our concrete contributions for the Agenda of next COP28 which will be host in the UAE later this year."

As a matter of fact, organic agriculture plays a fundamental role in helping to preserve soil fertility and in contrasting climate change, the environment and the loss of biodiversity. With 17.4% of the total cultivation area dedicated to bio-agriculture (2.1 million

***"THE EXPORT OF ITALIAN AGRI-FOOD PRODUCTS TO THE UAE HAVE REACHED DOUBLE DIGIT GROWTH IN 2022, WITH THE LARGER INCREASE AMONG THE WHOLE PRODUCTS EXPORTED BY ITALY TO THE UAE"***

hectares, + 79% from 2012), Italy is one of the European countries with the highest number of companies involved in the organic sector – over 80,000.

Over the last decade Italian agriculture recorded a drop of -32% for the use of phytosanitary products, confirming its position as the most sustainable country in Europe. The Italian industry with 30 M equivalent tons of CO generated is more virtuous than any other EU countries too.



*The Italian Minister of Agriculture receiving a copy of magazine from M. Matt, editor of Gulf Agriculture*



# MOU SIGNING

21 FEBRUARY 2023 • GULFOOD, DUBAI

Gulfood Review



**Fahad Al Kitbi, Chairman of Ostrich Oasis, and Riyadh Jabbar, Director of Al Tayeb International, a division of Lulu Group sign the agreement in the presence of Sheikh Ahmed bin Hamdan Al Nahyan, Yusuff Ali MA, Chairman and Managing Director of Lulu Group International**

**L**ulu Group and Ostrich Oasis announced the signing of a memorandum at Gulfood 2023, the world's biggest food and beverage trade show concluded recently at the Dubai World Trade Centre.

The MoU signed between Fahad Al Kitbi, chairman of Ostrich Oasis, and Riyadh Jabbar, director of Al Tayeb International, a division of Lulu Group, is a great turning point for the future. The grand event happened in the presence of Sheikh Ahmed bin Hamdan Al Nahyan, Yusuff Ali MA, chairman and

managing director of LuLu Group International, along with other top officials from both companies.

Under the agreement, Ostrich Oasis will provide ostrich products in the UAE and the rest of the gulf region

and expand the business to a larger scale.

"Indeed, we are pleased to announce our tie-up with Ostrich Oasis, an Emirati company based in Al Ain, committed to promoting locally produced ostrich meat and related products to our hypermarkets in the UAE and the Middle East region", said Yusuff Ali MA.

Today, ostrich farms are the most profitable agricultural projects. They are often called "the farms of the future" because of their high-profit potential and large variety of possible products. Ostriches are raised commercially for their meat, hide and feathers.

## LULU GROUP SIGNS MOU WITH OSTRICH OASIS AT GULFOOD 2023



**Gulf Agriculture magazine managing editor M Matt (middle) with Riyadh Jabbar (left) and Shameem Sainulabdeen (right) at Lulu Group stand during Gulfood 2023**



# AGMATIX PARTNERS WITH NASA HARVEST TO SUPPORT THE UPTAKE OF SUSTAINABLE AGRICULTURAL PRACTICES, PROMOTING RESILIENT AGRICULTURE WORLDWIDE



*Agmatix is working with farmers in India and Brazil to collect ground sampling data which will be used to quantify the impact of deploying conservation practices at the field level.*

**A**gmatix, a start-up AgTech business specializing in turning agronomic big data into powerful models and insights, announced a partnership with NASA Harvest - NASA's global Food Security and Agriculture Consortium - to support crop production in a sustainable way at the field level and mitigate the impact of climate change.

A combination of ground sampling and remote sensing data will be used to support

farmers in their transition toward sustainable agriculture. The methodology developed within this partnership will track farmer efforts to improve conservation management and guide them to improve their sustainability levels.

"According to the World Economic Forum, sustainable agriculture practices must triple in order to prevent climate change. Currently, adoption is hindered by a lack of consistent and acceptable measurements at scale. Our collaboration will promote

resilient agriculture beginning with smallholder farms in India and commercial farms in Brazil, and lead to further expansion worldwide," comments Ron Baruchi, CEO of Agmatix.

"NASA Harvest is excited to partner with Agmatix to advance the use of satellite-based information to help inform on-farm decisions which can ultimately result in increased resilience while reducing waste" comments Inbal Becker-Reshef, NASA Harvest Director.

NASA Harvest will provide its expertise on agricultural remote sensing and leverage tools developed by the consortium, which will then be combined with field data from Agmatix and processed using a proprietary artificial intelligence (AI) algorithm. These data-driven insights can help farmers make field-level decisions that impact sustainability most effectively, such as cover crop selection and fertilizer application.

"Our collaboration will help food manufacturers meet consumer expectations for more sustainably sourced products," comments Ron Baruchi, CEO of Agmatix.

**For more information, visit  
[www.agmatix.com](http://www.agmatix.com)**



ESA Sentinel 2 image, March 2023, Maharashtra, India



Landsat 9 image, March 2023, Rio Grande do Sul, Brazil

*Satellite imagery alongside ground measurements will be analyzed using the Agmatix platform, to inform sustainable on-farm decisions.*





# NITROSTIM: DISCOVER THE INNOVATIVE BIOSTIMULANT

**W**hat is Nitrostim? Nitrostim is a biotechnology product, the result of Humofert's research. It is a microbial preparation that stimulates plant growth due to the activity of specific nitrogen-fixing bacteria that have the ability to penetrate the above-ground parts of plants (phyllosphere) and become endophytes. It is important to say that Nitrostim can be applied to all crops (Wheat, Maize, Cotton, Oats, Alfalfa, medicinal plants, rice, potatoes, etc.) by spraying the leaves of the plants in the initial stages of their growth.

