

AGRICULTURE

TRADE MAGAZINE

YOUR GATEWAY TO THE MIDDLE EAST AGRIBUSINESS



ANCIENT CENTRAL
AMERICAN SUPERFOOD
THRIVING IN THE
MIDDLE EAST

21

DAVA AGRICULTURAL
SIGNS A NEW MAJOR
GREENHOUSE CONTRACT
WITH DEBETS SCHALKE

22

LOOKING FOR
HIGH-QUALITY PEAT
MOSS BEDDING FOR
YOUR POULTRY?

38

HOW TO MAKE A GOOD
CALF ENTRY TO THE
FEEDLOT?

40

CUSTOM FULL-SYSTEM GRAIN SOLUTIONS

DELIVERING TURN-KEY SOLUTIONS ACROSS
A RANGE OF INDUSTRIES INCLUDING FARMS,
GRAIN TRADERS, MILLERS AND FEED MILLS

CONTACT US AT
emea@aggrowth.com



aggrowth.com/emea

AGI 

GROWⁱⁿBAG™



Why Easy-Fill™ Grow Bags are the environmentally friendly choice!



Easy-Fill™ grow bags are made from top quality, virgin materials that won't disintegrate or create microplastics.



Growing with Easy-Fill™ grow bags will save water and can be used with drip systems, overheads, and hydroponic flood trays.



Easy-Fill™ grow bags are a climate smart product that withstands both sub-zero and extreme heat temperatures.



Easy-Fill™ grow bags are sustainable, reusable and recyclable.

GROWING GREENER WITH EASY-FILL™ GROW BAGS



All sizes available

General / Sales Enquiries

Ph : +61 438 834 379

info@whsaustralia.com.au

Contents

Managing Editor
M. Matt

Associate Editors
Jessie Jorge
Megha Mary Matt
Dr. Ann Matt

Assistant Editors
Raseena Navaskhan
Loimee De Leon

Contributors
Dr. Hansel Geo Thomas
Neville J. Chandler

Registered Office
Matt Media Intl. Ltd.
12 Gateway Mews
London N11 2UT
United Kingdom

US Office
Matt Media (USA) LLC.
1713 E. Morgan Court
Gilbert, Arizona 85295

Middle East Offices
Matt Media LLC.
Sharjah Media City
United Arab Emirates

Al Saad Adv. & Publishing LLC
P O Box 25694, Sharjah
United Arab Emirates

info@gulfagriculture.com
www.gulfagriculture.com

Gulf Agriculture is a publication from Matt Media Intl. Ltd. (UK) and is read by agri professionals, farm managers & owners, landscape consultants, contractors, agri-equipment suppliers, horticultural engineers, greenhouse managers, agronomists, veterinary surgeons, ministries, poultry & dairy breeders, importers, distributors, manufacturers and wholesalers of food and agri inputs.

All rights reserved. The opinions and views expressed in the publication are not necessarily those of the publishers. Readers are requested to seek specialist advice before acting on information contained in this publication, which is provided for general use and may not be appropriate for the readers particular circumstances. The publishers regret that they cannot accept liabilities on any error or emissions contained in this publication.

Printed and published by
Matt Media© Intl. Ltd.(U.K.) 2023



Cover Photo Courtesy: SaMASZ Sp. z o.o.

News	04
Blueberries	20
Growing Bags	21
Greenhouses	22
Vertical Farming	23
Horticultural Lighting	24
Fertilisation Software	26
Biostimulant	27
Agricultural Zeolite	28
Soil Generator	30
Irrigation	32
Agricultural Machinery	33
Landscaping	36
Fungal Protien	37
Poultry Bedding	38
Poultry Biosecurity	39
Livestock Farming	40





VIV MEA 2023

ABU DHABI, UAE
20-22 NOVEMBER

4TH EDITION
الاصدار الرابع

INTERNATIONAL TRADE SHOW FROM FEED TO FOOD FOR THE MIDDLE EAST AND AFRICA

WWW.VIVMEA.NL



هيئة أبوظبي للزراعة والسلامة الغذائية
ABU DHABI AGRICULTURE AND FOOD
SAFETY AUTHORITY

Partner of:

ADNEC
شركة أبوظبي الوطنية للمعارض
Abu Dhabi National Exhibitions Company



Abu Dhabi Agriculture &
Food Security Week
أسبوع أبو ظبي للزراعة والأمن الغذائي

Powered by:



WORLDWIDE

Organized by: VNU Europe

WWW.VIV.NET



GVF 2023 DUBAI CONFIRMS THE PARTICIPATION OF THE MINISTRY OF CLIMATE CHANGE AND ENVIRONMENT (MOCCAE) - UAE

The Middle East Largest and ONLY Exclusive Vertical Farming Event - the Global Vertical Farming Show (GVF 2023) by TAB group is all set to take place on the 13th and 14th September 2023 in Dubai.

The event is bringing the entire vertical farming ecosystem to one place and the organizers are extremely excited to be taking the show back to the region of vertical farming advancements and technologies i.e the Middle East.

The show is shaping up exactly how it had been

anticipated. With the Ministry of Climate Change and Environment, UAE confirming their participation for GVF Dubai - it is certain that the show will open doors for many new opportunities for participating organizations.

The Ministry is responsible for developing and implementing policies and initiatives that promote environmental protection, sustainable development and dealing with the effects of climate change. It creates and enforces environmental legislation, as well as works to protect natural resources. Apart from this, it also prioritises biodiversity preservation and uses public participation and education to raise awareness of

environmental issues.

The show is going to feature companies from around the world - showcasing their latest products and solutions. Apart from the companies dealing with vertical farming and CEA, the show is anticipating the participation from lighting, irrigation, automation, packaging, LED lights, HVAC, vertical farming technologies, solutions and many more.

Industry giants like FoodTech Valley, AEROFARMS, Fohsan Growspec, Al Aliyo Farms, MULTIVAC, Uns Farms, Crysp Farms, Weber Cooling, Elgro, Hyphen, Logitec Plus, Sharjah Research Technology & Innovation Park and many more are already on board and the show's organizers are eagerly looking forward to hosting them in Dubai.

ADFSA CONTINUES PROGRESS IN BREEDING RESILIENT EMIRATI HONEYBEES

With the support and patronage of His Highness Sheikh Mansour bin Zayed Al Nahyan, Vice President of the UAE, Deputy Prime Minister, Minister of the Presidential Court, and Chairman of the Board of Directors of Abu Dhabi Agriculture and Food Safety Authority (ADAFSA), ADAFSA has launched an ambitious programme to develop and sustain beekeeping and honey production in Abu Dhabi. The programme is based on scientific

and applied studies and research to develop the best methods and practices suitable for the UAE environment.

In celebration of World Bee Day on 20 May, ADAFSA has announced the commencement of the eighth-generation queen production for the Emirati bee breed. Developed as part of the ongoing project to enhance beekeeping and honey production, this initiative aligns with the theme, Bee engaged in

Research and Capacity Building at ADAFSA, emphasised the significance of developing the Emirati bee breed as a key factor in ensuring the sustainability of beekeeping in the UAE. This entails focusing on the breeding and production of queen bees capable of adapting to the country's unique environment and climate.

Al Yamahi provided an update on the progress made in 2022, stating that more than 3,000 queens were produced during that year. Furthermore, ADAFSA distributed more than 2,700 queens to 90 Emirati beekeepers. This initiative aimed to provide support to beekeepers and boost honey production while encouraging more breeders to actively contribute to the development and sustainability of this crucial sector.

pollinator-friendly agricultural production, for this year's World Bee Day.

Saeed Ali Al Yamahi, Director of Applied



EVONIK STRENGTHENS COMPETITIVENESS OF ITS ANIMAL NUTRITION BUSINESS LINE

Evonik is transforming the operating model of its Animal Nutrition business to further increase its customer focus, ensure competitiveness and enable further profitable growth. Moving forward, the amino acids business and the specialties business will operate separately and according to different models - in line with their respective requirements and market conditions.

Additionally, Evonik is optimizing the production setup for the manufacture of MetAMINO® (DL-methionine) at its three world-scale

production hubs and improving the ecological footprint.

These measures to adjust operating models and optimize production will result in an annual cost savings of €200 million with initial savings being realized in the current fiscal year. The full amount will be reached in the 2025 fiscal year. This will also include a reduction of around 200 jobs worldwide. The exact details are still being determined.

"We are systematically implementing a plan that will develop our Animal Nutrition business, so it continues to grow and succeed in our markets," says Johann-Caspar Gammelin, President of Evonik's Nutrition & Care division.

The strengthened competitiveness of Animal Nutrition will secure its role as strong and important cash generator for Evonik.

Animal Nutrition will be run in two distinct operating models: one for its amino acids and one for its specialty nutrition business.

COMPACT CUTTING-EDGE NUTRITION KNOWLEDGE FAIR AND SQUARE FOR EVERYBODY

H&N NutriCubes present a modular publication with monthly collectable chapters that not only answer this central question but offer multiple benefits for all feed stakeholders to start working

**AGRI
TECHNICA**^{DLG}
THE WORLD'S NO. 1

2023

12-18 NOVEMBER | HANOVER, GERMANY
PREVIEW DAYS 12/13 NOVEMBER

Scan and
save the
date!



Discover innovations. Experience the world's leading trade fair.



#agritechnica



www.agritechnica.com



layer targeted.

“H&N NutriCubes equip you for an educated discussion and for informed decision making! We want to enable egg industry stakeholders to really know and understand if their feed really delivers what they need. We want them to be able to get their layers what the birds need for specific egg targets” says Xabier Arbe, Managing Director and Chief Nutritionist at H&N International.

- NutriCubes support self-employed consultants and veterinarians to gain in layer feed reputation and win new markets with truly layer optimized recipes

- NutriCubes help inhouse nutritionists achieve better

results and support his or her impact in successful production

- NutriCubes can help premix companies to win new markets by offering customized layer recipes for the different egg production targets with comprehensive approach in additive usage

- NutriCubes enable feed companies to offer more layer customized feed even with cheaper ingredients, because the feed would yet be better adapted to actual laying results

- Last but not least, NutriCubes can help traders and feed mills to consolidate SKUS and achieve a product diversification for new markets

“Everybody can have a great reference when designing

layer recipes or making layer feed. Now is available to everybody and everybody can benefit of it!” suggests Arbe. “Every stakeholder has something to win with layer-optimized feeds. That is what we issue NutriCubes for.”

PMFAI ANNOUNCE INTERNATIONAL CROP-SCIENCE EXHIBITION, INDIA'S BIGGEST AGRI INPUTS TRADE SHOW ON 7TH & 8TH SEPTEMBER 2023 IN NEW DELHI

India is 4th largest global manufacturer of Agchem chemicals. Indian Agchem

NEW C-LINE FOR FARMS OFFERS SAFE, LOW-TOUCH, EFFICIENT GRAIN TRANSFER

Ag Growth International (AGI) has announced its new C-Line permanent handling grain system for farm use. Made in North America, the C-line offers growers the convenience, efficiency, and speed of no-touch permanent grain handling as experienced by commercial grain operations.

“Without a doubt, the agricultural work force continues to shrink. This is an issue for busy growers, who face increased pressure to do more with less. We are excited to launch the C-line permanent grain handling system for farm and light commercial use,” said David Wernsing, AGI Senior Director of Global Product Management for Permanent Handling Products. “This system is engineered to meet AGI’s highest manufacturing standards, and, most importantly, delivers virtually hands-free efficient grain transfer against the farm’s high-capacity, seasonal harvest needs.”