## Mode of action

The endophytic Nitrogen-fixing bacteria of the phyllosphere, after binding the atmospheric Nitrogen, convert it into a form immediately assimilable by the plants at a constant rate, ensuring fast, intense and balanced growth. In addition, they produce phytohormones intracellularly, which stimulate the functions of plant cells and "unlock" the potential productivity of plants prescribed by their DNA. Nitrostim's combination of nitrogen fixation and

biostimulation results in an impressive increase in yields with low cost and environmental safety.

Nitrostim's Nitrogen Fixing Bacteria:

1. Provide plants with an internal source of Nitrogen, which produces Nitrogen in a form immediately absorbable by plant tissues.
2. Continuously supply Nitrogen to the plants, as the cycle of Nitrogen fixation can continue during the biological cycle of the plants.
3. Produce growth hormones (eg auxins) which stimulate and promote growth.
4. Increase the uptake of nutrients from the foliage.

## Benefits of Nitrostim

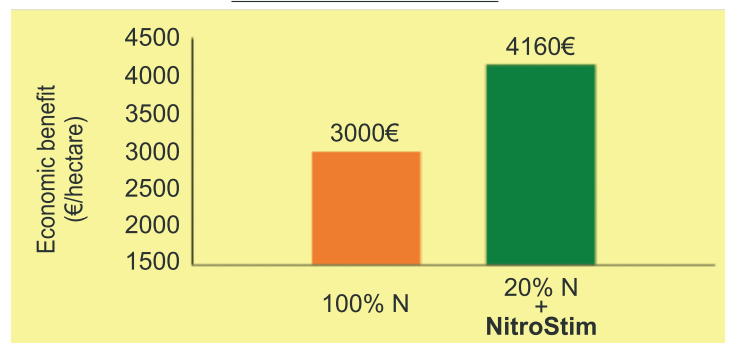
- Stimulates vegetative growth
- Increases performance while reducing production costs
- Strengthens plants against adverse environmental factors such as drought, salinity, etc.
- Improves plant resistance

against biotic stressors

- It reduces the use of Nitrogen fertilizers while in some cases it can completely replace it
- Contributes to the reduction of nitrate pollution caused by the use of chemical fertilizers

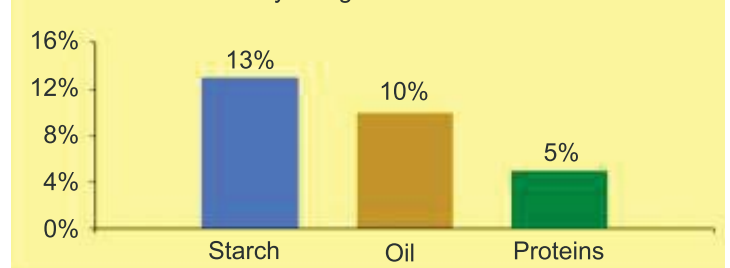
The diagrams show experimental results obtained after experiments of the Agricultural University of Athens.

## Increase in income



The increased crop yield resulted in a 39% increase in revenue.

## Increase of the qualitative characteristics by using NitroStim



For more information, visit  
[www.humofert.gr](http://www.humofert.gr)





## ULTRAPURE PEROXIDE LEADS TO LOWER PLANT MORTALITY AND INCREASED DISEASE CONTROL COMPARED TO MARKET STANDARD

**H**ydrogen peroxide ( $H_2O_2$ ) is a highly versatile and sustainable molecule. It is widely used in agriculture to treat irrigation water and protect crops. As the  $H_2O_2$  molecule is essentially water with an extra oxygen atom, there are no dangerous byproducts following use, making it particularly suitable for edible (including organic) crops. As an added bonus, the oxygen in hydrogen

peroxide is released upon use, increasing dissolved oxygen levels in irrigation water and soil.

### **Industrial peroxide vs Peroxide UltraPure™**

There are however some drawbacks in utilizing industrial-process based hydrogen peroxide in agriculture. In the traditional supply chain, industrial hydrogen peroxide is produced in large manufacturing plants, at high concentrations, requiring stabilizers that minimize losses of hydrogen peroxide during transport and storage. In contrast, Peroxide UltraPure™ is generated directly on-site through a patented electrochemical process that yields the highest

purity available in the market, >99.999%.

### **Growers report lower disease pressure and plant mortality**

In order to demonstrate the positive effects of Peroxide UltraPure™ versus industrial peroxide, a comparative study was carried out by growers representing different crops, irrigation systems and greenhouses. These included a strawberry propagator, a macadamia trees nursery (both using micro-sprinklers and foggers), a lettuce grower with drip irrigation and water recirculation, as well as a hydroponics cucumber grower with drip irrigation. In all these cases growers had extensive experience with



industrial peroxide, and switched either their whole or part of their facility to Peroxide UltraPure™. Dosing regimes and concentrations were kept at the same levels to provide a fair comparison. The results from these controlled tests are summarized in Table.

**Peroxide UltraPure™**  
Peroxide UltraPure™ is intrinsically stable; without requiring any addition of stabilizers, it is stable for up to 6 weeks in an agriculture facility. Peroxide UltraPure™ is accordingly very safe for agriculture use, as there are zero residues that can have detrimental effects on crops, no risk of overdosing to hazardous levels, and no buildup of stabilizers with continued use or recirculation. Additionally, the use of Peroxide UltraPure™ eliminates the occupational hazards involved in dealing with high-concentration bulk peroxide. Finally, Peroxide UltraPure™ is highly sustainable – it is made directly on site from only water and electricity, without any chemicals inputs; does not require transportation from remote production facilities, and can reduce carbon emissions by

up to 50% when using standard EU grid, and up to 100% when coupled to renewable sources.

**Peroxide UltraPure™ benefits observed in the field**

Growers observed visible differences after switching to Peroxide UltraPure™.

- Improved oxidizing ability: Growers reported a stronger effect on plant diseases such as pythium. We attribute this to Peroxide UltraPure™ not containing any stabilizers that may limit its oxidizing strength.
- Lowered mortality rates: Growers consistently reported lower crop mortalities when using Peroxide UltraPure™. Maintaining the substrate and root zone free of stabilizer accumulation enables improved distribution of water and fertilizer throughout the whole root zone and prevents buildup of osmotic pressure. This leads to improved plant health and vigor, and results in lower mortalities.
- Improved crop uniformity: Keeping water free of foreign salts and the superior efficacy of Peroxide UltraPure™ against blockages in the emitters helped growers achieve a more

| Customer               | Crop                     | Irrigation system                         | Benefits of switching to Peroxide UltraPure™ from industrial peroxide |
|------------------------|--------------------------|-------------------------------------------|-----------------------------------------------------------------------|
| Strawberry propagator  | Strawberry seedlings     | Micro-sprinklers                          | Decreased crop mortality from 26 to 12 %                              |
| Macadamia tree nursery | Macadamia tree plantlets | Micro-sprinklers                          | Decrease crop mortality from 15 to 6 %                                |
| Cucumber greenhouse    | Cucumber                 | Drip irrigation                           | Grower reported >97% decrease in pathogen levels.                     |
| Lettuce greenhouse     | Lettuce                  | Drip irrigation, with water recirculation | Decreased biofilm levels in substrate, improved crop uniformity       |

*Table: Growers of different crops have reported positive effects of switching from industrial peroxide to Peroxide UltraPure™*

uniform and predictable crop.  
In addition to the agronomical benefits reported above, Peroxide UltraPure™ also improves farm safety – it is generated without any chemical inputs at safe concentration levels. The Peroxide UltraPure™ on-site generation process is completely autonomous, and eliminates dependance on external hazardous supplies that require dedicated storage and handling.  
Overall, the improved plant health and lower mortality rates achieved with Peroxide UltraPure™ represent a strong positive financial impact for agricultural facilities, while at the same time improving predictability, stability, safety and sustainability of the operations.

**For more information, visit [www.hpnow.eu](http://www.hpnow.eu)**

**Industrial Peroxide**



**Peroxide UltraPure**





## NEW PRIVA IRRIGATION MEASUREMENT HELPS GROWERS TO IMPROVE CROP DEVELOPMENT

Careful water management will strengthen any horticultural business both in the short and long term. That is why Priva introduces an entirely new irrigation measurement system that provides real-time insight into plant water uptake and evaporation. Priva Irrigation Measurement enables growers to optimize their irrigation strategy to increase yield and crop quality while using resources more efficiently.

In developing Priva Irrigation Measurement, Priva combined its many years of expertise in smart irrigation management & sensing to create an entirely new irrigation measurement solution. By continuously measuring plant weight, drain water quantity, nutrient content (EC) and acidity (optional) Priva Irrigation Measurement gives the grower maximum control down to the last drop of every irrigation cycle and highly valuable real-time insights into crop health &

development via a cloud connection.

### **Improve precision and timing**

Better precision and timing of irrigation will increase crop production and quality while reducing resource use such as fertilizers and water. An optimal balance between oxygen and moisture level in substrate results in healthy root development. Priva Irrigation Measurement can be equipped with a pH sensor (optional) to ensure a stable pH at the root environment. This is necessary for plants to better absorb essential minerals, which affects the vitality and taste of your crops.

### **Seamless connection with Priva control software**

Priva Irrigation Measurement connects seamlessly with Priva Moisture Balance Module/Root Optimizer. The improved measurement accuracy and easy installation makes extending the Priva Connex or Compact CC process computers with these

control modules more attractive, because it further enhances your irrigation system by making it even smarter, safer and more sustainable.

You can see all the sensor measurements clearly in Priva Operator, the online application that enables you to access your greenhouse data and settings from any smart device, in real-time. Via a cloud connection, you have 24/7 insight into your measurements and your data is safely stored.

### **Easy to install & maintain**

Specially developed Priva Installation & Maintenance software helps installation partners through visualizations and step-by-step guides to get Priva Irrigation Measurement up and running smoothly, while minimizing downtime. Both Priva Irrigation Measurement and Priva's new Weather station Pro 21 use low-maintenance and reliable state-of-the-art sensor systems and provide reliable and future proof monitoring solutions for successfully growing a crop.

### **Priva water management systems**

In an environment where healthy growth of crop and company takes center stage, it is important that the various water flows are optimally controlled, and that the correct quantities of fertilizers are administered at the right time. The water systems developed by Priva enable growers to efficiently dose high-quality irrigation water and to recirculate it safely.

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**For more information, visit**  
[www.priva.com](http://www.priva.com)



# UAE-BASED COMPANY INCREASES AGRICULTURAL YIELDS OF OVER 30% ONLY WITH OXYGEN NANOBUBBLES

**H**omeport Water Solutions is a UAE-based company that is revolutionizing the agriculture industry with their nanobubble technology. By dissolving large amounts of oxygen in water, their chemical-free water treatment enables farmers to increase crop yields by up to 60%, even in harsh desert climates.

“I think that is quite possible that the Homeport nanobubble technology could very well rank as one of the most important discoveries in this century” says Randall P. Niedz – Head of Agricultural Research, United States Department of Agriculture.

The use of oxygen nanobubbles not only improves crop yields but also helps to conserve water

resources and reduce the environmental impact of agriculture. It can also reduce the need for harmful chemicals such as fertilizers, pesticides, and herbicides, leading to cleaner waterways, healthier ecosystems, and a more sustainable approach to agriculture.