The C-line for farms is the latest

addition to AGI’s variety of permanent and portable grain handling offerings. The low-touch permanent grain handling system can move whole grains up to 10,000 bushels per hour (bph). The C-line’s simple plug-and-play, modular structure is engineered for speed. Its design enables quick assembly, reduces overall installation costs, and avoids costly grain delivery bottlenecks at harvest.

The system components

complement AGI grain storage solutions and accessories:

- The C-line bucket elevator handles whole grains up to 10,400 bph with discharge heights to 150 feet.

- The en-masse chain conveyor delivers up to 11,000 bph with lengths up to 150 feet in horizontal arrangements or at slight inclines.

- The bulk-flow chain conveyor moves whole grains up to 11,000 bph in inclines up to 45 degrees.



Export shave grown at a CAGR of 6% from 2014-21 and will soon have 55% share in over all market share India has ample availability of technically skilled labor, state of art infrastructure, abundance scientific community, easy availability of raw materials, favourable cost dynamics and available resources in ecosystem and manpower. The sector has witnessed rapid increase in exports of generic and contract manufacturing in the last few years. Valuation of Agchem players is at all time high due to expansion plans many companies are in pipeline for stock listings. Now Indian Companies can also offer Biological products and many companies can

offer gamut of products without much hassle.

ICSCE is India's Biggest Agri Inputs Trade show with concurrent Exhibition driving Business Opportunities for all AG Chem & AG BIO.

The ICSCE provides great Opportunity to stand distinguished amongst more than 500 delegates to promote the business, network, gain ample knowledge of Industry.

ICSCE is a biggest and only Agri Input event for:

- Agrochemicals (includes Fungicides, Herbicides, Insecticides)
- Bioproducts (includes Bio pesticides, Bio Fertilizers, Bio stimulants and all biological products)
- AI and intermediate (solvents, Surfactants,

intermediates etc.)

- Fertilizer, Packaging, Seeds, Storage & Logistics, Research Laboratories.

MODEL INNOVATIVE BEEKEEPERS HELP PROTECT SAUDI ARABIA'S INDIGENOUS BEE RACE

Calamitous impact of climate change, dreadful spread of honeybee disease and unwise application of agrochemicals contribute to the declining number of honeybee colonies across the globe. Rising demand for honeybee colonies to meet the demand for local honey products forces the Kingdom of Saudi Arabia imports annually more than one million exotic package bees.



Reliable substrates for your plants

Stender Agency for Arabic countries:
Mohamed Adel Zarea | Phone +39 335 7161537
azaraa@stender.de

www.stender.de



Importation of exotic bees poses threats as they spread various honeybee diseases and dilute their genetic resources to Saudi Arabia's indigenous bees.

Under the development agenda, the Kingdom of Saudi Arabia mainstreamed the importance of minimizing the dependency on imported exotic bees. Rearing queens is an integral part of beekeeping not only contributes to increasing colony numbers but also improves the productivity of bee colonies through selective breeding. Consistent with the country's priorities, FAO Sustainability Rural Agricultural Development

(SRAD) project delivered field experience training on honeybee queen-rearing techniques to more than 100 participating beekeepers. The project set up pilot demonstration apiaries at five selected model beekeepers' farms and provided them with essential equipment for queen rearings such as modern beehives, nuclei hives, Jenter frames, grafting kits and others. The introduced queen-rearing technique was found to be very effective and provides good opportunities for the model beekeepers to apply and enable the learned knowledge, skills, techniques and real experiences to be spread and shared with

other fellow beekeepers hence solving their colony shortages.

"It is amazing to hear that one of our model beekeepers, Salem Al Awaji from Qilwah Governorate in the Al-Baha Region is applying the training and is already able to produce and sell around 1 000 virgin queens to the local market today after starting rearing honeybee queen bees using the grafting technique three months ago," says Kakoli Ghosh, Chief Technical Adviser, SRAD Project.

As part of SRAD scale-up plan, the project will continue grooming more model beekeepers to share their knowledge and skills

AGRITECHNICA 2023: ATTRACTIVE EXHIBITOR AND TECHNICAL PROGRAM AT WORLD'S LEADING TRADE FAIR FOR AGRICULTURAL MACHINERY

With an expected 2,600 exhibitors from over 50 countries, Agritechnica 2023, the world's leading trade fair for agricultural machinery, will take place in Hanover, Germany, 12-18 November. The organizer, the DLG (German Agricultural Society) has announced that all major companies operating in the international agricultural machinery sector are among the 2,200 exhibitors already signed up and

listed in the preliminary exhibitor database at www.agritechnica.com. Professional visitors can once again look forward to a comprehensive Agritechnica exhibition with its numerous market leaders and leading industry experts.

With more than 2,600 expected exhibitors across 23 halls, including 20 country pavilions, on over 400,000 square meters of exhibition space as well as a broad international technical program,

market leaders. With the international dealer center, the B2B marketplace 'Systems & Components' and the start-up area 'DLG-AgrifutureLab', Agritechnica 2023 will offer a complete overview of farm equipment and related topics, working as a much sought after business platform with international networking, especially after the hiatus due to the pandemic," says Timo Zipf, Agritechnica project manager.

DLG has developed a new platform "Inhouse Farming - Feed & Food Show" as part of Agritechnica focusing on self-contained food production of the future. Suppliers of aquaponics, alternative proteins, vertical farming and cellular agriculture, among others, will present not only their products but also their perspectives, innovations and business opportunities "from feed to food", closely networked with agricultural practice.



Agritechnica will this year be the central venue and major highlight for the global agricultural machinery industry.

"The exhibitors from more than 50 countries include all

MARTEX® PLANTING BAGS AND CONTAINERS

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

Parking and transportation of planting bags, other types of containers, mulch mats and rings



Mulch mats for weed protection



Packing and transportation



Arrangement and transportation



Arrangement and transportation



Small mulch mats



Packing and transportation



Metal trunk shaping rings



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

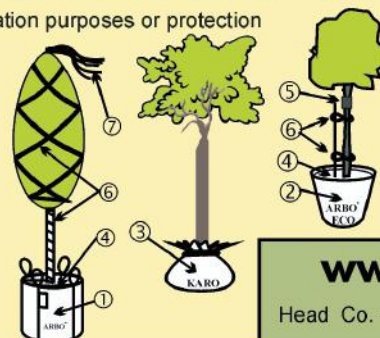
⑤ Protection of trunk and grafting points

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:

- protection for draining pipes
- water plant containers
- seed bags tunnels/sleeves for air ventilation in foil tunnels, greenhouses, fitotrons



P.P.MARTEX
J.M.Strenkowski
PL, 05-402 Otwock
Sucha 3 Str.
Tel/Fax :
+48/22/779 61 66

www.arbo.pl

Head Co. - email: martex@post.pl

Our representatives: D-Hermann Meyer KG: e-mail: mail@hermann-meyer.de NL/GB-B&P Co., www.b-en-p.nl

Scandinavia: OY Urban natural Ab, www.natural.fi **Russia:** Landscape Design Ltd., www.garden-center.ru

Ukraine: Demetra Ltd., e-mail: demetra@com.ua **Bulgaria-Romania:** Hermann-Meyer, www.meyer-shop.com

Abu Dhabi: Arid Land Co., LLC., www.aridlanddevelopment.com

e-mail: aridland@emirates.net.ae

experiences with a broader number of beekeepers in a wider area of the country. The model beekeeper's exemplary approach is applied for the effective dissemination of experiences through the organization of field days at the model beekeeper's apiary. As more beekeepers are technically supported they will be able to produce a stable number of colonies to supply to the markets. This will contribute to reducing the dependency on importation as well as protect the indigenous

bees of Saudi Arabia.

AGMISSION™ FUNDS GLOBAL PRODUCERS' CONSULTATION TO IMPROVE CLIMATE-SMART AGRICULTURE ADOPTION

Producer engagement and collaboration with researchers is critical to a successful global transition to climate-smart agriculture. The Foundation for Food & Agriculture Research (FFAR) and AgMission™ partners awarded a \$394,000

grant to the World Farmers' Organisation (WFO) to develop a novel farmer-driven methodology to consult producers on a global scale and collect unique data and insights on their climate-smart agriculture needs and expectations. AgMission is an initiative co-created by FFAR and the World Farmers' Organisation to develop and implement climate-smart agriculture solutions.

Understanding producer perspectives on the challenges posed by climate change is

ALFATECH (SG) BECOMES INTEGRATION & SERVICE PARTNER OF URBAN CROP SOLUTIONS FOR SOUTH EAST ASIA

AlfaTech will become the integration and service partner for the products of Urban Crop Solutions (UCS) in the South East Asian region. After an already first successful joint project for the National University of Singapore, both technology companies will now work together for indoor vertical farming projects.

Urban Crop Solutions has since 2014, been active in the engineering, procurement, and construction of indoor vertical farming solutions for a broad spectrum of applications. Many of which have been commissioned and installed globally. Since there is a significant interest in indoor vertical farming in Asia, the company was looking for a partner that can integrate their technology in a larger scope of projects. Furthermore, the service aspect of an indoor vertical farm is an important cornerstone of the UCS strategy, and therefore a regional representation for after-sales service is a logical and important step.

AlfaTech, based in Singapore, has already for 10 years been

providing turnkey project solutions – from consulting, design, build and project management, to facility management across Asia. The company has many projects in various industrial segments like the agri-tech and life sciences industry. Recently, they built the 'National University of Singapore (NUS) Agricultural Translational Research Centre' which is a facility designed to take high-density agriculture from innovation to industrial scale. Urban Crop Solutions served as the key technology partner in this project.

"Climate change, supply chain deficiencies and many other actual

challenges make that agri-tech and thus also indoor vertical farming techniques will become very important for food production and industry. When the proposal came our way, we did not hesitate to partner with a seasoned technology provider like Urban Crop Solutions that wants to bring its knowledge and technology to our region. Commercial food production, research infrastructure and plant molecular farming applications are industries in which we see the highest potential in the short term" says Zach Wilson, Managing Director of AlfaTech Asia.



critical to ensuring that researchers identify climate-smart agricultural practices that align with farmers' priorities. This AgMission-funded project, the Global Producers' Consultation, engages farmers and ranchers and enables producers and scientists to co-create a research agenda that produces actionable insights.

The Global Producers' Consultation is developing a scientific methodology for consistent data gathering from producers globally that will inform research and implementation projects supporting the growing need for on-farm resiliency. The farmer-driven, comparable data and insights that result from this methodology can be used to support national, regional and global initiatives working towards accelerating the transition to climate-smart agriculture. This project will explore focus areas that include producers' awareness of and willingness to adopt existing solutions and the systemic barriers to adoption.

SHARJAH CHAMBER DISCUSSES THE PRESENT AND FUTURE STATE OF FOOD SECTOR TO SUPPORT UAE'S FOOD SECURITY

The newly restructured Foodstuff Trade and

Industry Sector Business Group, operating under the umbrella of the Sharjah Chamber of Commerce and Industry (SCCI), has organized its first meeting to discuss the group's mission and the pivotal role its members can play in fostering productive communication between sector investors, workers, the chamber, and pertinent government agencies.

Held at the chamber's headquarters, the meeting delved into the current state and prospective future of Sharjah's food sector. The attendees explored potential avenues for expanding exports, along with strategies for monitoring international markets to bolster local production. Additionally, they identified potential obstacles within the sector and brainstormed practical solutions to these challenges.

A significant portion of the discussion was also dedicated to reinforcing efforts to further the UAE's strategic objectives in achieving and maintaining food security. The group emphasized the country's advantageous position, built on its advanced logistics infrastructure, robust international trade relations, and innovative strategies in this field.

The meeting was attended by Abdul Aziz Shattaf, Assistant Director-General for the Communications and Business Sector; Jamal



**Over 130 000
machines
working all over the world!**



SET OF DISC MOWERS GigaCUT
from 8,60 m / 28'2" to 9,40 m / 30'10"



HAY MERGER MRG 2-900
10,6 m / 28'10"



✉ export@samasz.pl

WWW.SAMASZ.COM

Saeed Buzangal, Director of Corporate Communications; Mohammed Itani, Chairman of the Foodstuff Trade and Industry Sector Business Group; and members of the group, including Fatima Al Shehhi, the Business Groups' executive.

UNLOCKING THE POWER OF ROBOTICS IN AGRI-FOOD

As the role of automation in the agricultural industry continues

to increase, so does the importance of building an ecosystem that will foster the adoption of robotic technologies by the European agri-food sector.

The agROBOfood Network Event held successfully on May 11 and 12, 2023 at the Agricultural University of Athens.

The agROBOfood community was the topic underlying all sessions throughout the two days. A partnership of few in

the beginning that steadily grew to count more than two hundred members, as presented in "agROBOfood in a nutshell" by Jens Martinus Pedersen, Coordinator of Innovation Experiments, agROBOfood.

From established companies, SMEs and start-ups to policy makers and end users, different stakeholders of the ecosystem were there to share their knowledge and experience.

Each provided useful insights showcasing on one hand the

IMPROVING ON EXCELLENCE – THE NEW GENERATION OF GRAIN CLEANERS

Bühler announces the launch of the next generation of its TAS grain cleaning system, the TAS LAAC. Cleaning is an essential part of any operation, as clean raw material is vital for any food and feed production process, ensuring safety and high quality of the product. The TAS cleaning system has been a customer favorite for grain processing for more than 30 years and its updated version is now

available to customers worldwide.

The new TAS LAAC builds on the success of the classic TAS, renowned for its highly efficient cleaning, high throughput rate, flexible configuration, and low operating costs. The latest model retains all of this and comes with a range of impressive new features, including remote control for the machine settings. This means that operators can easily make adjustments to

optimize settings at changeovers, no matter where they are in the mill, malting plant, or reception points.

Its instant compatibility with Bühler Insights, meanwhile, allows for advanced trend analysis and much more. This range of new functions can help operators bring an end to unwanted downtime and product losses due to incorrect machine settings. In an ever-more competitive milling market, optimum efficiency is vital to improve yields, cut waste, and make sure that frequent changeovers are as smooth as possible.

"These were the challenges our engineers at Bühler set out to tackle when we took a fresh look at the well-established TAS cleaner series," says Manfred Dess, Product Manager for TAS cleaners at Bühler. "Not many would expect much potential in improving or even revolutionizing a technology that has reliably met customers' needs for decades. However, we have built on past success, optimized our existing cleaner solution, and introduced new groundbreaking features. With the new system in place, operators can manage machinery more easily, efficiently, and profitably with all the required functionality at their fingertips – even via mobile devices."



COBB NAMES ROY MUTIMER VP EMEA AND ASIA-PACIFIC

Cobb-Vantress, a leading global poultry genetics company, announces the appointment of Roy Mutimer to VP EMEA and Asia-Pacific, effective May 1.

"In this critical role for Cobb, Roy brings previous experience



leading this integral part of our business," said Joyce J. Lee, President of Cobb. "Both of these regions are dynamic and complex and Roy's proven business acumen and customer relationships will help ensure our many distributor partnerships, as well as joint ventures, have a trusted source of continuity during this transition."

Mutimer has over 30 years of experience in the poultry industry and began his career with the UK Veterinary Investigation Service in 1981 before joining Cobb UK Ltd. in 1995. During his tenure with Cobb, he has held roles in the United Kingdom and United States, covering Laboratories,

Quality Assurance, and Animal Welfare. He most recently served as Managing Director of Cobb's European operations, with responsibility for Production, Sales, and Technical Services.

"I am thrilled at the opportunity I have been given to renew my connection with our customers in Asia-Pacific while continuing to support our EMEA customer base," said Roy Mutimer, VP EMEA and Asia-Pacific. "It is extremely reassuring for me to know that I have the support of our highly dedicated, world class teams in Asia-Pacific and EMEA. I know that together we will be able to make great progress as we work to take advantage of the exciting opportunities that are coming our way."

challenges that a niche market like that of agri-food robotics has to face and on the other how a strong community, led and supported by experts, can address those challenges.

Agri-cooperatives and farmers representatives of today and of the "future" discussed their views on the impact robotics can have on the work done in the field. They also focused on how adoption could be boosted in the near future using tools like training to help end users.

This year's event signaled the passing of agROBOfood to a new era. Bringing together Digital Innovation Hubs, SMEs, Policy makers and farmers to work towards a shared vision was just the steppingstone. agROBOfood has created a vibrant community that sets the foundation for the agri-food robotics field.

CROPX CLOSES \$30M SERIES C IN ROUND LED BY ALIAXIS TO EXPAND DIGITAL FARM MANAGEMENT SOLUTIONS AND PURSUE ADDITIONAL ACQUISITIONS

CropX Technologies, a leader in digital agronomic farm management, announced the completion of a Series C financing round with \$30 million in funding. The funding round was led by Aliaxis SA, a world leader enabling access to water and energy through inventive fluid management solutions.

The funding will be used to build on the two pillars of CropX's growth: the continued development of innovative capabilities for its agronomic farm management system, and the acquisition of companies with

complementary technologies and market reach. Through this partnership, Aliaxis and CropX will continue to collaborate closely in the field of data-driven precision irrigation. Additional investors in the round include Edaphon, Finistere Ventures, NTT Finance Corporation, OurCrowd, Reinke Irrigation, Yair Shamir, and Victrix.

Food production accounts for roughly 70 per cent of total freshwater withdrawals globally and efficient water usage in agriculture is clearly becoming more and more important. Users of CropX's irrigation planning are able to conserve irrigation water and boost yields. In addition to irrigation, the CropX system also optimizes the use of energy and fertilizers, supports farmers in adopting more sustainable farming practices, and is becoming a one-stop-shop for

crop management. CropX now has over 100 employees in the US, the Netherlands, Israel and New Zealand and a large research and development department.

CropX CEO Tomer Tzach comments: "Completing this funding is a huge endorsement from our investors of the value that we bring to our customers and shareholders, and the positive impact we are making on farms around the world. This round follows CropX's January acquisition of California-based precision irrigation company Tule Technologies, our fourth

acquisition. We are proud to be one of the consolidation leaders in ag-tech as we bring a complete, powerful and simple solution to farms and agribusinesses."

FRUIT ATTRACTION RECORDS AN 80% OCCUPANCY RATE FIVE MONTHS BEFORE ITS 15TH ANNIVERSARY CELEBRATION

Fruit Attraction, organised by IFEMA MADRID and FEPEX, will celebrate its 15th anniversary from 3 to 5 October. Five months before

the start of the fair, it has recorded an 80% occupancy rate, as stated by its director, María José Sánchez, at the presentation of the 2023 edition, which took place at the Brazilian Embassy on the occasion of its participation as a Noted Importing Country. Jorge F. Brotóns, president of FEPEX, and Orlando Leite Ribeiro, Brazilian ambassador in Spain, also took part.

So far, 46,602 m² of exhibition space has been allocated, an increase of 8% compared to the same time last year. All in all, the forecasts for the next edition are optimistic, with 1,800 participating companies

FAO TRAINS FARMER FIELD SCHOOLS FACILITATORS ON MANAGEMENT OF DATE PALM PESTS IN KUWAIT

Within the framework of the regional programme for Red Palm Weevil (RPW) management in the Near East and North Africa region, the Food and Agriculture Organization of the United Nations (FAO), in cooperation with the Public Authority of Agriculture Affairs and Fish Resources in Kuwait, held a training programme for Farmer Field Schools (FFS) facilitators on managing date palm pests, focusing on the Red Palm Weevil (RPW) in Kuwait, from 8 to 11 of May. The training was attended by FAO regional experts and trainers as well as more than 30 participants working in the date palm sector in Kuwait.

The programme was held for the first time in Kuwait and aimed to enhance the capacities of agricultural extensionists to establish and implement farmer field schools and to improve the skills and capabilities of farmers in controlling RPW and other date palm pests.

"The training programme in the

State of Kuwait is of great importance as it focuses on training FFS facilitators and the specifications for establishing and preparing successful FFS topics as well as how to prepare the agricultural crop calendar and the analysis of the agro-ecosystem. The training also discusses the wrong practices in the integrated management of RPW and other palm pests stressed Thaer Yaseen, Plant Protection Officer at the Regional Office of the Food and Agriculture Organization of the United Nations for the Near East and North Africa region (NENA).

RPW is a serious pest that attacks around 40 species of palms in more than 50 countries, causing widespread damage to palm trees and other crops and affecting production, farmers' livelihoods, and the environment. The Regional Programme for RPW management in the

NENA region aims to address the gaps in managing RPW in three main areas: scientific research, technology transfer, and capacity building. The programme also developed five working groups in the areas of RPW monitoring and early detection, activating the participation of farmers, developing RPW control protocols and techniques, studying RPW social and economic impact, and developing phytosanitary systems and border protocols, as well as producing certified palm propagation materials for RPW sustainable management.



FLOWERTRIALS 2023: MUST-VISIT EVENT FOR POT AND BEDDING PLANT PROFESSIONALS



FlowerTrials® 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.

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.

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.

from 55 countries, more than 58,000 m² of fruit and vegetable produce on offer and an expected attendance of 90,000 professionals from 130 countries.

Up to today, the fair has confirmed the participation of practically all the production areas and Autonomous Communities of Spain, as well as the international participation of 45 countries, which demonstrates the whole industry's firm commitment to the project in this new edition of the Fair.

Fruit Attraction 2023 will occupy eight halls at the IFEMA MADRID exhibition centre - 3, 4, 5, 6, 7, 8, 9 and 10 - making

the city the world epicentre for the marketing of fresh produce, with innovation, quality and diversity as the main attributes of this major business centre, recognised by operators and retailers from all over the world as essential for planning their campaigns at a key time such as October.

KEMIN AQUASCIENCE™ LAUNCHES PATHOROL™ FOR FARMED SHRIMP HEALTH IN MULTIPLE ASIAN COUNTRIES

Kemin Industries, a global ingredient manufacturer that

strives to sustainably transform the quality of life every day for 80 percent of the world with its products and services, has launched Pathorol™, a shrimp supplementation product that improves the health of the hepatopancreas, an organ in the crustacean's digestive tract, for customers in India, Thailand, Vietnam, Indonesia and Singapore.

For shrimp to thrive in a farm-pond setting, maintaining healthy digestive systems is a key component in supporting good shrimp husbandry. Multiple agents contribute to slow or stunted growth in shrimp.

Supporting a healthy digestive system is part of a multi-faceted set of tools producers can use to support healthy growth rates in shrimp. By protecting the hepatopancreas and its role in the secretion of digestive enzymes, absorption and storage of nutrients, producers can encourage healthy growth and yield outcomes in their shrimp ponds.