Homeport achieves:

- Significant reduction in biofilm and algae within irrigation lines and tanks
- Reduced fertilizer costs
- Significant increase in crop yields
- Improved groundwater usage for agricultural use.

Homeport's Oxyfusion units are equipped with oxygen generators that produces 96% pure oxygen. Additionally, these machines feature advanced remote monitoring

systems that measure water quality and monitor machine performance in real-time. Notably, all Homeport machines consume minimal power and can even be powered by solar energy.

Since 2018, Homeport Water Solutions has been working closely with government institutions such as the Dubai Municipality to bring their innovative technology to the market.

Their commitment to reducing the environmental impact of agriculture while improving crop yields is truly impressive, and they are at the forefront of this movement.

**For more information, visit [www.homeport.global](http://www.homeport.global)**





Tomatoes with Waterboxx



Cucumber Waterboxx 6 weeks after planting



Pumpkin in Waterboxx 6 weeks after planting

## DUTCH COMPANY GROASIS HAS UNIQUE TECHNOLOGY TO REFOREST DEGRADED LAND AND REVERSE DESERTIFICATION

**T**he Groasis Waterboxx is an effective solution to grow trees, bushes and even vegetables in deserts. This intelligent bucket, or plant cocoon, functions as a plant incubator,

sheltering the sapling from the elements while collecting dew and rain. Water is fed to the young plant like a slow-releasing water battery. Groasis' intelligent bucket doesn't require energy or

maintenance, and has been successfully used to bring back biodiversity in the Gulf region and the wider Middle East.

Groasis was founded by Pieter Hoff. He sold his flower bulb



business in 2003 because he saw that the world was being destroyed by deforestation and excessive (ground) water use for irrigation. He developed products that make it possible to plant trees, shrubs and vegetables on degraded land, without water-wasting (drip) irrigation. The re-useable Waterboxx, now in its 10<sup>th</sup> generation, has been used to plant over 2 million trees in 55 countries. Pieter passed away in 2021 and his son Wout is now leading Groasis.

## Imitation of nature

The Groasis Waterboxx creates the perfect micro climate for a young tree. It provides sufficient water for the tree to survive, but not so much that it thrives. The roots of the trees grow deep and strong, at a rate of 0.5 to 1 centimeter per day. After a year they are 2 to 4 meters deep and the tree finds sufficient capillary water to survive without the Waterboxx. The Waterboxx is then removed and used to plant the next set of trees. Each Waterboxx can thus be used to plant up to 20 trees!

The water savings from using Groasis' Waterboxx are more than 90% compared to other methods, such as drip



irrigation. Trees planted with the Waterboxx do not require any ongoing irrigation and the average survival rate is in excess of 90%. In many places, trees planted with the patented Waterboxx also grow faster.

The Groasis Technology has been successfully implemented in 55 countries around the globe and makes it possible to restore nature and increase biodiversity on degraded lands, reducing sand storms and erosion, and halting desertification of precious land.

Countries, companies, and

NGOs use the Waterboxx to diversify their local economy by generating jobs for planting, maintaining, and harvesting trees, and for processing the harvest in related industries. By planting productive trees and vegetables, countries can become self-sufficient for food production – and create sustainable food production systems. Use the Groasis Technology to be a leading example of sustainable regeneration of degraded land and gain world-wide publicity.

**BRILLIANT  
TRIPLE NINETY  
BENEFIT  
DESIGN: 90%  
LESS WATER,  
90% SURVIVAL  
RATE, 90%  
LOWER COST**

**For more information, visit  
[www.groasis.com](http://www.groasis.com)**

*Some boxes are covered with sand but the water in it cools the soil down below and the tree grows well.*



March-April 2023

*Some boxes are covered with sand but the water in it cools the soil down below and the tree grows well. Kuwait is not only one of the hottest areas and has one of the highest radiation on Earth.*



[www.gulfagriculture.com](http://www.gulfagriculture.com) | Gulf Agriculture 33



# FRESH HOPE FOR MIDDLE EAST GROWERS IN FIGHT TO RESOLVE WATER CRISIS

A UK crop input specialist has created a cutting-edge technology to help solve the water shortage crisis in the Middle East by slashing billions of litres of water from use in agriculture.

Engage Crop Solutions has developed a transformational water technology called Aqualatus that allows growers to cut their water use by half while still maintaining crop quality.

The freshwater table in the Middle East is dropping by one-metre a year and the region loses an equivalent amount of water to the Dead Sea each year – that's around 180 billion litres of water.

Experts predict the region will run out of water in less than 50 years at the current rate of use. As agriculture accounts for around 85% of water use in the Middle East, Aqualatus could save as much as 76 billion litres of freshwater a year alone. This adds up to a potential financial saving of \$135bn for agricultural businesses.

With food security back at the top of the agenda, Aqualatus can ensure growers and Governments can continue to feed the growing population in the region while still working to address one of the biggest challenges facing the Middle East, the diminishing water reserves.

A leading agricultural engineer that works across 14 countries in

the Middle East, Adnan Zurba, has used Aqualatus on a range of crops.

He says: "We are in the red zone. This region faces a lot of stresses, from the heat to the soil quality but, the greatest challenge for agriculture in the Middle East is the water shortage. Aqualatus solves the problem and could be a critical part of the solution needed for this region.

"We've run trials across this region and it has proved to be a magic product, saving huge quantities of water while still delivering the crops we need.

"The war in Ukraine has cast the spotlight on the importance of food security in the region and we must find ways to grow the food we need while still protecting the precious reserves of water we have.

"We are on the brink of a green revolution, but all of the crops we need to feed people in this region require huge quantities of water. Aqualatus will cut the water used by agriculture in half and that will have a massive impact on the future of the region."