Pathorol, a patent-pending product, was developed to support a healthy hepatopancreas and digestive system for shrimp and aid in maintaining healthy shrimp throughout their growth cycle. Pathorol is a unique blend of phytogenic compounds that has been shown to enhance performance and productivity for pond-raised shrimp. By adding Pathorol to shrimp feed, producers can improve feed digestibility and growth performance and reduce size variability.

"Growth performance and productivity are essential for successful shrimp farming,"

said Leo Xie-Lei, President, Kemin AquaScience™.

JOHN DEERE SETS NEW STANDARDS IN PRECISION AG TECHNOLOGY AND DRIVING COMFORT

With its model year 2024 tractors, John Deere will take farming to the next level, integrating the new G5 CommandCenter™ displays into all 6, 7, 8 and 9 Series machines, while further enhancing driving comfort.

The new G5^{Plus} CommandCenter™ includes documentation, data sync, JDLink™ connectivity, variable rate application, section control and AutoTrac™ guidance as standard on all 6-cylinder 6R, 7, 8 and 9 series tractors. The 12.8-inch G5^{Plus} CommandCenter™ is 33% larger than the previous display, comes with 1080P high definition and a much faster processor. With this update, customers will achieve

the highest levels of precision agriculture efficiency and ease of use while ensuring their tractors are ready for the future.

The model year 2024 John Deere 6R brings with it new developments improving driver comfort. The redesigned steering column and new steering wheel provides the next level in comfort, especially in its on-the-road performance. In addition, the new dampening system available on both Premium and Ultimate seats, the 6R model year 2024 sets new standards.

The model year 2024 7R features a new steering system with a 50% increase in steering capacity. This is made possible by larger steering cylinders, which are fitted as standard to all 7R. To enhance operator comfort during transport, the 7R features a new Automotive Type Steering System. It naturally re-centres itself and improves line holding significantly. Known as reactive steering, the feature can be easily activated via a softkey

INTRODUCING THE NEW MS10 ROTATOR® FOR THE NURSERY MARKET

Nelson Irrigation Corporation (NIC), headquartered in Walla Walla, Washington U.S.A., plans, designs, manufactures and sells proprietary products for the irrigation equipment

market. NIC has led the industry with developments in Big Gun® Sprinklers, Rotator® Sprinklers, 3030 Series Pivot Products, Control Valves and Pressure Regulators.

Nelson Irrigation is now introducing the new MS10 Rotator® for the Nursery Market. This high-volume, multi-stream, fast-turning MS10 Rotator provides high uniformity for containerized plants. It can be used in an upright and inverted

position. There is no vibration and reports from the field indicate great performance in the wind. Like other Rotator products, the unique Acme Thread delivers!

- Flow rates from 1 to 4.5 GPM
- Typical applications are on 20 to 25 foot spacing
- Quick removal with acme thread for cleaning plugged nozzles
- Easy to add a regulator or a check valve
- Quickly cap a riser using Acme Cap #10615
- Multiple adapters available: (3/8", 1/2", 3/4" MNPT) and (1/2", 3/4", 25mm socket).



**MS10
ROTATOR®**

A GREAT UPRIGHT OR
INVERTED SPRINKLER
OPTION FOR CONTAINER
GROWN PLANTS

NEOM FOOD SECTOR AND CARE'S JOIN FORCES TO DRIVE FOOD INNOVATION IN THE KINGDOM OF SAUDI ARABIA



NEOM, the innovation hub in northwest Saudi Arabia, announced a partnership with CARE's, a global project founded by Italian chef Norbert Niederkofler and Paolo Ferretti, to develop NEOM's unique culinary identity where the food supply is treated responsibly from the planet to the plate. Together we will inspire a new generation of Saudi chefs to become change agents, creating exciting, delicious new dishes using fresh ingredients from their own regions.

NEOM and CARE's will develop a manifesto for food-industry professionals, outlining the

principles for sustainable gastronomy and food security, alongside educational initiatives and content to broaden understanding of healthy eating. With a commitment to nurturing Saudi talent, the partnership will facilitate training opportunities and chef camps, as well as launch an award series to recognize leading examples of innovation in food systems.

Dr. Juan Carlos Motamayor, Executive Director of NEOM Food Sector, commented: "In an era marked by the challenges of climate change and food insecurity, NEOM is committed to developing groundbreaking food solutions, with the support of our industry partners and specialists. Working with Norbert and the CARE's program gives us the opportunity

to demonstrate, develop and implement locally adapted modern food practices that both meet the nutritional needs of consumers in NEOM and the Kingdom and preserve our planet."

CARE's brings together chefs, inspirational entrepreneurs and professionals from the food industry who all share the goal of promoting the use of locally sourced ingredients and sustainable food practices that are in harmony with nature. At present, the program includes over 150 chefs in more than 25 countries, who act as ambassadors across the globe and support a wide variety of initiatives and engagement opportunities that will establish a sustainable approach to gastronomy.

The NEOM CARE's partnership further strengthens NEOM's ongoing commitment to harnessing innovation to nourish people and the planet and guaranteeing food security for generations to come.

on the CommandCenter™. Two additional front brake discs enhance the operator's experience and transport performance. All 7, 8 and 9 tractors have a new high-resolution corner post display and a built-in StarFire™ 7000.

ARTIFICIAL INTELLIGENCE ENHANCES FARMER INSIGHT

DeLaval Plus is a portal for an ever-growing set of cloud-based services that enable advanced farm management analysis and reporting. By drawing on the latest in data

processing, farmers can ensure that their cows are healthy, well looked after, and milked efficiently, safely and sustainably. The portal is powered by DeLaval DeepBlue, which uses artificial intelligence to find patterns and trends in data from connected DeLaval farms all around the world.

"We've come a long way with farm data in recent years, but DeLaval Plus takes data insight to the next level by drawing on tens of millions of data points from around the world to empower farmers to make better everyday decisions," explains René

Kolbach, Business Development and Go to Market Manager.

"DeepBlue will continue to evolve and better serve our customers as more farms and data points are connected globally."

As of March 2023, DeLaval Plus had been launched in eight markets around the world, with plans to introduce the portal to another 12 countries during 2023.

"DeLaval Plus will also support our dealers who are our essential business partners," says Kolbach. "Enhanced analysis of the performance of DeLaval milking systems through DeLaval Plus will enable our dealers to better understand farmer needs and

deliver an even higher level of service and more proactive support to their customers.”

AGRILEVANTE, THE AGRICULTURAL TECHNOLOGY EXHIBITION

The 2023 edition of Agrilevante, to be held at the Bari exhibition centre, Italy from 5 to 8 October, was presented at the Ciheam of Bari. The technical content of the exhibition is very high and the conference programme is extensive, devoted to agronomy, electronic and robotic technologies, as well as public financing for agriculture and policies for the development of the primary sector in the entire Mediterranean area.

Agrilevante is the place for technologies but also the place for ideas and projects.

This was the message that the General Manager of FederUnacoma, Simona Rapastella, launched at the Mediterranean Agronomic Institute in Bari when presenting the seventh edition of Agrilevante, the biennial exhibition of machinery and technology for agriculture in the Mediterranean area. The event - organised by FederUnacoma in partnership with the Fiera del Levante, with the support of the Puglia Region's Agriculture Department, and in collaboration with the Municipality of Bari and AIA-ARE Puglia, the universities of Bari and Foggia, and the Ciheam of Bari itself - is a major workshop for the development of the primary economy. Businesspeople and farmers from Mediterranean Europe, the Balkan countries, the Middle

East, as well as North and sub-Saharan Africa, will be in Bari - from 5 to 8 October next, in the halls of the exhibition centre - to learn about the most advanced technologies for arable crops, animal husbandry, fruit growing, and above all viticulture and olive growing, but also to investigate the most topical political and economic issues and the development models that are envisaged for this vast region.

NEW MODE OF ACTION CLASSIFICATION FOR BASF INSECTICIDE AXALION® ACTIVE

Axalion® Active, BASF's newest insecticide innovation, was recently designated as a new and distinct mode of action by the Insecticide Resistance Action Committee (IRAC). Based on research and discovery by

E-FORCE – BOOSTING CALF IMMUNITY



E-Force from Vilofoss is a feed supplement for calves to be used in the stressful period around weaning when the calves are experiencing big changes in the feeding. The feed contains natural vitamin E, which is more bioactive and has a higher

absorption rate. To protect this fragile vitamin E form, the product is embedded with a special fat coating. Trials demonstrated that calves supplemented with E-Force had a significantly higher plasma vitamin E level and that stress

indicators in the animal decreased.

The product is the outcome on a project supported by the GUDP program coordinated by The Danish FishAgri Agency, Ministry of Food, Agriculture and Fisheries. The background for the project is the frequency of diarrhea which is often high around weaning.

The product has been developed together with the University of Aarhus, LVK vet group, and SlagtekalveRådgivning Aps.

E-Force includes functional fibre instead of insoluble fibre

The carrier used in E-Force is functional fibre, which is non-fermentable and hydrothermic-treated. These special fibers increase enzyme activity in the digestible tract and modify the intestinal microbiota – improving the intestinal health.

NEW! HORTI AGRI NEXT TO JOIN VIV MEA 2023 IN ABU DHABI!

VIV MEA, the international trade show from feed to food for the production & processing of poultry meat, eggs, fish, and dairy, in the Middle East and Africa, returns for its 4th edition 20-22 November 2023, in Abu Dhabi.

VIV MEA brings together the livestock world with 500+ global and regional suppliers from the entire supply chain of all animal species production. Strongly business-driven, with a clear focus on innovation, technology and scientific research, VIV MEA is by far the top show for the animal husbandry industry in the whole region since 2016 when the first edition took place.

Smart Horticulture And Sustainable Agriculture In The Epicenter Of The Middle East Agri-Food Business Week

Parallel to VIV MEA 2023, two new concepts are showing up to complement a rich portfolio: HORTI AGRI NEXT (HAN) MEA 2023. This new co-located show will bring for the first time an array of exhibitors and brand names from the horticultural, agricultural, and plant-based protein production and processing industry, in the heart of

the Middle East. The first edition of HAN MEA aspires to be an international platform for all professionals in the agri-business in the region that will bring new products, innovations, and technologies to an ever-growing audience.

The Abu Dhabi Agriculture & Food Security Week is back for the second time in November 2023

The Abu Dhabi Agriculture & Food Security Week (ADAFSW) was launched for the first time in 2021 by the Government entity Abu Dhabi Agriculture & Food Safety Authority (ADAFSA). It has since its launch been recognized as the largest event of its kind in the region, bringing together farmers and growers, food producers, policy makers, scientists, and investors with the ultimate goal of moving forward in sustainable agriculture and food security.

Following a valuable first edition, ADAFSA announced a cooperation



with VNU Europe, the organizer of the VIV worldwide series of events - including VIV MEA, to bring the Abu Dhabi Agriculture & Food Security Week to the next level. Within this concept, there is no better timing and stage for the launching of HORTI & AGRI NEXT MEA exhibition that will be covering – together with the well-established VIV MEA – the entire AgriFood supply chain, both horizontally and vertically.

VNU Europe invites all professionals in the field to save the date for an event of business networking, knowledge and future-focused discussions shaping the future and new standards in the agri-food production.

BASF, Axalion is the only representative of the new "Group 36", targeting a new site in chordotonal organs. Axalion is the first insecticide for the control of piercing and sucking pests to receive a new IRAC mode of action classification since 2015.

"We are extremely excited about the new IRAC classification as Axalion is not only the sole representative of new Group 36, but it is also the only representative of a unique insecticidal class of chemistry, the Pyridazine amides," said Harold Bastiaans, Vice President Global Research Insecticides at

BASF Agricultural Solutions. "New modes of action, such as Axalion, offer growers greater flexibility to control target pests while helping to reduce insecticide resistance." Axalion is BASF's newest insecticide innovation and contains the active ingredient dimpropridaz. It is designed to safeguard a broad range of fruits, vegetables, row crops and ornamentals from damaging piercing and sucking insect pests. Specifically designed to work harmoniously with beneficials and pollinators when applied in accordance with label instructions, Axalion

controls pests that have developed resistance to existing chemistries. Already available for use in Australia as Efficon® Insecticide, farmers in Asia Pacific, Europe and South America are expected to have access to Axalion in the near future.

The only member of new IRAC Group 36, Axalion quickly disrupts the function of chordotonal stretch receptor organs which are tiny sensory organs that provide insects with their senses of hearing, orientation, and balance. Once the functionality of these organs is disrupted, the target pests become uncoordinated, and unable to feed and/or transmit viruses.



ELITE GLOBAL FRESH TRADING EXPANDS EXPORT OF POPULAR UAE-GROWN BLUEBERRIES TO NEW MARKETS IN ASIA-PACIFIC

Elite Global Fresh Trading (EGFT), a subsidiary of Yas Holding's agriculture division Elite Agro Holding (EAG) and a leading UAE trader of fresh produce, has expanded its international footprint by exporting highly in-demand blueberries to the new destinations of Japan, Cambodia, Thailand and India, adding to its existing export markets of Singapore, Malaysia and Hong Kong.

EAG is the first and biggest producer in the UAE to grow blueberries, and the first

Emirati company to export to markets like Japan that have a tough requirement for high-quality certifications is an important milestone for EAG and the UAE, and a testament to its agricultural capabilities.

"We're proud to see the expansion of the international distribution network for our high-quality and popular blueberries. This is a strategic move that supports the UAE's food security and its vision for economic diversification, while placing the country

among elite agricultural exporting countries," said Dr. Abdulmonem Almarzooqi, Elite Agro Holding Chief Executive Officer and Member of the Board.

Last year, EGFT debuted locally-grown blueberry exports to the international markets of Malaysia, Singapore and Hong Kong.

"Our export expansion is a demonstration of our commercial strength and our robust and sustainable farming capabilities. We're optimistic about future growth in the export of blueberries to these new markets, which we have penetrated despite significant competition from producers in Morocco, Spain and Peru. There is massive demand from the Asia-Pacific region for UAE-produced fresh, tasty and high-quality blueberries and EAG is the pioneering and leading producer of five varieties of the fruit," said Dr. Abdulmonem Almarzooqi, CEO of Elite Agro Holding.

For more information, visit www.eag.ae

ANCIENT CENTRAL AMERICAN SUPERFOOD THRIVING IN THE MIDDLE EAST

One of the tastiest and most versatile superfoods, the Avocado has become very popular in the MENA region in the last 10 years with imports growing exponentially each year. Originally from “Puebla, Mexico”, this single seeded berry (yes, it’s a fruit and not a vegetable) is actually a relative of the bay laurel as well as the cinnamon trees. Ancient tribes began enjoying this strange, delicious fruit 10,000 years ago, and cultivation started around 5000 years ago. With over 500 varieties available, it is an ideal fruit to enjoy all year long. Different varieties will produce fruit at different times of the year, and it’s also curious how the fruit will not start to ripen until it is picked from the tree. They can hang on the tree, in pairs, for up to 18 months

without going bad.

Why are they considered a superfood? All 10 minerals that are considered essential for human health are contained in an Avocado. They are nutrient dense and contain the good fats that are needed for a healthy heart. Can avocados grow in the MENA region? Yes, absolutely. The warm climate make them ideal for this fruit to prosper. Many growers in Morocco are using GROWinBAG’s™ to cultivate avocados commercially. There are numerous benefits in planting avocados in GROWinBAG’s™. The fruiting tree can receive all the water and nutrients it needs directly without any

loss into the surrounding ground. The light and air pruning qualities of these bags help support a fibrous root system that will in turn make for a fruitful tree.

Next time you enjoy your avocado in puree, salad, toast, chocolate mousse or even as a face mask, consider visiting your local garden centre to grow your own.

**For more information, contact
lina@whsaustralia.com.au**





First greenhouse project of Dava (in operation since 2021)

DAVA AGRICULTURAL SIGNS A NEW MAJOR GREENHOUSE CONTRACT WITH DEBETS SCHALKE

The Saudi Arabian company Dava Agricultural is further expanding its greenhouse acreage. The company Dava, owned by the Al-Batal family, has signed a contract for a new semi-closed greenhouse of 23 hectares to be built with their long-term partner Debets Schalke. Dava's greenhouse complexes located in the Al-Kharj region will soon cover more than 110 hectares.

The expansion contributes to Saudi Vision 2030. Saudi Vision 2030 is a strategic framework to reduce Saudi Arabia's dependence on oil, diversify the economy and develop public service sectors and sustainable food production.

Dava supports Saudi Arabia's goal to become more self-sufficient in food production. While Saudi Vision 2023 is moving into the next phase, Dava is doing the same with its greenhouse complexes. Recently Dava achieved its GlobalG.A.P. certification for cucumbers and peppers. In addition to premium quality tomatoes the greenhouses are now also used for the

cultivation of cucumbers and peppers. The GlobalG.A.P. certification underscores Dava's commitment to produce high-quality, safe, and environmentally friendly food.

From start-up to a thriving company

"In 2019 we started with the construction of the first greenhouse complexes in collaboration with Debets Schalke. Dava was a start-up in the agricultural sector, but we are now a solid organization, a thriving company with an ambitious vision and our location is right at the crossroads of important international trade routes between three continents: Asia, Europe and Africa. Combining the local abundance of sunlight with energy and water efficient climate control systems makes our greenhouses the perfect solution for supplying a large part of the Middle East with sustainably grown vegetables."

Sharing knowledge

"The decision to continue our

cooperation with Debets Schalke was an easy one. Debets Schalke and Dava are both 100% family businesses that are known to value long-term relationships. As a pioneer in the Middle East, Debets Schalke is able to realize high-tech greenhouse projects suitable for the local climate conditions. The greenhouses offer the opportunity to grow vegetables year-round in an energy-efficient way," says Faisal Al-Batal, owner of Dava, "Knowledge exchange between the Dutch horticultural sector and Dava is essential for further development in the field of horticulture in Saudi Arabia. I am proud that with our large-scale greenhouse projects we can contribute to Saudi Vision 2030 and food independence."

Dava's greenhouse complexes, including the new project, will cover over 110 hectares and are spread over 6 different locations in Saudi Arabia.

For more information, visit
www.dava.sa

A pilot vertical farm is a small-scale version of your future farm that enables you to apply your research, make mistakes, and play around without the higher risk of jumping straight into a full commercial business.

Five reasons you need a test vertical farm

- It's a low-cost, low-risk way to see if hydroponic farming is right for you.
- A test system amplifies your education and shortens your learning curve.
- You'll feel more confident about going into full-scale production.
- You can make mistakes on a small scale without having to risk your entire farm.
- It allows you to bring samples to interested customers before launching. And believe us (and successful ZipGrow farmers) when we say that samples sell!

Starting a pilot vertical farm system is simple, affordable, and only requires a small footprint.

ZipGrow Inc. now has three solutions at various price points that are turnkey hydroponic systems using the same space-smart technology as commercial vertical farms. You can set these up in a home, garage, or existing workspace.

Economy

With 2, 4, and 8-Tower options, the wall-mounted Farm Wall™ gives you the flexibility to get your feet wet with vertical farming no matter how much space you have available.

Aesthetic

We designed the ZipGarden™ for homes and offices; however, its smaller footprint



HOW TO START A PILOT FARM USING ZIPGROW™ HYDROPONIC TOWERS

and free-standing structure make it an ideal pilot system that can be placed anywhere.

Mobile and highly productive

The Education Rack is mounted to its own modular rolling frame that fits through a standard door frame. You can plant up to 16 Towers; it's

our largest and most productive test system.

All systems have all necessary plumbing and pumps, LED grow lights (optional on FarmWall), hydroponic ZipGrow™ Towers, and assembly instructions.

For more information, visit www.zipgrow.com

RESEARCH BY PHILIPS HORTICULTURE LED SOLUTIONS, WUR, AND NUNHEMS SHOWS THAT LONG-TERM EXPOSURE OF FAR-RED LIGHT IN TOMATOES CAN PRODUCE ADDITIONAL YIELDS

The world leader in lighting, together with Wageningen University & Research and Nunhems conducted research that shows that the use of far-red light can produce an additional yield of almost one fifth in tomatoes, depending on the variety. The far-red light needs to be added during the entire photoperiod alongside the standard PAR light.

Growers want to get as much as possible out of their LED lights. That's why Philips Horticulture LED Solutions, in close collaboration with its partners, is conducting ongoing research into the optimal light recipes and

photoperiod (lighting duration) for different crops. This has recently resulted in new insights for tomato cultivation.

It is well-known that the different colors within a light spectrum can have an effect on the development of plants. In fact, crops may react differently to the various colors of light at different times of day. Therefore, this study sought to find the most appropriate time for the application of far-red light. They found that far-red was by far most effective when added throughout the entire photoperiod.

While the outcome confirms the opportunities that far-red light presents, it





is not a clear and straightforward equation. “We now have more insight into the impact of far-red light during different periods of the day. The next step is to focus on the ratio between far-red and PAR light to find the ideal balance between growing optimization and energy efficiency,” says Plant Specialist Erik Stappers of Philips Horticulture LED Solutions.

16 percent additional yield

The best result was a 16% increase in yield, however, major differences between varieties make the outcome uncertain for growers. The 20-week study shows that all far-red treatments give more sink strength, which means that more sugars flow to the fruits. However, this only led to a significant increase in

harvest if the far-red was dosed during the entire photoperiod -- in this case 16 hours a day.

The research partners, Philips Horticulture LED Solutions, Wageningen University & Research and Nunhems, conclude from this that the plant is not more sensitive to this light in the morning or in the afternoon. Far-red light requires more energy than PAR light, which means that the long duration that far-red has to be added leads to higher energy consumption.

Ratio between PAR and far-red

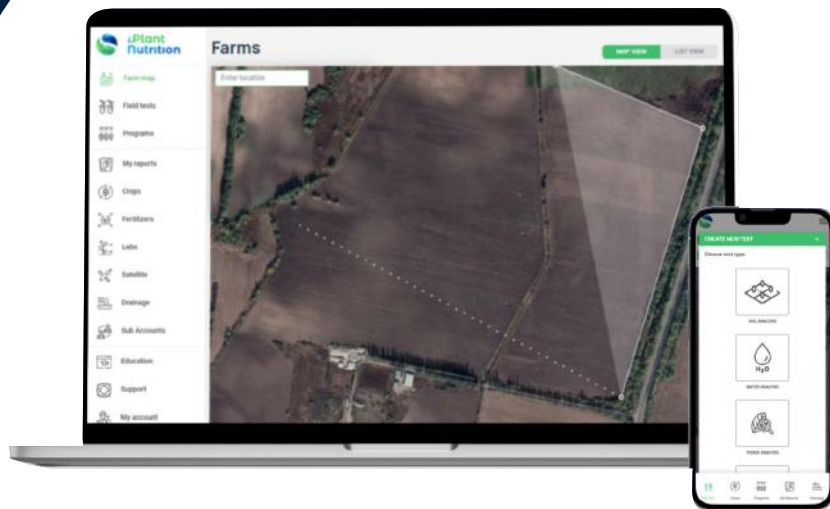
The question now is the level at which the use of far-red becomes advantageous in relation to the extra energy consumption. If a relatively low percentage of far-red light

produces additional yield, then the researchers expect it may become appealing. “We continue to tweak it to find the ideal light recipe for tomatoes. Besides additional yield in kilos, higher quality and better taste may also come into play in the future,” says Elena Jiménez, Plant Pathology researcher at Wageningen University.