Aqualatus is applied to irrigation systems and is a sophisticated blend of liquid polymers which contain billions of microscopic structures that adhere to soil particles and slow the gravitational movement of water and promotes lateral movement, thereby increasing the moisture-holding capacity of the soil.

Surface runoff and evaporation are



almost completely eradicated and gravitational movement is dramatically slowed. Reducing this natural water loss allows for irrigation volumes to be much lower and timings to be shorter as the soil is more retentive.

In ten years of trials across the Middle East, Aqualatus has proved to cut water usage by 50% while maintaining or even improving plant health and crop yields.

Managing Director of Engage Crop Solutions, Peter Bleazard, says: "Water has been dubbed the new 'blue gold' in the Middle East because the crisis is so severe.

"We have worked for 10 years to develop Aqualatus and we believe it should be a key part of the solution, ensuring agriculture can dramatically cut the amount of water it needs and helping to ensure water remains available to everyone.

"By using Aqualatus, growers can confidently cut their irrigation cycles by half and still see exceptional results without any loss of crop development, yield and quality. The technology also ensures farmers and growers can make savings in fertiliser and energy costs too by the reduction in irrigation cycles and helping to improve the soil quality."

**"FOR THE MIDDLE EAST, AQUALATUS COULD BE TRANSFORMATIONAL IN DELIVERING WATER SECURITY WHILE ALSO ENSURING FOOD SECURITY THROUGH CROP QUALITY, COST SAVINGS AND PROFIT GROWTH FOR THE GROWERS."**

For more information, visit [www.engagecropsolutions.com](http://www.engagecropsolutions.com)



**R**edSea, the innovative AgTech whose pioneering technology enables commercial farming in hot environments, announces the start of operations at its award-winning greenhouse facility. The technology in the new Abu Dhabi facility - which is a first in the United Arab Emirates - will help diversify food product sources and stimulate the region's agri-food sectors.

The commissioning is a first look for UAE audiences at RedSea's cutting-edge, sustainable agricultural technologies. The one-hectare showcase facility is set to supercharge wider adoption in the UAE for the benefit of local growers and significantly impact Abu Dhabi's agricultural ecosystem. The project received HSBC's Living Business award for innovative water management and efficiency.

RedSea's focus on resource and food scarcity supports the UAE's 'National Food Security Strategy' to promote food security with advanced agricultural technology. With climate change and increasing global food shortages, the UAE and the Middle East are leading the way in addressing

## REDSEA AWARD-WINNING GREENHOUSE FACILITY IN ABU DHABI

these huge issues ahead of COP 28.

Ryan Lefers, Chief Executive Officer of RedSea, said: "We are delighted for UAE audiences to have their first glimpse of our award-winning technology, which is transforming global controlled environment agriculture and open-field farming. There is a clear path for local growers to use this technology to generate higher production yields, operate more sustainably and be more profitable.

"Globally, food production is frequently unsustainable and very vulnerable to climate change. Our technology - which addresses these problems directly - is a solution born in the deserts of the Middle East and already being delivered in hot climates around the world."

Miles Thornhill, Team Head Corporate Banking and Head of Business Banking UAE at HSBC, commented: "HSBC is focused on helping to deliver a net zero

global economy, which includes channelling investment towards sustainable projects.

Sustainable finance has an important role to play in allowing AgTech companies, such as RedSea, to scale and demonstrate solutions that help build a better future."

The greenhouse facility is powered by 2,000m<sup>2</sup> of elevated solar panels functioning as agrivoltaics, with protected crops grown under the panels and heat-blocking net - showcasing the full capability of RedSea's sustainable technologies.

RedSea is also demonstrating its resilient genetics, which enable salt, heat, and drought-tolerant crops of better quality and increase yields. The facility will showcase RedSea's saltwater irrigated fodder plot - a ground-breaking use of salty brine for irrigation of fodder for livestock feed.

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**For more information, visit**  
**[www.redsea.ag](http://www.redsea.ag)**



# PZ 1000 SERIES DRUM MOWERS, A COMPLETE AND NEW RANGE



**S**tarted in 2019, Kuhn gradually renewed their 4-drum mower range. Today the PZ 1000 series has replaced all 4 drum-models of the PZ 100 series. The new and improved features are being integrated whilst retaining some important aspects from the previous models.

The PZ 1000 series range consists of front, rear and triple models:

## Front mowers

The PZ 2721 F, PZ 3021 F and PZ 3221 F provide working widths of 2.69, 3.04 and 3.19 m respectively. Their main features:

- Continuous height adjustment with 45 mm range
- Narrow swath provided by the typical PZ knife plate layout, secured via the standard swath discs
- V-belt driveline protection for a smooth start-up

## Rear mower

The PZ 3015 rear drum mower, with a

working width of 3.04 m, is designed for optimal ground following and mowing performance, even in the most challenging of conditions. This is particularly due to a sophisticated headstock design with trailed linkage geometry. Other important characteristics:

- Vertical hydraulic folding to 128°
- Optional parking stand for vertical storage to 3.6 m
- Height adjustment via spacers with 44 mm range
- LIFT-CONTROL ground pressure compensation and non-stop safety breakaway

## Triple mower

High capacity with a low power requirement is what characterises the PZ 8831 triple drum mower (working width of up to 8.84 m). Due to its compact design and low power requirement the machine is suitable for medium and large size tractors. Additionally, the PZ 8831 features:

- LIFT-CONTROL hydro-pneumatic suspension system for uniform ground pressure
- Optional reverse drive kit
- Height adjustment via spacers with 44 mm range
- Optimal mowing performance even in the most challenging crop and soil conditions, remains the main feature of PZ drum mowers. Benefit from:
  - Swath width and cutting height adjustments
  - Simplified maintenance procedures
  - Uneven sized diameter knife plates to produce a uniform swath formation
  - Easy knife changing process to lower downtime
  - FLEXPROTECT protective side covers to increase robustness
  - Standard road lights positioned around the machine

**For more information, visit**  
**[www.kuhn.com](http://www.kuhn.com)**



# TOPCON LAUNCHES TRANSPLANTING GUIDANCE AND CONTROL TECHNOLOGY FOR SPECIALTY FARMERS

**T**opcon Agriculture has introduced Transplanting Control, a new solution for specialty farmers. Designed to reduce labor, boost efficiency and increase production, this turnkey solution provides global navigation satellite system (GNSS) based guidance, autosteering and control, benefitting producers of permanent and perennial trees, fruits and vegetable crops.