Philips Horticulture LED Solutions, Nunhems and Wageningen University & Research have been working together for about seven years to research the ideal light recipe for tomatoes. Various light recipes are being tested in relation to energy consumption, light spectrum, additional yield and uniformity.

For more information, visit www.signify.com

I-PLANTNUTRITION: A FERTILISATION SOFTWARE FOR GROWERS TO REDUCE THEIR FERTILIZER USE AND IMPROVE THEIR YIELDS



i-Plantnutrition, a member of Yellow Brick AgTech, has made a bold and generous move by making its fertilisation software available for free to private growers, NGOs, and non-profit organizations. This decision comes after more than 12 years of commercial sales in over 72 countries, during which time the company has accumulated invaluable data to support the algorithm behind its fertilization recipes.

The i-Plantnutrition fertilisation software is renowned for its accuracy and effectiveness, with growers using it to make informed decisions and reduce their fertilisation use. The software's output is based on years of data that have been carefully analysed to provide reliable and unbiased results.

Johnathan Kol-Bar, CEO of i-Plantnutrition, commented: "Recognizing the importance of sustainable agriculture practices, i-Plantnutrition has

decided to make its software available to all growers for free. This move demonstrates the company's commitment to supporting sustainable farming practices and its dedication to ensuring that growers have access to the latest tools and technology."

The decision to make the software free also ensures that good fertilisation practices is not influenced by any fertilisation company, and that its fertilisation recipes remain accurate and non-biased. This independence is crucial for growers who need reliable information to make informed decisions about their fertiliser use.

With this announcement, i-Plantnutrition is not only providing a valuable tool to growers but also encouraging the adoption of sustainable farming practices worldwide. By making the software available for free, the company is removing financial barriers that may have prevented some

growers from accessing the software in the past.

The i-Plantnutrition fertilisation software is a testament to the company's commitment to innovation and sustainability. The software's accuracy and effectiveness have helped growers around the world to reduce their fertilizer use and improve their yields. Now, with the software available for free, more growers will be able to benefit from this valuable tool.

By providing this software, the company is helping growers to make more informed decisions about their fertiliser use, reducing their environmental impact, and improving their yields. The i-Plantnutrition fertilisation software is an example of the power of innovation and collaboration in promoting sustainable agriculture practices.

For any queries, please contact johan@ybcap.com



NITROSTIM: DISCOVER THE INNOVATIVE BIOSTIMULANT

What 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

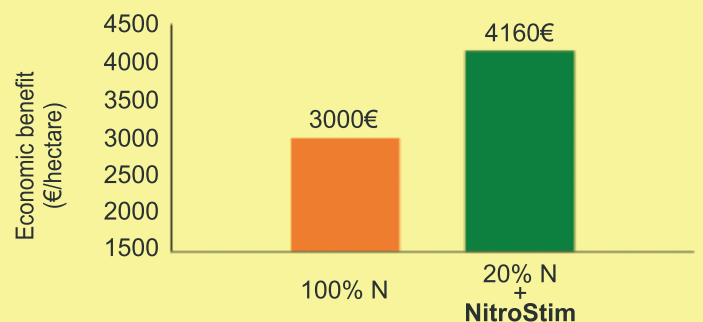
- Stimulates vegetative growth
- Increases performance while reducing production costs
- Strengthens plants against adverse environmental factors such as drought, salinity, etc.
- Improves plant resistance against biotic

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

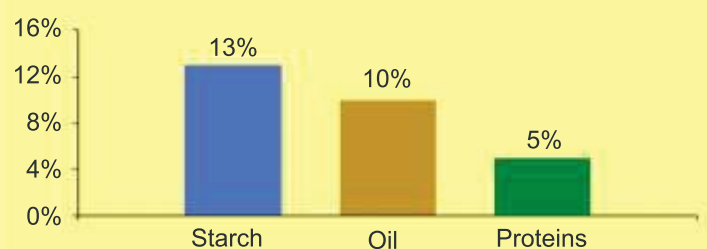
The diagrams show experimental results obtained after experiments of the Agricultural University of Athens

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



ZEOLITE FOR PLANT & ANIMAL PRODUCTION

Agriculture Green Zeolite Company, honored to be recognized as the third-ranked firm in the world by the list of the International Natural Zeolite Association (INZA), congratulations to our excellent partners, and special thanks to all the hard-working team. GZ headquartered in Amman, Jordan, was established in 2015, specializing in the extraction, mining, and production of natural zeolite and the manufacture of various formulations for different uses in a lot of sectors. Zeolite is processed and packaged in a variety of sizes at the company's factory, owned

together with a natural zeolite mine.

What is Zeolite?

Aluminum, silicon, and oxygen make up the group of crystalline minerals known as zeolites, which are found in nature. They are useful in many applications because of their distinctive porosity structure, which enables them to selectively adsorb and desorb chemicals.

Zeolite is a natural, environmentally friendly solution that has proven successful in all countries of the world and in many different sectors such as plant production, animal production, water treatment, etc.

It is a product that is not affected by environmental variables or influences and has a long shelf life. This in itself is an advertisement for the commodity that increases its distribution and the degree of demand for it and gives it greater strength in competing with similar commodities that have evidence of conformity to standard specifications, which increases profits, reduces inventory, and works to increase the capital cycle.

It has been proven that our zeolite (chabazite) has effectiveness and quality, the minimum of which is double that of any other zeolite, and its results have appeared in

various fields. Due to their porous nature, zeolites have excellent adsorption and ion-exchange properties and a honeycomb structure. They can selectively trap and release certain molecules based on their size, shape, and polarity. This makes zeolites useful in applications such as water purification, gas separation, catalysis, and chemical synthesis.

As it works to increase agricultural production by more than 50%, save water by 50%, and increase the effectiveness of the use of fertilizers, which makes the production cost lower.

All of this is achieved while promoting environmental well-being and the sustainable consumption of natural resources.

Benefits of Zeolite

Adding zeolite to the deteriorated soil and mixing it with organic fertilizers works on improving the soil's physical, chemical, and biological properties and increases the soil's ability to support plant growth and expel salinity from the root perimeter, as it increases the cohesion of sandy soil.

Zeolite also works to neutralize harmful substances and heavy elements, reduce diseases, and thwart nematodes, which leads to better development and spread of plant roots and thus plant growth, improve and increase production. Prolonging the storage period and preserving the freshness and quality of stored fruits and crops.

The use of zeolite in various ways in water treatment leads to a significant reduction in the levels of pollutants that may reach the complete removal of pollutants, which

makes the water ready for unrestricted use in agriculture according to standards.

Zeolite is used in various fields, including landscaping and gardening, the industrial field (dyes, coatings, and adhesives), the construction field (building and asphalt),

mushroom production, and the medical field. Zeolite has been widely used in the medical field, and multiple studies have shown that it reduces the side effects of cancer.

For more information, visit
www.greenzeolit.com



SOIL GENERATOR, ABSOLUTELY NEW AND ONE-OF-A-KIND BIO-FERTILIZER OF ITS KIND, FORMING SOIL FERTILITY IN SANDS

The use of chemical and biological substances by human civilization for 120 years, threats of a man-made nature have destroyed the delicate balance of the Earth's ecosystem. One of the problems of which was salting and soil degradation. And here you have the Immune response of the Earth!

My Comprehensive Company has developed an innovative product that can change global environmental changes. These are Bio Agents that absorb salt, pesticides and any toxic waste.

"Soil Generator" is a unique product in the world, capable of turning sea sand into fertile land in three months with the appearance of earthworms.

Today, oil and petroleum products are recognized as one of the main pollutants of the

environment. Our product copes with this pollution by turning it into fertile soil.

We are proud that the "Soil Generator" based on organic animal waste can change the properties of the earth. Thanks to the use of advanced technologies, our product effectively removes salts, pesticides, dioxides and oil pollution from the soil.

Today, the world spends from \$400 to \$700 per hectare on chemical fertilizers that pollute the environment and harm human health. We offer an eco-friendly and efficient method of cultivating land from \$50 to \$150 per hectare, depending on the condition of the soil.

Our method is affordable for a simple farmer and an average entrepreneur, and is able to make a business sustainable in

the long term, allowing to reduce costs and increase profitability of production.

Our technology restores the environment, making it a safe human habitation.

Our technique is able to simultaneously dispose of chemical waste and produce valuable products.

Our position is the sustainable development of agriculture and environmental safety around the world.

Food is a strategic instrument of global influence in the world. We are confident that our product will radically change the world of agriculture, with increased investment and guarantee the food security of any country.