"Manual measurement is still common practice in areas where specialty and permanent crops are grown," said Michael Stone, vice president of product development at Topcon Agriculture. "Our precision GNSS-based guidance and control allows for more elaborate planting patterns, and has been proven through countless industries and applications. This now-affordable transplanting technology can help growers increase crop production by up to 15 percent, if not more."

The solution eliminates manual labor required to physically outline fields and

provides streamlined setup through an easy-to-use task planning interface. Farmers can also expect reductions in fuel and other inputs through the reliability of GNSS, resulting in fewer mistakes and corrections.

"Crops placed in an optimized space maximize available resources like soil nutrients, water, sunlight; this also allows more accessible angles for maintenance, like cleaning and weeding, which will further improve output," Stone said. "More uniform transplanting executed through GNSS generates a healthier crop for increased production and quality. This technology can even improve efficiencies with tasks like soil sampling and post hole digging."

**For more information, visit [www.topconpositioning.com](http://www.topconpositioning.com)**





## URBAN CROP SOLUTIONS RANKED FOURTH IN FAST COMPANY'S LIST OF MOST INNOVATIVE COMPANIES IN EUROPE, THE MIDDLE EAST AND AFRICA

Urban Crop Solutions has been named the fourth Most Innovative company in Europe, the Middle East, and Africa by Fast Company. The only indoor farming company to be named in this category, it stood out for the launch of PharmSpee™ – a platform enabling the use of plants, instead of animal cells or synthetic materials, for the production of ingredients for the biopharmaceutical, life science, cosmetics, or feed industry. Aside from lowered production costs, the use of the PharmSpee™ platform drastically reduces production cycles, and time-to-market.

As an end-to-end indoor farming solutions provider, Urban Crop Solutions has been investing heavily in their technology and growth solutions, as well as their research centre and Research & Innovation stream since their establishment in 2014. Aside from producing and supplying plant factories for commercial use or external research purposes, Urban Crop Solutions carries out both contract and in-house research at their very own research centre in Belgium. Through research carried out here, and observing demand from their biopharmaceutical customers, they launched their PharmSpee™ platform.

PharmSpee™ is essentially a platform whereby, plants that are grown inside a UCS growth

chamber become – via the process of agroinfiltration in a closed and controlled environment – the carrier of the molecule for their intended end-application (i.e., plant-based vaccines, proteins, or growth factors, etc.). PharmSpee™ combines a scientifically proven and validated method, with Urban Crop Solutions' own plant science expertise and technology, to successfully replace a traditionally animal-based practice with plants. All the while drastically reducing the high production cost associated with using animal-based bioreactors, lowering production cycles from 6-12 weeks to 5-6 weeks, and therefore ultimate time-to-market in a more resource-efficient manner.

"Our entire company ethos is based on harnessing the power of plants. We have observed in recent years, more interest in plant-based solutions, most noticeably coming from the biotech sector. By providing clients a growing platform for the production of their applications, our experience and

expertise in indoor vertical farming delivers a high value add" explains Dr Oscar Navarrete, Chief Science Officer at Urban Crop Solutions.

**For more information, visit [www.urbancropsolutions.com](http://www.urbancropsolutions.com)**



# AUTOMATIC ANIMAL WEIGHING REDUCES FEED COSTS

**T**he ever-rising feed costs are placing considerable pressure on the profitability of poultry producers. It is therefore crucial to use feed efficiently, or increase your efficiency, and focus on achieving the highest growth per kilo of feed. This factor is often expressed as feed conversion. The feed conversion rate is a good reflection of the efficiency of your management strategy. The lower the feed conversion rate, the less feed is needed by the animals for growth and the higher the efficiency. There is also another benefit: an improvement in feed conversion means animals utilise nutrients more efficiently, resulting in fewer minerals being excreted in their manure and urine. This reduces the environmental burden of nitrogen emissions.

It is important to know how much the animals weigh in order to determine their feed conversion rate. The weight of animals is often estimated visually. Small errors of judgment are not necessarily a problem, but not everyone has the eye of a master. Weighing is the only way to know with certainty how much your animals weigh. But generally, you won't have time to put your animals on a weighing platform every day. Manual weighing is time consuming and less reliable because there are relatively few measurements. And the results are not representative of the entire house as weighing is usually limited to just a small section.

Manual weighing often causes stress in the house and entails a risk of introducing diseases. An automatic animal weighing system is the ideal solution that can help reduce feed costs. It might seem a less obvious solution than adapting the feed composition and feed value and reducing feed waste. However, automatic weight monitoring is an ideal way to improve feed conversion and the performance of the animals.

## Insight into activity

Because it registers how many times the animals are weighed, an automatic animal weighing system also gives insight into animal activity. If a sudden drop in activity is noticed there is probably something wrong. This could signal a disease. Early intervention is recommended because reduced activity can lead to feet problems, a reduced feed and

water intake and ultimately lower growth. An early warning generated by your animal weighing system can avoid these issues. This has benefits for the feed costs too, as animals that are ill lag behind in growth and need extra feed for recovery.

## Automatic weighing for poultry

An automatic poultry weighing system consists of a smart control computer and one or more weighing scales in the house. The animals are weighed continuously and automatically - without them being disturbed. A good system can register up to 3000 measurements per day. This gives a reliable picture of the current situation in a way that would be impossible with manual weighing.

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**For more information, visit**  
**[www.fancom.com](http://www.fancom.com)**







Ventilation Solutions



# YOUR GLOBAL SPECIALIST IN PREMIUM AXIAL FANS

**A**t Vostermans Ventilation, we develop, produce and distribute axial fans for the agricultural market. We are a Dutch, family-owned business founded in 1952. With a passion for technology and commitment to our customers, we deliver high-quality fans that meet our customer's ventilation needs and requirements.

The R&D department develops our motors and impellers and production takes place at our own state-of-the-art factories. Because we design and develop everything in-house, we're able to create the perfect motor-impeller

combination. Quality always comes first, because we understand that reliability is vital in the agricultural industry.

As we are a manufacturer, we can combine different impellers and motors. This results in a broad range of axial fans for a variety of applications. Depending on the application, we are able to develop a fan that performs better at high pressure, is extra efficient, and can move a lot of air over a long distance.

The ultimate motor-impeller combination not only ensures better performance, but also a minimal motor load, which improves the service life. To be

able to guarantee you the best quality, all combinations are tested extensively during our rigorous test programs.

## **Multifan**

Vostermans Ventilation manufactures the premium brand Multifan. Known worldwide as being energy efficient and very reliable, Multifan is the right choice if you're looking for a ventilation solution you can count on. In the development and production process, we take local laws and regulations, specific market requirements, the local situation and specific customer requirements into account.





### Circulation fans

The range of circulation fans offers a solution for every indoor climate challenge. We

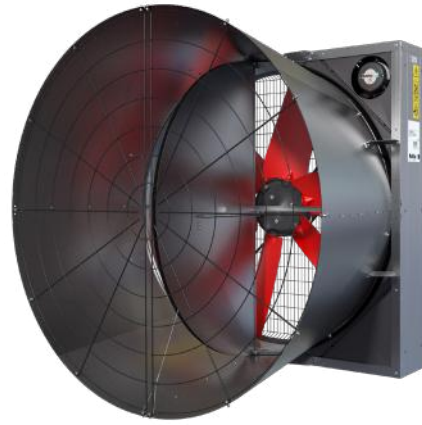
offer fans that are specifically designed to evenly distribute air in an energy-efficient way. Vertical or horizontal airflows improve temperature and humidity differences, creating a uniform climate.

In addition, we offer circulation fans that ensure that animals or people are kept cool. A solution that can help prevent heat stress and keep animals healthy.

### Exhaust fans

Choosing natural ventilation can, result in an insufficient air exchange or temperature change. A problem which can be easily solved with the help of mechanical ventilation, using fans.

Our exhaust fans are used in, among others, dairy barns, poultry houses, greenhouses and industrial applications. Each industry has its own challenges, requiring different ventilation methods. It is always important to ensure sufficient ventilation, taking into account temperature, occupancy, humidity and other



gases or substances.

### Flexible solutions

The product portfolio was created by listening carefully to the wishes and needs of our customers worldwide. Since the entire development and production process stays in-house, we're able to deliver tailor-made solutions for any ventilation challenge you face.

### Save more energy

The Multifan fans are optionally available in extra energy-efficient ECplus and Vplus versions with infinitely variable speed control. For every 20% reduction in speed, the energy consumption is halved. In order to protect sensitive electronics in a controller, it is placed in a separate housing. This is essential to guarantee reliability in the most extreme environments.

### Contact your specialist in air!

If you have any questions regarding our products or its applications, want to receive product information or need advice from our specialists; please do not hesitate to contact us. You can visit our website at [www.vostermansventilation.com](http://www.vostermansventilation.com) or directly send us an e-mail via [ventilation@vostermans.com](mailto:ventilation@vostermans.com).







## STRESS REDUCTION VIA DRINKING WATER – DR. ECKEL PRESENTS INNOVATIVE ANTI-STRESS ADDITIVE

**A**t VIV Asia, Dr. Eckel Animal Nutrition presented their latest innovation: the water-soluble anti-stress product MagPhyt WS. Designed specifically for drinking systems and therefore of particular interest to poultry producers, MagPhyt WS promises rapid stress reduction and improved resilience thanks to a combination of selected plant extracts, highly bioavailable magnesium sources and vitamin C.

### **Stress requires immediate action**

In stressful and challenging times, producers need immediate relief to calm their animals and prevent stress symptoms from spreading. There is usually no time for a feed change: the solution comes through the drinking water.

Thanks to its unique triple complex, MagPhyt WS provides the essential extra: it is more than magnesium, more than Vitamin C, more than fast stress relief. With its

combination of proven plant extracts, optimally bioavailable magnesium sources and vitamin C and the innovative formula for fast solubility, MagPhyt WS has what it takes to strengthen poultry flocks against stressful situations, quickly calm down nervous birds and stabilise their condition. This means that livestock keepers can act at the first signs of restlessness in the poultry house and take countermeasures in good time, before the stress affects the well-being and performance of the animals. This means less injuries, better carcass quality and fewer animal losses.

### **More than magnesium**

For MagPhyt WS, the German high-quality manufacturer relies on two particularly valuable magnesium sources: Mg-Citrate and Mg-Glycinate. On top of that, there are vitamin C and selected plant extracts. Thanks to the interdisciplinary development work, the Dr. Eckel team

succeeded in combining the various ingredients in a complex with residue-free solubility. As a fine powder, MagPhyt WS is added directly to the water tank, dissolves immediately and distributes evenly in the water. There is no need to change the feed.