For more information, visit
www.fertilesands.com

SPACE



Discover
the exhibition
in video

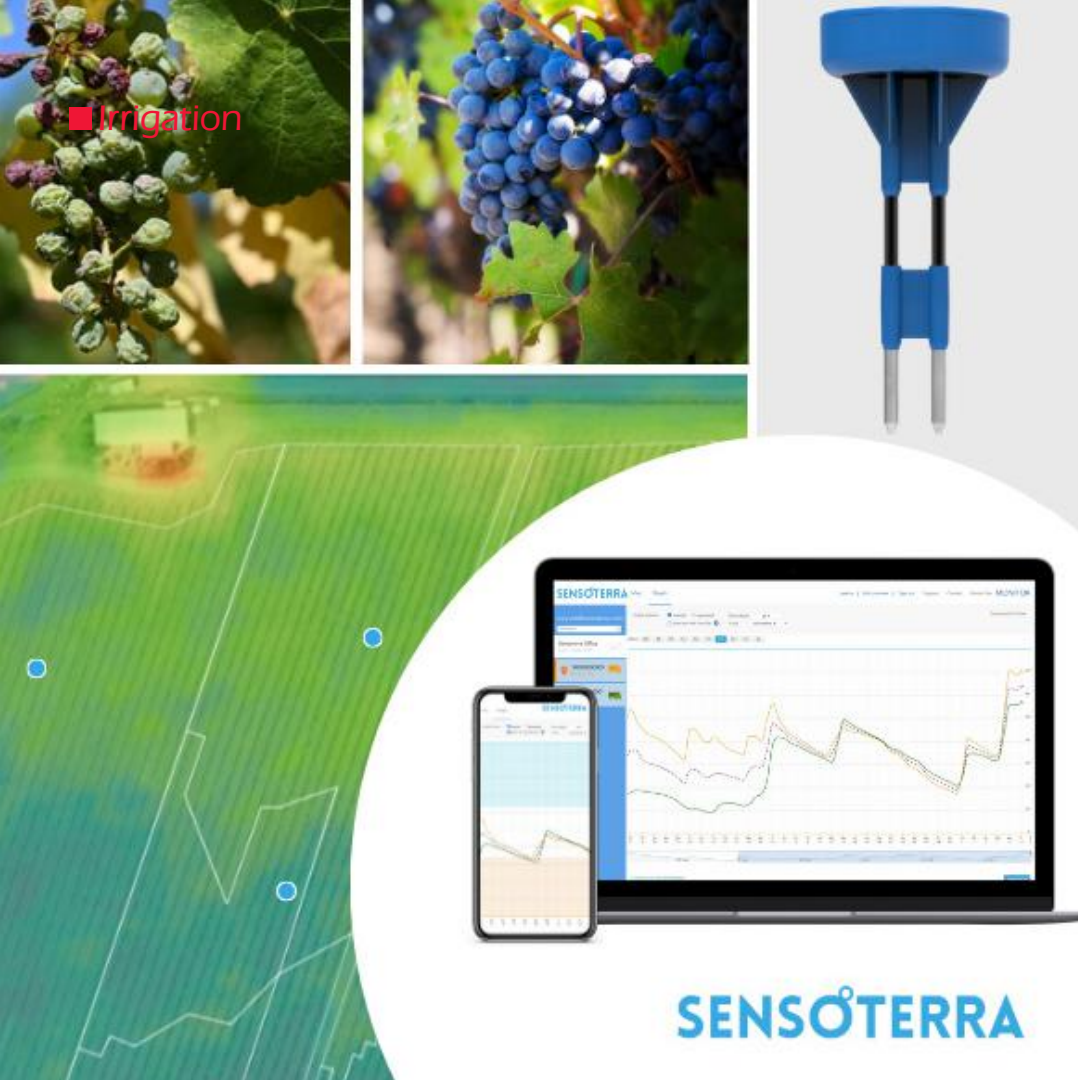
12.13.14
SEPT. 2023

RENNES
FRANCE
space.fr



#SPACE2023
@SPACERennes

THE INTERNATIONAL EXHIBITION FOR ANIMAL FARMING



SAVING 7,000,000 LITERS OF WATER WITH PRECISION IRRIGATION

Precision irrigation is an increasingly important management process for horticulturalist, across the globe. With increased demand for both high plant quality and yield, along with the increasing market volatility of chemical input availability, horticulturalist are looking for optimized solutions for irrigation and fertigation processes on their fields.

Sensoterra partner, Verdi Ag, developed a modernized solution to irrigation optimization. They break up

large irrigation, and re-build into micro-irrigation management zones. This prevents over- and under-irrigation across a field, using precision irrigation techniques.

Working with orchards and vineyards, Verdi Ag has worked to save an excess of 7 million liters of water in 2022 alone, with this method of precision irrigation. Vineyards are often found on sloping hills, of gravelly mineral rich soils. These soils offer unique profiles of the terroir, but often are lacking in

soil moisture retention ability, easily stressing the plant and threatening yield. Growers frequently irrigate to maintain plant growth and quality, but without key data insights, this can be a challenge to perfect.

"We often see that the vines are growing over-vigorously, with the fruit being very large, and the sugar content too high," says Roman Kozak of Verdi Ag.

By limiting water availability to areas which are over-irrigated, there is a reduction of water waste, and an improvement of fruit quality. And splitting up irrigation from one centralized system to smaller management zones, growers can monitor and optimize activities on a much more precise level. Placing Sensoterra sensors in strategically determined micro-irrigation zones, means improving irrigation needs for the plant, increasing quality and yield.

"One of our customers reduced irrigation by 80%. This improved grape quality, resulting in a marketable price increase three-fold of that of the previous season," Roman Kozak, Verdi Ag.

With improved uniformity, consistency of quality and vigor of the vineyard, optimized irrigation also reduced the likelihood of diseases like powdery mildew, which can spread rapidly in an affected crop. Helping growers gain control of irrigation, benefits the crop, and reduces risks of irrigation induced disease.

Learn more about how precision irrigation can help save water and improve plant yield and quality by visiting www.sensoterra.com



SaMASZ MRG 2-900: HIGH-PERFORMANCE HAY MERGER FOR FORAGE COLLECTION IN AGRICULTURE

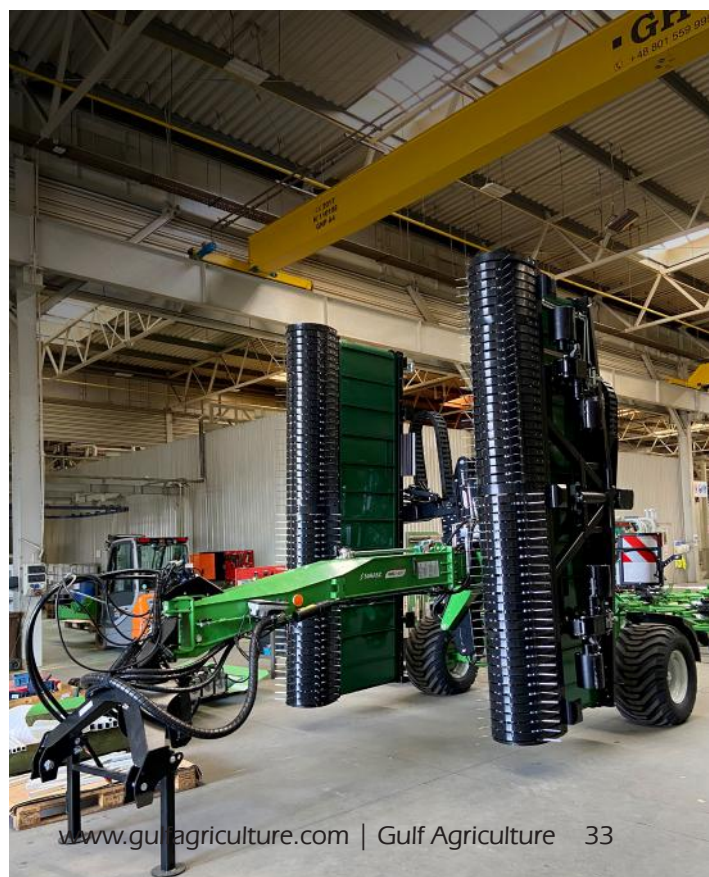
SaMASZ is one of the world's leaders in production and sales of high quality agricultural and municipal machines. Close contact with the customer supports us in the dynamic development. Our strategy relies on dialogue and we are open to the needs of our existing and future customers. Thanks to that approach we can manufacture up to date machines, that are appropriate for the changing needs of the customers and are becoming indispensable partner at work.

New machine MRG 2-900
Hay merger MRG 2-900 is a

combination of cam pickup and conveyor belts with a working width of 9 m. The raked fodder is tossed and then transported in the direction selected by the operator. Compared to rotary rakes, the MRG 2 - 900 can collect material at a higher driving speed (more than 15 km/h), ensuring a clean and precise collection of high-quality forage. This machine is mainly used on large farms and among contractors. Double-sided, adjustable working unit allows for six ways of swath deposition e.g. to the center, to the left or to the right side of the machine.

It also gives the possibility to work with each unit separately. The hay merger is a semi-mounted design for cat. II/III three point hitch. The tractor that the rake is connected to should be equipped with at least one hydraulic section and has 120 HP.

For more information, visit
www.samasz.com



CASE IH PATRIOT® SPRAYER TAKES LEAP FORWARD IN SPRAY TECHNOLOGY, COMFORT AND CONNECTIVITY

Three new models will be introduced to the market sporting a complete redesign delivering improved efficiency, operator comfort and the introduction of AFS Connect™



Case IH is adding the Patriot® 50 series sprayer to its lineup of self-propelled application equipment. With an exceptional operator environment, complete vehicle control, enhanced connectivity solutions and integrated spray technology, the Patriot 50 series sprayer is designed to help operators work more productively and achieve high-efficiency spraying.

For decades, growers and custom applicators have trusted the Patriot sprayer to take on tight application windows. The distinctive cab-forward, rear-engine design and strong,

durable boom are critical Agronomic Design™ elements that enable operators to achieve accurate, timely spraying. To match the needs of today's producers and ag retailers, the Patriot 50 series sprayer integrates advanced technology and connectivity solutions with a reliable design — all to enhance operator productivity.

"The priority during the development of the new Patriot series was to help customers maximise yield potential and manage tight application windows better," said Stefan Amering, Case IH EMEA Product Manager, Sprayers. "We are confident we

have achieved that with the 50 series."

Major innovations of the Patriot 50 series sprayer include:

- **Optimized Precision:** Includes the option of adding AIM Command FLEX™ II, offering six modes of operation for greater accuracy and control across chemical application rates, pressure and droplet size, as well as individual nozzle on/off control for increased precision.
- **Increased Cab Comfort & Ease of Use:** The new Patriot offers a quieter cab than previous models, with a comfortable interior and an



abundance of glass for maximum and unrestricted visibility. Compatible with optional AutoTurn, two customizable displays, the AFS Pro 1200 and the Viper 4+, ensure operators always have optimal vehicle and product control and the ability to see what they want, when they want.

- **Stable Booms for Accurate Spraying:** The integrated AutoBoom® XRT Automatic Boom Height Control detects and accommodates changes in terrain, ensuring coverage accuracy and effectiveness, while a new center section design minimizes boom yaw in challenging conditions, even with

longer boom options.

- **Unmatched Connectivity:** Currently being rolled out across the Case IH tractor ranges, AFS Connect™ is now offered in the Patriot, providing unmatched connectivity, guidance, data and monitoring solutions for any farm operation. It also allows remote support with the full display visible. Every Patriot 50 series sprayer comes with an AFS Connect-compatible modem and a 5-year subscription from the factory.

With the addition of AFS Connect, operators and managers can view, store, and share their application maps from season to season, or track a machine's location, parameters, and

progress during jobs to help with planning tasks. This capability allows producers to regain valuable time in the field and increase efficiency across their operation.

"Keeping features that are tried and tested, like the forward cab/rear engine design that works so well, but then adding and re-designing to ensure the highest levels of spraying accuracy and efficiency, with industry-leading connectivity and remote management capabilities are what make the Patriot 50 series unmatched," added Mr. Amering.

For more information, visit
www.caseih.com

BOBCAT ENTERS NEW MARKET WITH RYAN TURF EQUIPMENT



Bobcat is now offering the high performance line of Ryan turf care equipment in Europe, the Middle East and Africa (EMEA). Part of the company's new ground maintenance equipment (GME) range now available from the Bobcat network of authorised dealers, this expanded portfolio of heavy-duty, commercially built and long-lasting turf machinery includes aerators, power rakes and dethatchers, an overseeder and sod cutters. The Ryan Turf brand has been on the market for over 75 years and is very well known amongst lawn care professionals in Europe and North America.

The Ryan Turf Equipment Range

The Ryan Turf Equipment line

comprises the following robust, easy-to-use, top-quality machines:

- **Lawnaire Aerators** - Removes small plugs of thatch and soil from lawns to improve natural soil aeration, water and fertilizer uptake and to strengthen grass roots. Productive, durable and easy to transport, Ryan aerators deliver high performance results.

- **REN-O-THIN® Power Rakes** - Power rakes are designed for efficient and effective dethatching – removal of layers of dead grass to keep it greener and healthier, while minimizing the chance of disease. They offer simple height adjustment for fine-tuning the dethatching depth down

to 6 mm below ground level. REN-O-THIN® power rakes provide the option to use reels or cutting blades, without any tools and even an optional seed box for lawn overseeding.

- **Matabay® Dethatcher** - Built for heavy-duty lawn renovation and verticutting, the self-propelled, walk-behind Matabay® Dethatcher covers up to 1700 m²/hour. Dethatching can go down up to 6 mm below ground level with the use of five exchangeable blade types.