Anne Möddel, Senior Technical Sales Manager and Product Manager at Dr. Eckel, is really enthusiastic about the new MagPhyt WS: "MagPhyt WS has a holistic effect on the animal. You can scent it immediately in the drinking water, it smells intensively of lavender. In the organism it works highly effectively and incredibly fast, within just one day. You can literally watch the animals become calmer." This is also confirmed by the company's initial practical experience with selected turkey and chicken farms. MagPhyt WS is now available on the European market, in numerous Asian countries and in other regions.

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**For more information, visit**  
**[www.dr-eckel.de](http://www.dr-eckel.de)**



# FODDER SOLUTIONS FOR SUSTAINABLE LIVESTOCK FARMING

**T**arannum Malik, Chairperson and Managing Director of Al Aliyo Hydrofarms, started the company to offer a long-term solution to the much-neglected challenges of the agro-industry in the UAE. They have a growth and harvest capacity of 15,000kgs per day of fresh grass for animal feed.

"Our vision is in sync with the UAE national agenda to strengthen significant food supply chains across all strata of society on top priority. We reside in a desert with sub-tropical arid summers and warm winters, where the flora is sparse. Hence, we aim to contribute to the UAE government's food security efforts by providing top-notch green fodder directly to farmers", says Tarannum Malik.

Hydroponic farming has been gaining steam as it eliminates the dependency on climatic conditions, seasons, and soil. Plant production occurs in a monitored sterile environment sans human interference. Hence, the product tends to grow faster, uses less water, and is chemical

and pesticide-free. Furthermore, hydroponic grass is easier to harvest and has higher nutritional value.

Hydroponic fresh fodder invariably results in healthier livestock. Animals have better gastrointestinal health, and there are lesser chances of ulcers, colic, acidosis, and laminitis. Moreover, feeding fresh grass results in healthier weight gain and better hydration. There is improved milk yield and fat composition.

Despite growing premium produce, Al Aliyo's hydroponic fodder is economical and affordable vis-à-vis the dry grass and feed currently available in the market.

Al Aliyo cuts through the noise in the hydroponic industry for the following reasons:

- They use no chemical fertilizers or pesticides in the growth process. Additionally, the grass is grown under strictly monitored hygiene and sanitary protocol.
- They consume up to 90% lesser water than conventional farming. Additionally, they use atmospheric

condensers and save up to 2000 liters of water daily.

- They control their facility temperatures with state-of-the-art, green HVAC systems.
- They use no soil.
- They grow in 3500 sqft within one week what a hectare of land yields annually.
- Their seeds undergo a thorough cleansing process to eliminate dust, mud, and other contaminants, thus reducing the possibility of colic and other gastrointestinal illnesses.
- They pride themselves on providing safe and healthy fodder compared to the commercially available dry fodder options in the market.

Al Aliyo Hydrofarms has reimaged innovation to combat climate change and is on the cusp of a green revolution. Helmed by a strong woman, they are changing the fodder solutions spectrum for sustainable livestock farming, one feed at a time.

**For more information, visit**  
**[www.alaliyofarms.ae](http://www.alaliyofarms.ae)**



# THE NORWEGIAN SEAFOOD COUNCIL MARKS 25 YEARS AS SUPPLIER TO UAE WITH EYE ON INCREASED REGIONAL TRADE

**T**he Norwegian Seafood Council (NSC), a public company owned by the Ministry of Trade, is marking 25 years as a supplier of Norwegian seafood to the UAE as it looks to leverage its already substantial MENA trade presence to boost further growth and expansion in the region.

The NSC works closely with Norway's fisheries and aquaculture industry to improve markets for Norwegian seafood, using several research, development, and risk management processes.

As a global market leader and the largest provider of premium salmon, the NSC has established strong trade connections between Norway and the UAE. Over the past two decades, demand for high quality seafood from the Scandinavian nation has dramatically increased across the Middle East – largely due to rising demand for more sustainable seafood. As a pioneer in salmon farming, and with a reputable

history of craftsmanship in seafood production, Norway remains at the forefront of sustainable seafood sourcing and consistently delivers fresh, healthy, and flavourful products. The Middle East's shift towards healthier living has also influenced the growing demand for lean seafood options, along with increased sushi consumption in countries like Saudi Arabia. As a key ingredient in both a balanced diet and sushi meal, salmon is critical to the region's overall health and flourishing gastronomical scene.

With strict governmental regulations ensuring high standards of food safety – and thorough, sustainable management of natural resources – the NSC is looking to further penetrate the market with a supply of premium salmon that complements the region's appreciation for high-quality food.

Mr. Sten Arne Rosnes, the Norwegian Ambassador to the UAE, commented: "There is a great synergy between the supply and

demand of the Norwegian and Middle Eastern markets, and the NSC has a unique opportunity to expand its presence and elevate the quality of seafood in the region. Its 25- year history of exporting to the UAE dates to 1998 – with a 200-tonne shipment of salmon – and has seen tremendous growth in the years since. In 2022 alone, the NSC brought in more than 40 million meals to the UAE – and almost three times as much to the wider region."

Commenting on the future of the NSC in the Middle East, Ørjan Kjærvik Olsen, NSC's Head of Emerging Markets, said: "We're currently halfway through a four-year project, which will see us continue to collaborate with local stakeholders and invest in B2B arenas throughout existing markets. Our focus in 2023 will be advancing trade relations with the UAE and Saudi Arabia, with the long-term goal of bringing premium Norwegian seafood to all surrounding regional markets."



*Mr. Sten Arne Rosnes, the Norwegian Ambassador to the UAE (Right) and Mr. Ørjan Kjærvik Olsen, NSC's Head of Emerging Markets (Middle) with Mr. M. Matt, Managing Editor of Food Business Gulf & Middle East magazine (Left)*



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