- **Matabay® Overseeder** - Heavy duty and built to perform, the Matabay® Overseeder places seeds directly into soil slits for fast germination and unmatched seed-to-soil contact. The Overseeder plants grass seed directly into existing turf, without tearing up the turf or the soil.

- **Jr. Sod Cutters** - Jr. Sod Cutters have been the gold-standard in the golf, sports turf, rental and landscape industries for over 75 years. Four sod cutter models deliver long-lasting durability and dependable performance and are available to lift sod for relocating, expanding or establishing shrub and flower beds. The machines can also be used to remove damaged turf, allowing new sod to be installed instantly.

For more information, visit www.bobcat.com

ENIFERBIO RAISES €11M TO MAKE PLANET-FRIENDLY FUNGAL PROTEIN FROM THE BY-PRODUCTS OF FOOD AND AGRICULTURAL PROCESSES

Finnish biotech startup eniferBio has successfully raised an €11M series A funding round. The round was led by the Netherlands-based global aquaculture investment fund Aqua-Spark, with Tesi (Finnish Industry Investment) and Valio, Voima Ventures and Nordic Foodtech VC also joining the round. With the freshly raised funding, the company will begin to scale up the production of its PEKILO® mycoprotein powder to thousands of tons per year and seek Novel Food approval from the EU and other markets.

The world faces the seemingly insurmountable challenge of doubling the protein supply by 2050 to answer the demand from a larger and wealthier global population, while simultaneously decreasing CO₂ emissions from the food value chain. The production of traditional animal- and plant-based proteins cannot be doubled without the planet boiling over, and the world therefore urgently needs novel innovative sources of protein.

PEKILO® is a fungus that, through a special fermentation process, can produce a dried powder rich in protein and has a vast variety of usage cases, such as pet food and aquafeed. The process was originally developed by forestry industry scientists in the 1960s in Finland to produce cost-efficient animal feed protein from side streams of the pulp and paper industry.

Using the same, yet enhanced, proprietary technology and fermentation

process, eniferBio can upcycle by-products from diverse agri-, food- and forest industry processes into its PEKILO® mycoprotein, which consists of up to 70% protein, 20–30% of good-quality fiber, about 10% of fats and minerals, and has a high concentration of vitamin B. The production process is efficient, uses very little water, doesn't require large land areas and does not cause eutrophication like traditional agriculture.

"We are extremely excited to have our new investors Aqua-Spark, Tesi, and Valio join us on our mission to feed the world with sustainable protein. Together they put a huge amount of new sector-specific know-how and networks at our disposal. We're also glad to see our long-term backers Nordic Foodtech VC and Voima Ventures double down on their bets and show their continued support for our vision," says CEO and cofounder of eniferBio Simo Ellilä.

According to Statista, humans consumed 160 million metric tons of farmed and wild fish in 2021. Aquaculture production has overtaken the wild fish catch and is the most rapidly expanding food production sector, requiring

huge amounts of new high-quality protein feeds. Soy has become a common feed ingredient, with Brazilian soybean production increasing and estimated to reach 152 million tons in 2021/2022. By comparison, PEKILO® mycoprotein has a lower carbon footprint than soybean, offering a sustainable alternative for the European market that is currently heavily reliant on imported soybeans.

"We are very excited to work with eniferBio to scale PEKILO® as a positive ingredient in the sustainable aquaculture feed of the future," says Lissy Smit, CEO of Aqua-Spark. "Greening aquaculture feed by eliminating our reliance on wild ingredients and reducing our footprint is one of our biggest priorities in getting to a more sustainable aquaculture industry. EniferBio's alternative feed ingredient serves as a replacement for soy in aquafeed. It significantly reduces land and water usage. Furthermore, early trials suggest that it has the potential to improve growth performance and immune response in fish."

For more information, visit www.eniferbio.fi



LOOKING FOR HIGH-QUALITY PEAT MOSS BEDDING FOR YOUR POULTRY?

Etepek is a leading export company that offers top-quality bedding for poultry use. Our company is based in Latvia, which is a country that boasts abundant natural resources such as wood and peat. In fact, over 60% of Latvia's land is covered in forests and bogs, giving us extensive experience in exporting these resources.

Professional Bedding for Poultry Use

At Etepek, we take pride in offering a professional bedding solution that caters to the specific needs of poultry farmers. Our Bedding for poultry use is a mixture of peat moss and wood shavings, which provides several benefits that make it an excellent choice for poultry farmers. The product is 100% organic, reusable as fertilizer, cost-effective, natural, and sustainable. Moreover, organic bedding delivers excellent thermal properties, has a low pH level, and reduces bad smells, making it a healthier

option for chickens.

Benefits of Organic Bedding for Poultry

Etepek understands that every farm has unique needs, which is why the company offers customized blends of peat moss and wood shavings. We offer several options for the mixture ratio, such as 50:50, 60:40, 70:30 (peat moss: wood shavings), ensuring that poultry farmers can choose the optimal ratio for their farm. Our bedding also comes in Big-Bale packaging up to 6500L, providing convenience in handling and storage for our clients.

Customizable Blends of Peat Moss and Wood Shavings

At Etepek, we prioritize our customers' satisfaction by offering a personal approach to doing business. Our company's reputation is built on friendly

terms with our clients, and we take pride in building long-term relationships with them. As a result, our customer reviews reflect our excellent customer service and high-quality product offerings.

In conclusion, if you're looking for a reliable supplier of professional poultry bedding, look no further than ETEPEK. With our customized and sustainable product, excellent customer service, and competitive pricing, we are confident that we can meet your needs and exceed your expectations. Contact us today to learn more about how we can help you achieve healthier, more productive flocks with our natural and cost-effective bedding solutions.

For more information, visit
www.etepek.com



PRECISEAG IS USING ARTIFICIAL INTELLIGENCE TO BRING ABOUT A POULTRY BIOSECURITY REVOLUTION

Traditional Poultry Health Assessment

If your poultry farm has experienced a devastating disease outbreak, then you know just how important biosecurity is. In fact, it should be the top priority for any poultry farmer, big or small.

Current prevalent methods of poultry health assessment worldwide rely on observations from farmers, farmworkers, and veterinarians. Frequently laboratory analyses are required as a follow-on. However, all this process takes time, frequently days, and by the time a diagnosis is complete, the disease has spread.

Additionally, human perception is **OVERWHELMINGLY** susceptible to error. This has been evident over the years, with most of the disease outbreaks being attributed to the missteps or miscalculations of individuals or groups. Human error is always a possibility, no matter how well-trained or experienced the staff may be. So what is the solution?

The Technology Advantage

In search of an answer to this persistent problem, the industry has turned to artificial intelligence to assist the people

on the front lines of the global food supply. A new AI-powered solution, PreciseAG.ai uses critical imagery data collected by cameras to detect anomalies in the health of poultry stock. The results are instantly delivered to the right people in real-time, allowing for quick and decisive action to be taken before disease has a chance to spread.

With solutions like PreciseAG.ai at the forefront of this new revolution, the future of poultry farming looks brighter than ever before. Commercial producers, animal health professionals, and even government agencies can deploy PreciseAG.ai's solution anywhere, regardless of the size of the farm. This is a huge step forward in the fight against poultry diseases.

With early intervention, expensive measures like quarantining chickens and halting the movement of poultry products can be avoided. In the long run, this will lead to considerable savings for the industry at large.

The best part...there is

no change to daily operations during initial flock checks, no equipment to install or maintain, and no extra work for the farm management or staff.

For more information, contact info@preciseag.ai



HOW TO MAKE A GOOD CALF ENTRY TO THE FEEDLOT?

The entrance to the feedlot is a time of high stress for the animal, which has a negative impact on its productive performance. It is essential to implement all possible measures to mitigate the effects of handling, climate, fasting, mixing of animals and, especially, the effects of transport.

Although sanitary programs may vary from one feedlot to another, a standard can be established, considering the priorities in terms of management and products to be applied.

Rehydration

This is the most important because dehydration causes the mucous membranes of the respiratory and digestive tract to be dry and lose effectiveness in fulfilling their filtering function against pathogens. So if we do not comply with this step it is possible that in a few days we can see symptoms of disease either digestive as diarrhea or respiratory problems. It should be applied

to all animals, regardless of their weight and the distance traveled at the entrance to the fattening area, with the objective of correct the level of dehydration suffered by the animal during transport and handling, adapt the digestive system after the fasting period, and to provide energy, especially to suckling calves.

For this, it is important to be able to offer the calves a good rehydrating agent that allows reestablishing the hydric and electrolytic balance, recovering the normal and functional characteristics of the mucous membranes and the digestive system. The next step is to establish a good sanitary protocol at the entrance to the feedlot to prevent parasitic and infectious pathologies.

Prevention and control

A vaccination plan that includes enterotoxemias and vaccines for viral diseases to all animals entering the feedlot, reducing the percentage of animals with infectious pathologies. This

translates into an improvement in GMD and carcass quality. On the other hand, there are also intestinal parasites such as coccidia that, at this stage of life, can cause great losses due to diarrhea. Phytobiotic products can be used via feed or water that have antiparasitic activity, such as COCCI CERO or BILANTUL RUM, which also have a modulating effect on the microbiota.

Calf distribution

In the phase of entry to the feedlot, it is advisable to divide the animals, forming lots mainly on the basis of sex and weights or sizes. The distribution in uniform lots is important, since it reduces the competition between animals.

Calf weighing

Another important point to take into account is the weighing of calves, individually or by batches.

For more information, visit
www.ambiotecsolutions.com

AgraME

Featuring



09 - 10
OCTOBER
2023

Dubai World Trade
Centre, UAE

CREATING SUSTAINABLE FOOD SUPPLY IN ARID LANDSCAPES

AgraME is largest gathering of agriculture and trade professionals in the Middle East



5,000+
visitors and buyers



77% of exhibitors stated that
participatin helped them to
establish new business contacts



100+
Exhibitors



If you are a solution provider in Agriculture, Horticulture, Indoor Farming, Livestock Nutrition and Health, Agtech, and Aquaculture, don't miss the opportunity to tap into the vast potential for growth in the Middle East's agriculture sector!

CONTACT

Brent Crosbie | T: +971 52 5072847 | E: brent.crosbie@informa.com

www.agramiddleeast.com



Brought to you by

informaconnect

Join Industry Leaders at the Center of the Fastest Growing Global Economy and Participate in the 40th Anniversary of the Largest Agriculture Exhibition in the Middle East Region...

40th
EDITION

Saudi Agriculture

INTERNATIONAL TRADE EXHIBITION & CONFERENCE

Incorporating: Farming, Agro & Organic Food • Poultry
• Livestock & Dairy • Mills & Feed • Aquaculture • Food Processing &
Packaging • Animal Health & Veterinary Services

23 - 26 OCTOBER 2023
RIYADH INTERNATIONAL
CONVENTION & EXHIBITION CENTRE

Under the Patronage of

وزارة البيئة والمياه والزراعة
Ministry of Environment Water & Agriculture



Co-located:

Saudi
Agrofood

The 28th International Trade Show
for Agro Food & Organic Food,
Ingredients, & Technologies

Saudi
Food Pack

The 11th International Trade
Show for Food Processing and
Packaging

Saudi
Aquaculture

The 5th International Trade Show
for Aquaculture



Diamond Sponsor



Platinum Sponsors



Partner of Food Security



Strategic
Organic Partner



Scientific
Research Sponsor



Specialized Magazines



Official Media Partner



Organized by:

