

# AGRICULTURE

TRADE MAGAZINE

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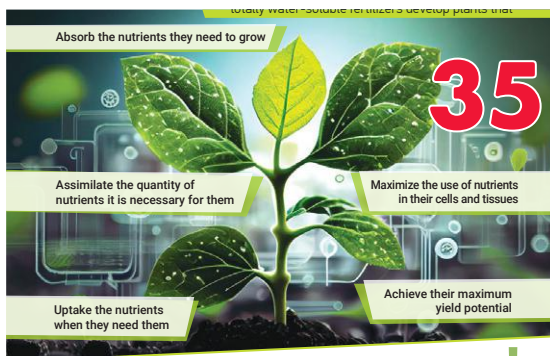
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## AGTHIA GROUP TO ACCELERATE DIGITAL TRANSFORMATION BY ADOPTING ARTIFICIAL INTELLIGENCE

Agthia Group PJSC, one of the region's leading food and beverage companies, has signed a Memorandum of Understanding (MoU) with Microsoft UAE, offering scope to revolutionise everything from customer service to production, procurement, and employee engagement, and marking a significant milestone in Agthia's journey to become a regional digital leader in the consumer-packaged goods (CPG) industry. The MoU focusses on:

- Revolutionizing Customer Experience with AI: One of the key initiatives under the MOU is the early adoption of Artificial Intelligence (AI) technologies in the UAE, the implementation of which into Agthia's Water Home Delivery Contact Center is already improving our services to and interactions with customers.

- Establishing Smart Retail Stores: Agthia will also aim to leverage MS Dynamics Retail and POS solutions to establish smart and best-in-class digital stores, starting with our healthy snacks and coffee brand Abu Auf prior to scaling across the group.

- Enhancing Employee Engagement and Learning: Agthia has commenced the deployment of Microsoft Viva to improve employee experience, engagement, and continuous learning, helping to further strengthen the Group's reputation as an innovative and engaging workplace.

Alan Smith, Group Chief Executive Officer of Agthia commented, "Our work with Microsoft will play a pivotal role in Agthia's ongoing digital transformation, utilizing new tools to navigate the digital landscape

and identify opportunities for market expansion, operational excellence and commercial success, while accelerating innovation and responsible, sustainable business practices throughout the FMCG value chain."

Vanderlei Santos, Chief Digital Officer of Agthia added, "We are delighted to embark on this transformative journey with Microsoft that enables us to offer our customers a truly personalized experience, and we look forward to providing unparalleled value to our customers and employees, leveraging Microsoft's experience and comprehensive suite of technologies. Consistent with our five-year growth strategy, this underlines our commitment to becoming a consumer data-driven organization through accelerating our digital agenda."



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## THE ALLTECH ONE WORLD TOUR WILL BRING INTERNATIONAL AGRICULTURE LEADERS TO DUBAI

Join Alltech as it brings the ideas and inspiration of its annual ONE Conference to Dubai on Nov. 27-28, 2023. The Alltech ONE World Tour unites changemakers and thought leaders to examine regional and local market trends in agriculture, business, health and nutrition. Alltech ONE Dubai will explore collaborative solutions to some of the greatest challenges facing the agri-food industry in the Middle East, Africa

and beyond.

Alltech ONE Dubai will feature global and local experts discussing trends in sustainable agriculture, animal nutrition and business, including keynote presentations from Dr. Mark Lyons, president and CEO of Alltech and Tara McCarthy, Alltech's global vice president for ESG and Dr. Marc Larousse, vice president of the Middle East of Alltech.

The conference will explore species-specific nutrition and production topics in greater detail through two dedicated breakout sessions, one focused on dairy and the other on poultry, as well as an interactive panel discussion featuring industry experts.

A variety of social activities, including networking breakfasts, a gala dinner and tours of local industry sites will also take place during Alltech ONE Dubai.

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## ALMARAI CEO MEETS THE MINISTERS OF AGRICULTURE & COMMERCE OF THE SULTANATE OF OMAN

The CEO of Almarai Abdullah Al-Bader met in the Omani capital Muscat recently with the Minister of Agricultural and Fisheries, Dr. Saud Al Habsi, the Ministry of Commerce, Industry & Investment Promotion, Qais Al-Yousef, and the President of the Consumer Protection Authority, Sulayem bin Ali al-Hakmani, and Vice-President of the Omani Investment Agency, Mulham bin Basheer Al-Jarf.

The CEO of Almarai reviewed the company's investments in the Sultanate of Oman and spoke with officials there about how to expand and enhance such holdings.

Almarai Company has been in the Omani market since 1988. It now employs more than 750 Omani citizens. The company is the world's largest vertically integrated dairy company the largest food and beverage producer and distributor in the Middle East.





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## VIKINGGENETICS CALLS FOR SUSTAINABLE DAIRY FARMING AND AIMS TO ACHIEVE A SIGNIFICANT REDUCTION IN CATTLE EMISSIONS BY 2050

VikingGenetics, a cattle genetics cooperative, owned by 16,000 dairy and beef producers across Denmark, Sweden, and Finland, is eager to contribute at COP28 as part of the prominent Danish food and agricultural cluster, Food Nation, and has an opportunity to share their significant contributions to sustainable dairy farming and their vision for the future.

VikingGenetics has long been committed to sustainable farming practices, and its contribution to COP28 showcases its commitment to addressing climate change through innovative and sustainable breeding goals.

During an interview with the UAE Press Delegation, they highlighted their dedication to sustainable breeding goals, which play a vital role in reducing the

environmental impact of dairy farming. To balance cow health with high milk and solids production, emphasizing genetic diversity improves cow longevity and minimizes inbreeding. This approach results in medium-sized cows that are easier to manage and require less feed, ultimately reducing emissions.

In collaboration with Nordic farmers and scientists, VikingGenetics aims to achieve a 20% reduction in cattle emissions by 2050, a commitment that promises to contribute significantly to the sustainability of the dairy industry as a whole.

VikingGenetics' sustainable breeding goals have provided impressive results. By breeding more efficient and low-methane cows, they not only reduce emissions but have also achieved significant cost savings for farmers. VikingGenetics has witnessed up to 1 ton of saved feed per cow per year. These savings highlighted the economic viability of sustainable dairy farming.

VikingGenetics envisions a future of dairy production that feeds the world's expanding population while preserving the Earth's natural resources. To make this vision a reality, they foster relationships with universities, research organizations, and global experts to provide farmers with cutting-edge tools and technology. Their innovations, rooted in scientific data and facts, aim to enhance the lives and businesses of dairy and beef farmers, promoting both sustainability and profitability.

The CEO of VikingGenetics, Louise Helmer, said, "We are here to support farmers in achieving their business goals while prioritizing animal welfare, food security, and reducing climate impact. Together, we can create a brighter and more sustainable future for dairy farming."

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### RIZAMMINA 42

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### NOV@

Fosters balanced overall plant growth and encourages root development.



## AGRILEVANTE, AGRICULTURE IN CELEBRATION

The seventh edition of the international exhibition of technology and machinery for agriculture ended on 8<sup>th</sup> October in Bari - with a record number of visitors. Businesspeople from 60 countries, more than 50 conferences, 1,200 business meetings reserved to foreign delegations of the ICE Agency. Rendez-vous for the next edition in October 2025.

Agrilevante closes its 2023 edition with a record number of attendees, confirming its position as the reference exhibition for agriculture in the entire Mediterranean area. During the four days of the exhibition - attended by 350 manufacturers of machinery and technologies for arable crops, specialised crops, animal husbandry and bioenergy, including 50 foreigners from 20 countries - there were 94,900 visitors, 18% more than at the last edition, held in October 2019

before the break due to the Covid emergency. The number of foreign visitors from over 60 countries was also up, reaching 4,050, a 14% increase over the previous edition.

"The government is looking with priority interest at the potential of agriculture in the Mediterranean area and the opportunities for cooperation in this sector," said Minister of Foreign Affairs and International Cooperation Antonio Tajani in a message at the conclusion of the event, "in particular with the countries of the Southern Shore, also in the strategic perspective of the fight against human trafficking". "We are working to strengthen the sustainability and solidity of supply chains from a regional perspective," the Minister added, "and to counter the food crisis that has particularly affected the vast Sahel area stretching from the Gulf of Guinea to the Horn of Africa".

## CAMEL MILK PRODUCT DEMAND IS PREDICTED TO REACH US\$ 2.02 BILLION BY 2032 – FACT.MR

Fact.MR, a renowned market research authority, offers unique, in-depth, and perceptive reports for investors on the Sales and Demand of Camel Milk Market. The report will provide a comprehensive overview of growth predictions, significant trends, and promising segments suitable for prospective investments. Sales of camel milk products are expected to reach US\$ 1.34 billion globally by 2032, growing at a compound annual growth rate (CAGR) of 4.1%. Consequently, by the end of 2032, the global camel milk market is anticipated to be valued US\$ 2.02 billion.

Our team of analysts has conducted thorough primary and exhaustive secondary research to formulate a range of estimations and forecasts for

Camel Milk Sales and Demand. These assessments encompass market share, production distribution, recent product launches, partnerships, ongoing research and development initiatives, and market strategies.

Camel milk's profile is rich in essential nutrients and molecules that promote health, which is why it is being used extensively in food supplements. The use of camel milk in pharmaceuticals is being encouraged by its natural probiotic properties, which significantly improve digestive health. The food and beverage industry is seeing a healthy influx of camel milk as an ingredient due to the growing demand for functional food products that offer health benefits.

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## REGENERATIVE AGRICULTURE VENTURE PROGRAMME LAUNCHED TO ENABLE CLIMATE-RESILIENT AGRICULTURE IN MENAT

Goumbook, a leading social enterprise dedicated to accelerating sustainability and climate action, announced the launch of the Regenerative Agriculture Venture Programme.

Launched in partnership with HSBC Bank Middle East Limited and SAB (Saudi Awwal Bank), and supported by the European Institute of Innovation & Technology (EIT) Food, Goumbook's Regenerative Agriculture Venture Programme aims to empower and upskill researchers and students who are actively engaged in addressing the fundamental agricultural challenges facing the Middle East, North Africa and Turkey (MENAT) region.

The primary objective of the programme is to chart a sustainable path toward a greener future by supporting innovative solutions in process methods and

technology, addressing a broad spectrum of challenges including hunger, nutrition, climate change mitigation, and adaptation, among other matters. In doing so, it will position regenerative agriculture as a beacon of hope in the battle against the regional agricultural obstacles, fostering a more resilient and prosperous MENAT region for generations to come.

The solutions proposed by the participants must yield net beneficial economic, environmental, and social impacts for farmers and local communities, tailored to the unique agricultural conditions of the MENAT region to drive sustainable, long-term change.

Recent research reveals that earth has only 60 years of nutritious topsoil left, equating to approximately 60 harvests, as a result of conventional agricultural practices. A thin layer of topsoil is

responsible for 95% of all the food produced for human consumption.

The Food and Agriculture Organization (FAO) of the United Nations also reports that globally, conventional agriculture accounts for 72% of all surface and groundwater withdrawals, mainly for irrigation, which is straining and depleting water supplies in many regions.

Regenerative agriculture, through its key principles and adoption of resilient crop varieties that require less water, fewer pesticides, and reduced chemical inputs, is an approach that translates as a vital component in addressing the region-specific agriculture and climate challenges of the MENAT region. Regenerative Agriculture also holds the potential to sequester carbon dioxide, making it a climate change mitigation and adaptation solution.

## GROWING VEGETABLES UNDER COVER: ARRIGONI'S HI-TECH SECRET FOR PRODUCTION IN EXTREME CLIMATES



Arrigoni, which specialises in the development and production of agrotextiles and agrofilms for use in farming, has come up with a number of solutions to enable crops to be grown even at latitudes unthinkable for fruit and vegetables until only recently.

The solutions for the most critical climates include Prisma® Ldf Strong, the even higher-performing, even more efficient evolution of Prisma®

Ldf, developed to guarantee crops a protected, safe environment. The figures speak for themselves: compared to the already outstanding performance of Prisma® Ldf, the Prisma® Ldf Strong agrotextile delivers: +60% strength; +78% light

diffusion percentage; enhanced sunlight shading effect (30%); better control of internal temperature due to reduction in passage of short infrared radiation; and bigger savings on water. In other words, a guarantee for the production even in very problematical conditions of vegetables such as bell peppers, tomatoes and aubergines, with optimal water saving and reliable protection against the most invasive

atmospheric agents.

Another solution for greenhouse crops is Robuxta® MDF, also by Arrigoni, which is already delivering excellent results. This covering protects plants from excessive sunlight, maintains an optimal internal microclimate and increases yields, thus also extending production and cropping cycles.

Depending on the demands of the specific geographical area, Biorete® Air Plus is a very thin but very uniform monofilament covering, essential for perfect passive protection. As well as providing an effective barrier against insect pests, it is also an ideal solution for combating excessive humidity, leading to fungal diseases. In fact, Biorete® Air Plus also improves ventilation inside the greenhouse.



## IAAC WILL FULFIL THE NEED OF INDIA'S AND GLOBAL DISPUTES SETTLEMENT IN FOOD AND AGRICULTURE SECTOR

IAAC is set to emerge as a trustworthy global institution with an expert panel comprising legal, financial, and agro-trade professionals at its core, Justice P. Sathasivam.

Launching the world's first agro focussed dispute settlement body, International Agro Arbitration Centre (IAAC), promoted by the Indian Chamber of Food and Agriculture, Justice P. Sathasivam, Former Chief Justice of India and Former Governor of Kerala, said that IAAC is poised to revolutionize dispute resolution mechanism within the agricultural and food sector in India and worldwide.

Agriculture is an incredibly diverse sector. Post WTO food and agro trade has significantly grown to over \$2 trillion and a large number of companies have gone global today with trade, technologies and

businesses. While USA, Netherlands, Germany and Brazil occupy top positions in agro food exports, India is fast catching up, exporting agri products to more than 150 countries in the world, accounting for more than \$55 billion and importing close to \$25 billion. Such rapid growth in trade gives rise to many issues and trade disputes, which need to be promptly and cost-effectively addressed, said Justice P. Sathasivam.

Domestic agro sector is also huge and different businesses from inputs to output and services are rapidly expanding with innovation and new products and technologies. While the rising business and trade of agriculture comes with its own benefits, the disputes arising within the agro trade industry can hinder its efficiency in several ways. These disputes may crop

up for a variety of reasons; contract disputes, nuisance claims, produce quality, patent and IPR infringements, payments and debt recovery, among others, Said Mr. Justice Anil R Dave, former Judge, Supreme Court, while highlighting the vacuum felt for long time of sector specific arbitration centre with domain expertise.

Bearing in mind the gravity of such issues, IAAC, a unique agro sector focused arbitration centre, has been incepted to provide a forum to address the challenges and mitigate the negative effects that disputes can have on productivity, relationships, costs, ultimately promoting a more productive and efficient agro trade and businesses globally, asserted Dr. MJ Khan, Chairman of IAAC and also the chairman of parent body, ICFA.



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## 115,000 VISITORS AT THE 32<sup>ND</sup> SOMMET DE L'ELEVAGE

Boasting a record-breaking attendance of 115,000 visitors and a robust presence of 1,681 exhibitors, the SOMMET DE L'ELEVAGE has cemented its position as the premier livestock show in Europe. The spotlight on sustainability in livestock farming played a pivotal role in this achievement.

Notably, Jessie George, Associate Editor of Livestock & Poultry Middle East magazine, was extended an invitation to provide coverage of this remarkable event for our readers. According to her report, "This year's event stood out not only in terms of impressive numbers but also in terms of the elevated friendly atmosphere it offered." The show concluded at Clermont Ferrande, France on 06<sup>th</sup> October 2023 successfully.

With a record 115,000 visitors and

1,681 exhibitors, the SOMMET DE L'ELEVAGE is firmly established as Europe's #1 livestock show. And the new central theme of sustainability in livestock farming has a lot to do with it. For Fabrice Berthon, the show's General Manager, "this year's event was exceptional, both in terms of numbers and in terms of the friendly atmosphere, that reached even higher levels." "This 32<sup>nd</sup> edition of the show was a great success, with some big contracts signed during the event and three fun evenings", as Jacques Chazalet, Show President, adds. "The Young Farmers' party was an awesome success, as was the evening sponsored by the Auvergne-Rhône-Alpes Region and the International Gala Evening. These convivial events encapsulate what the SOMMET stands for and



is all about, 4 fun and action-packed days!"

To conclude, Jacques Chazalet (President) and Fabrice Berthon (General Manager) share the same ambition for next year, which is to top 1,700 exhibitors and 120,000 visitors at the SOMMET DE L'ELEVAGE 2024 (1-4 October 2024)!

The 2024 edition will host the SALERS breed National Championship.

## INNOVATIVE GREENHOUSE COVERS SAVE WATER, ENERGY AND EXPONENTIALLY IMPROVE PROFITABILITY

Armando Alvarez Goup and RedSea - a world leading sustainable AgTech - have signed an exclusive collaboration agreement for the production and supply of innovative greenhouse covers for hot climate farming.

The new heat absorbing greenhouse cover is designed for agriculture in areas with high temperatures and water shortages. Test results demonstrate exponential improvements in harvest, a significant reduction in irrigation and fertigation as well as less energy use.

Nearly 2 billion people live in hot, desert areas of the planet and depend on subsistence agriculture. Providing a solution that helps improve the

sustainability of protected cultivation in these regions will help to sustainably feed a global population estimated to grow to 10 billion by 2050.

Red Sea's patented iyris® SecondSky® advanced nanotechnology solution reduces daytime temperatures in covered areas while allowing up to 80% of photoselective radiation to pass through. It will be incorporated into the 100% recyclable greenhouse and tunnel cover films manufactured by Grupo Armado Alvarez.

Developed by RedSea, and used in Armando Alvarez Group's production of greenhouse and tunnel covers,

iyris® SecondSky® technology has already been successfully tested and proven under extreme heat climatic conditions in the Middle East, Southern Mediterranean and Arizona desert.

RedSea is a leader in AgriClimate Technology, specialized in providing solutions for controlled environment agriculture. Its "Roof to Roots" technology portfolio, developed by scientists and proven in the field by farmers and agronomists, saves water and energy, and increases farming yield.

Armando Alvarez Group (GAA) is the World's largest converter of agricultural plastics and a leader of the polyethylene film European industry, offering solutions for the packaging, agriculture and geosynthetics sectors. The Group is committed to innovation as a driver of sustainable growth and this collaboration is the result of the continuous search for solutions within the circular economy.





# CORBION LAUNCHES ALGAPRIME™ DHA P3 FOR PET FOOD INDUSTRY

Corbion, the global market leader in algae-based feed ingredients, announced the launch of its new AlgaPrime™ DHA P3, a high-performance omega-3 ingredient enabling pet food manufacturers to enhance the nutritional profile of their products and boost DHA levels reducing dependency on marine-based resources and positively impacting their carbon footprint.

Produced via microalgae precision fermentation, AlgaPrime™ DHA P3 helps meet increasing consumer demand for more sustainable pet food ingredients, as nearly 70% of pet owners worldwide express concern about nutrition, climate change and a desire to make a positive impact on the environment through their everyday actions.

The ingredient supports manufacturers in their efforts to overcome the most common challenges of omega-3 DHA inclusion, as it provides the highest level of DHA on the market in biomass powder form (35% DHA), enabling flexibility for nutritionists and developers in working with higher DHA inclusions for added nutritional value, while advancing the sustainability of pet diets. In addition, it is stabilized with a natural antioxidant system. AlgaPrime™ DHA P3 is suitable for dry, wet, and injection-mold applications, allowing efficient access to, and use of, long-chain omega-3s.

“The launch of AlgaPrime™ DHA P3 furthers Corbion’s mission to preserve what matters by offering sustainable

ingredients for healthier people, pets, and the planet,” said Tim Rutten, Vice President at Corbion Algae Ingredients. “We believe this breakthrough ingredient will play an important role in meeting the growing need for better nutrition and more sustainable solutions, while delivering value across the pet industry.”

AlgaPrime™ DHA P3 is sustainably produced in closed fermentation tanks where cane sugars are transformed into omega-3-rich algae powered by a renewable energy source. The unique production process and innovation opens new opportunities for DHA health benefits, sustainability, and vegan claims while delivering stability and palatability.

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## COBB EXPANDS ITS FOOTPRINT IN AFRICA WITH NEW JV

Cobb seeks to expand in Africa with a new joint venture with the Irvine's Group. The Irvine's Group, are Cobb's oldest distributor and have been producing and selling Cobb products in Africa for over 72 years. The joint venture will open a new grandparent (GP) operation in Tanzania that will help supply East Africa with healthy, affordable and quality broiler breeding stock. This endeavor helps to strengthen an already strong presence in the region as the Cobb brand is readily recognized and has been successfully distributed by Irvine's for many years.

"This is the first time that Cobb will invest directly in

Africa and we are excited to commit to the development of a market with extraordinary growth potential," said Roy Mutimer, Vice President EMEA & Asia-Pacific, for Cobb. "Irvine's, a company with more than seventy years of experience doing business in sub-Saharan Africa will be a great partner for Cobb – it's a recipe for success."

The existing challenges of freight cost and HPAI (high-pathogenic avian influenza) bans mean that current supply from Europe has become less reliable. This new joint venture is projected to help improve market access and reliability of supply. Cobb egg production

improvements in existing lines, as well as new genetic lines that are tailored to environments similar to those of Sub-Saharan Africa, will also help build on current success.

"With over 700 million people, Sub-Saharan Africa has a great long-term potential and we are excited for this new partnership and the future of Cobb East Africa," said Mutimer.

Cobb will leverage Irvine's existing market development, local knowledge and existing parent stock operation in Tanzania. Local production, via Cobb East Africa, will deliver more competitive cost and reliable Cobb supply.

## BAYER INTRODUCES AGRICULTURAL SYSTEM FOR DIRECT-SEEDED RICE WITH POTENTIAL TO REDUCE GREENHOUSE GAS EMISSIONS AND WATER USE BY UP TO 40 PERCENT

On UN World Food Day, Bayer announced the introduction of its direct-seeded rice (DSR) system at the 6th International Rice Congress in Manila. Moving from transplanted puddled rice cultivation to direct-seeded rice can help farmers to reduce water use by up to 40 percent, greenhouse gas emissions (GHG) by up to 45 percent and reduce farmers' dependence on scarce

and costly manual labor by up to 50 percent. The introduction of the DSR system is fully in line with Bayer's recently announced approach to regenerative agriculture which will enable farmers to produce more while restoring more.

Driven by these advantages, DSR has the potential to be transformational with 75 percent of total rice fields in India

expected to switch to this cultivation method by 2040, in comparison to roughly 11 percent today. By 2030, Bayer plans to bring the DSR system to one million hectares in India, supporting over two million early-adopter smallholder rice farmers through its DirectAcres program.

Already underway, DirectAcres has seen considerable success with 99 percent of Indian farmers achieving successful plant establishment and 75 percent a higher return on investment compared to rice grown using the conventional transplanted method. Bayer plans therefore to introduce DirectAcres in other rice growing countries in Asia Pacific, starting with the Philippines in 2024.

"We are building entire systems based on regenerative agriculture practices that create value for farmers and nature alike and that help address the issue of global food security," said Frank Terhorst, Head of Strategy & Sustainability at Bayer's Crop Science division.

"Direct-seeded rice is an excellent example of a system that holds huge potential to create a positive impact going forward."







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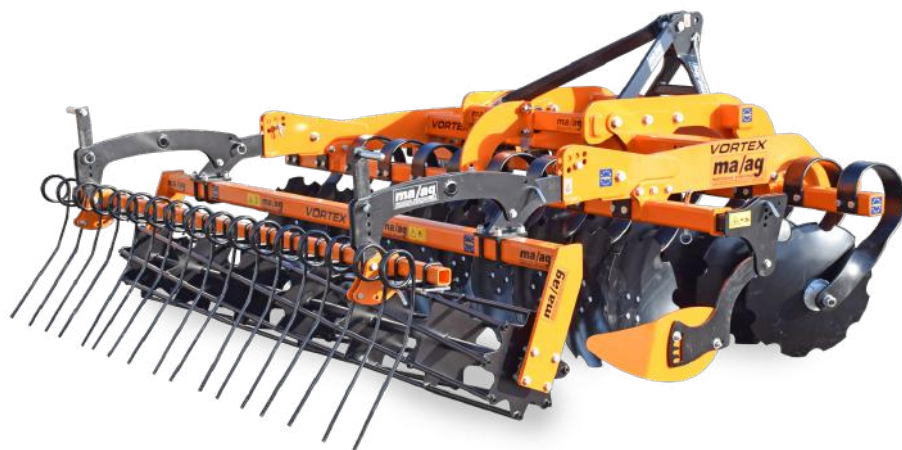
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## STRENGTHENING AGRICULTURE RESILIENCE IN THE ARAB REGION: A COLLABORATIVE WEBINAR SERIES

The Food and Agriculture Organization of the United Nations (FAO) in partnership with the Arab Organization for Agricultural Development (AOAD) of the League of Arab States (LAS) is currently conducting a webinar series titled "Towards climate-resilient agrifood systems in the Arab region." The series aims to enhance knowledge and capacities on the impacts, tools, solutions, and best practices to enhance agriculture's resilience in the region.

The Arab region is confronting a significant challenge as climate change accelerates, leading to rising temperatures, changing precipitation patterns, and an increase in extreme weather events. These changes place

substantial stress on the agriculture, water, and land use sectors that underpin crop cultivation, livestock farming, aquaculture, fisheries, and forest-based production, all of which play a crucial role in the region's economy and food security.

Failing to address this need could lead to severe consequences, especially in areas already struggling with heightened food insecurity. This emphasizes the critical importance of taking action to enhance the sustainability, productivity, and resilience of agriculture sectors in the region.

As part of ongoing efforts to address these challenges, this webinar series serves as a valuable platform for experts to share

insights and practical examples from the Arab region on planning for and implementing adaptation and mitigation solutions in agrifood systems, promoting collaboration and knowledge exchange.

Key topics include an understanding of UNFCCC processes and negotiations related to agriculture and food systems, the assessment of climate impacts on agrifood systems, developing and implementing climate-resilient and climate-smart practices in crop production, livestock, fisheries, and aquaculture, with a focus on sustainable water and land management solutions, leveraging climate finance to enhance resilience in agrifood systems and many more.

## ANITOX RELEASES FREE FIRST-EVER BIOSECURITY AUDIT APP



Feed pathogen control specialist, Anitox, has launched the first free app to collect and present feed mill biosecurity audit records for all geographies and regulatory bodies.

Dr. Enrique Montiel, Anitox's Global Director of Nutrition and Live Production, explains: "Auditing feed mills and amassing the evidence and data needed to produce meaningful biosecurity programs can be a headache. For years our feed mill technologists have been walking facilities with

become significantly easier, thanks to the new feed mill biosecurity audit app."

The Feed Mill Biosecurity Audit app enables mill managers and quality teams to establish a baseline for biosecurity standards by identifying areas of concern, implementing sound manufacturing practices and adhering to regulatory biosecurity requirements.

Anitox is uniquely placed to produce the audit app, having a longstanding relationship with

customers, collecting evidence and preparing reports for regulatory and compliance bodies across the globe. That has

one of Europe's leading independent feed microbial quality auditors.

"Our team of feed milling technologists and technical specialists solve Salmonella, virus and other feed pathogen-related challenges on a daily basis; now that knowledge has been put the good use for the wider community. Having proven the technology with our loyal customers, we've decided it's too useful to keep to ourselves."

App users can be confident their data is protected and private. Anitox has given up the right to track user-given audit data to make it the most secure and private offering available.

Available for free in iOS and Google Play Stores, the Feed Mill Biosecurity Audit app allows mill managers and their teams to save past audits and access a Feed Mill Technologist with just the touch of a button.



# 23 – 26 JANUARY

# OUR HEART

# BEATS GREEN

40<sup>TH</sup> | SUCCESS  
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PLANTS  
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# WELCOME TO ABU DHABI, WELCOME TO VIV MEA!



**A**fter a successful third edition, VIV MEA is back! From the 20<sup>th</sup> until the 22<sup>th</sup> of November, the ADNEC exhibition centre in Abu Dhabi will be transformed into an industry worth platform of trade, information and networking. The international event focusing on the entire food chain from feed to food, comes back for its fourth edition with an enriched conference program, covering the latest trends in dairy, fish, poultry, eggs, cattle, calves, goat, and camels.

## **Professionals and businesses unite!**

VIV MEA is the leading animal husbandry show in the Middle East, strongly business driven, and aiming to unite professionals from

around the world. With an impressive gathering of 500 exhibitors from 50+ countries, displaying a diverse array of cutting-edge products and solutions, VIV MEA is certainly not to be missed!

## **Step into the world of Horti Agri Next (HAN)!**

The newly-launched Horti Agri Next MEA 2023 - a pivotal event in the agricultural landscape in a region marked by diverse climates and unique challenges, is setting the ground to become a hub for innovations and sustainable

practices that are reshaping both arable and indoor agriculture. VIV MEA holds the premier, being the host of the first of the HAN global event series. Horti Agri Next MEA, combines a high-profile conference program with an exhibition area, that aims to introduce a complete seed and feed to food value chain next to VIV MEA.

## **Conference program**

Next to the extensive trade show floor, visitors are welcome to join the conference program. Entailing high-interest conferences, seminars and panel discussions, with a





variety of topics, the aim is to offer a program that suits many information needs. A key highlight in the program is the centrally staged FoodTech Transition Square's conference program, where a systems approach for greenfield development towards food self-sufficiency in the UAE and neighboring countries will be presented. Key speakers include a.o. ADAFSA, sharing Abu Dhabi's food strategy, the Dutch Inspiration seminar series focusing on circularity and mineral loop closure, and the AgritectureXchange panel discussions, with high-level

industry speakers from the GCC.

#### **Prepare yourself for VIV MEA**

When visiting VIV MEA and Horti Agri Next, be prepared to meet, get informed and know your way around the multi-species exhibition, covering dairy, fish, poultry, eggs, cattle, calves, goat, and camels. With over 500 exhibitors, the VIV Connect app helps you to find your way, so you won't miss out on any business and networking opportunities. The conference program is mostly free to attend, making sure you have access to

the information that supports your business, without barriers.

#### **More information**

VIV MEA, co-located with HortiAgri Next MEA, open doors from 10:00 until 18:00 on Monday 20<sup>th</sup> and Tuesday 21<sup>st</sup> November and from 10:00 until 17:00 on the 22<sup>nd</sup> November.

All information about the show, the exhibitors, the conference program, the VIV Connect app and travel & stay can be found on the website [www.vivmea.nl](http://www.vivmea.nl)



# WELCOME TO ABU DHABI, WELCOME TO HORTI AGRI NEXT!

**T**his year the 4<sup>th</sup> edition of VIV MEA will be co-located with HORTI AGRI NEXT (HAN) MEA. From the 20<sup>th</sup> until the 22<sup>th</sup> of November, the ADNEC exhibition center in Abu Dhabi will be transformed into an industry worth platform of trade, information and networking. The international event focusing on the entire food chain from seed to food, makes a perfect match showcasing the latest products, innovations, and advancements in horticultural food production, landscaping, controlled environment practices, environmental conservation, and agriculture.

HAN MEA aims to bring together industry professionals and experts from around the world to exchange ideas, knowledge, and expertise in the fields of arable land planting, crop harvesting and processing, land and water resource management, and cutting-edge enhancing technologies.

## Step into the world of HAN!

The newly-launched HAN MEA 2023 - a pivotal event in the agricultural landscape in a region marked by diverse climates and unique challenges, is setting the ground to

become a hub for innovations and sustainable practices that are reshaping both arable and indoor agriculture. VIV MEA holds the premiere, being the host of the first of the HAN global event series. HAN MEA, combines a high-profile conference program with an exhibition area, introducing the seed and feed to food value chain next to VIV MEA.



**HORTI AGRI NEXT**  
**MEA 2023**  
ABU DHABI, UAE, 20-22 NOVEMBER

## From Feed & Seed to Food

VIV MEA is the leading animal husbandry show in the Middle East, strongly business driven, and aiming to unite professionals from around the world. With an impressive gathering of 500 exhibitors from 50+ countries, displaying a diverse array of cutting-edge products and solutions. VIV MEA and HAN MEA present an enriched conference program, covering the latest trends in dairy, fish, poultry, eggs, cattle, calves, goat, camels and agriculture.

## Conference program

Next to the trade show floor, visitors are welcome to join the conference program. Entailing high-interest conferences, seminars, and panel discussions, with a variety of topics, the aim is to offer a program that suits many information needs. A key highlight in the program is the centrally staged FoodTech Transition Square's conference program, where a systems approach for greenfield development towards food self-sufficiency in the UAE and neighboring countries will be presented. Key speakers include a.o. ADAFSA, sharing Abu Dhabi's food strategy, the Dutch Inspiration seminar series focusing on circularity and mineral loop closure, and the AgritectureXchange panel discussions, with high-level industry speakers from the GCC.

## Prepare yourself for HAN MEA

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## More information

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# BASUSAD SECRETARY GENERAL NURI GÖKTEPE: “PRESSURIZED IRRIGATION SECTOR RAISED THE BAR IN EXPORTS”

**N**uri Göktepe, Secretary General of Pressurized Irrigation Industrialists' Association (BASUSAD) stated that the effects of global warming are felt more across the whole world and said that conscious consumption of water as a sine qua non of agriculture sector is gaining importance.

Drawing attention to the importance of saving water in agricultural irrigation Nuri Göktepe expressed that BASUSAD works for expanding in Türkiye the scope of pressurized irrigation systems that bear importance in combating drought.

Stressing that with its 33 members BASUSAD represents 80 per cent of the sector continues on its stable growth trend in exports Göktepe said that they built great commercial connections and grew their target markets.

Stating that they export commodities to over 40 countries in South America, North Africa, Russia, Europe, and the Middle East Nuri Göktepe added: “We have realized once again the importance of food supply due to the effects of Covid-19 pandemic and global warming. Water is one of the most essential inputs of the agriculture sector. Contrary to common belief, water is a restricted source and thus saving water plays a crucial role in the agriculture sector. 77% of the water used in our country, in other words 3/4 of it is utilized for agricultural irrigation purposes. 3/4 of agricultural irrigation is conducted via



the uncontrolled method of traditional flood irrigation method. This system helps the irrigation of the field not the plant. This is because half of the consumed water is wasted. It is of vital importance that traditional flood irrigation method be prohibited in respect of countering drought in our country.”

## Growtech offers global opportunities to the sector

Stating that every year they witness at Growtech new success stories of the Turkish pressurized irrigation systems sector at international arena, Engin Er the Fair Director said they have been expecting this trend to continue this year.

Pointing out that the fair gains strength every year with new participants, Engin Er added: “We are grateful to see that the fair is enriched with national participation.



Every single year the number of national and international participants are on the rise. Last year we hosted participants from 27 countries. Furthermore, Germany, the Netherlands, Spain, France, Africa, China, and South Korea were represented with national participation at the Growtech bringing together international agriculture sector professionals. China managed to engage in a growth trend again in the wake of the pandemic. China alongside with participants from over 120 countries participating at Growtech aims at accessing global agriculture via the Growtech. China will leave its mark on Growtech 2023 with the help of around 100 Chinese companies. International demand to participate in the Fair is on the rise. Germany, Spain, Italy, China, the Netherlands, and South Korea will participate in Growtech 2023 with national representation”

*Growtech, the world's biggest exhibition in the greenhouse industry will bring together the global agriculture sector in Antalya for the 22nd time between the dates of 22-25 November 2023.*





## CLIMATE-SMART AGRICULTURE FOR FOOD SECURITY IN THE MIDDLE EAST, AFRICA & SOUTH ASIA

Agtech stakeholders, innovators and investors will meet in Dubai this December 4-5 to forge new partnerships, drive forward industry projects and showcase the latest technologies.

The renowned World Agri-Tech Innovation Summit – held since 2013 in London, San Francisco and São Paulo – launches in the Middle East with a high-level two-day programme focusing international attention on agtech innovation and investment opportunities in the most climate-stressed regions of the world.

Hosted alongside COP28, the summit unites growers, agribusinesses, technology providers, start-ups and investors actively seeking new partnerships and solutions in climate-smart agriculture for food security in the Middle East, Africa and South Asia.

Hear from 75+ speakers, including top names at the **UAE Ministry of Climate Change and Environment, Silal, The World Bank, Barakat Group** and the **FAO** as they discuss challenges and opportunities for desert farming, including seed breeding

for arid climates, regenerative agriculture for soil restoration, digital platforms for smallholder farmers, and energy-efficient CEA.

Attracting a global audience to the UAE, the summit will showcase agri-tech start-ups from across the MEASA region, on stage in the Start-Up Showcase and at their booths in the dedicated Start-Up Exhibition, promoting fresh thinking and new opportunities for investment in sustainable farming.

The summit is geared for networking, making it easy to connect with the agtech visionaries and decision-makers you need to meet via the 1-1 networking app, which opens early for two weeks of pre-event networking. Boost your connections

over networking coffee and lunch breaks, plus a relaxed evening reception. World Agri-Tech is the place to be to secure funding, collaboration and growth. Whether you're an investor, corporate or entrepreneur, this is the gateway to your next deal!

Join us at the Conrad Dubai on December 4-5, 2023 and be part of the future-focused ecosystem driving the latest innovations and market opportunities to advance food security and climate-resilient farming in the Middle East, Africa and South Asia.

Explore full event details including the programme, speakers, and delegate registration at [www.worldagritechdubai.com](http://www.worldagritechdubai.com).







## 40<sup>TH</sup> INTERNATIONAL PLANT FAIR FROM 23 TO 26 JANUARY 2024 AT MESSE ESSEN

**T**he next world's leading horticultural fair is a very special one: For the 40<sup>th</sup> time, the International Plant Fair IPM will be launching at Messe Essen from 23 to 26 January 2024 - and with a new look. With the slogan "Our heart beats green" and a visual showing a heart overgrown with plants, the great bond between the industry and IPM ESSEN as well as the importance of the trade fair as a pacemaker for innovations are expressed. Numerous activities are planned around the

trade fair anniversary.

2024, more than 1,500 exhibitors from around 50 nations are expected throughout the fairgrounds to present their products and services to an international trade audience: from plants and technology to floristry and décor. Numerous activities are planned for the 40<sup>th</sup> edition, such as a podcast, a photo campaign, a selfie point in the new campaign look and a big birthday party with tributes to the exhibitors of the first hour.

Messe Essen and the German

Federal Association of Florists (Fachverband deutscher Floristen e. V. - Bundesverband - FDF) are taking the anniversary year as an opportunity to announce the "Best Practice Award" for the first time. A jury of experts will evaluate products for the floricultural trade in eight categories. The winners will be selected on the basis of their high practical relevance and sales potential. The awards ceremony will take place on the first day of the trade show.





# THE LARGEST AGRICULTURAL EVENT IN THE MIDDLE EAST, AGRAME, THRIVES AT DUBAI WORLD TRADE CENTRE

**A**graME, the Middle East's most significant agricultural event, recently unfolded at the Dubai World Trade Centre on October 9-10.

This year, AgraME, organized by Informa Connect, marked its largest edition to date, occupying an impressive 8,280 square meters with over 250 exhibitors hailing from more than 150 countries.

As the premier agricultural exhibition in the region, AgraME drew over 5,000 industry visitors from around the world. The exhibition served as a platform to showcase cutting-edge agricultural technologies and processes in various sectors, including arable farming, horticulture, aquaculture, and animal health.

One of the standout exhibitors, Engage Crop

Solutions (ECS), hailing from Lancashire, United Kingdom, presented their innovative 'Aqualatus' technology. Peter Bleazard, the company's Founding Director, emphasized that this solution could significantly enhance soil moisture retention, leading to water savings and increased

crop yields and profits.

Bleazard stated, "Sustainability must be at the forefront of agriculture, especially in the Middle East where food security is crucial, but resources are becoming limited. Growers need support and innovative solutions to ensure sustainable crop production for a growing





population. When applied to irrigation systems, Aqualatus technology can halve irrigation cycles while maintaining exceptional crop development, yield, and quality. Additionally, it reduces fertilizer and energy costs."

He went on to highlight the local impact of the technology, as it can help address water scarcity issues, which is a significant concern in the region. ECS has already collaborated with the Dubai Municipality to trial the

Aqualatus technology.

"In a year-long trial at the Al Warqa Park, Aqualatus reduced water usage by 50%, maintaining lush landscapes with significantly lower water consumption, from 87,000 liters a day to just 43,500 liters. When extended across the city, Aqualatus is projected to save the Municipality of Dubai Dh560 million annually and provide crucial water security," Blezard added.

Brent Crosbie, the Exhibition Director of AgraME, commented,

"This year, we have witnessed a prompt and resolute global response, with participants representing regions across the Gulf, Africa, Asia, Europe, North America, Central America, and South America. AgraME has now become a genuinely international platform, serving a world deeply dedicated to sustainability and food security.

The next edition is scheduled to take place at Dubai World Trade Centre from October 7 to 8, 2024.



November - December 2023

www.gulfagriculture.com

Gulf Agriculture 27





# Peat Moss and Peat Substrates for the professional horticulture

For more than 100 years the Floragard Vertriebs-GmbH in Oldenburg has successfully been developing, producing and distributing products for the professional horticulture. Since then we let this knowledge flow into our hobby potting soils. Because of that we nowadays refer to innovative premium recipes with a high standard from which the trade and hobby gardeners benefit equally. Regardless of whether indoors or outdoors, in a bed, on the balcony, in

the greenhouse or in a winter garden, whether magnificent blossoms or delicious harvest of vegetables and herbs – when using Floragard you will always find the ideal base for your project.

Floragard employees are horticultural professionals and put all their knowledge at the service of their clients. Our know-how is fully at the service of your growth company thanks to the Premium substrates from Floragard.



Our professional customers demand high-quality service and reliable product quality at the highest level. Among others, the consistent high quality is monitored by the Gütegemeinschaft Substrate für Pflanzen e. V. (Quality Assurance Association Growing Media for Plant Cultivation). The umbrella organisation is the RAL Deutsche Institut für Gütesicherung und Kennzeichnung (German Institute for Quality Assurance and Certification e. V.). Here the institute intensively investigates substrates for plants and continually studies the substrates' chemical, physical and biological properties. A company is only awarded the RAL seal of approval subsequent to the successfully concluded approval procedure, and following this, it is constantly monitored.

In this regard, the quality assurance does not only include the quality control of the finished substrates, but also continually inspects the basic materials and additives received. The consistent high quality provides a foundation for crop safety and the commercial success of your company – secured by Floragard and the Gütegemeinschaft Substrate für Pflanzen e. V. (Quality Assurance Association Growing Media for Plant Cultivation) under the umbrella of the RAL.

Our high-grade range of substrates satisfies virtually every customer's needs. In the meantime, however, the requirements and technical circumstances of numerous crops are frequently just as special and unique as the great variety found in the horticultural industry. For this reason, Floragard offers mutual cooperation with our substrate field experts and the Technical Department of Horticulture. The purpose is to work on crops, growing methods, technical equipment and climatic conditions of the horticultural business and to develop individually tailored special substrates. To determine the optimal recipe for your substrates with regard to the composition, structure, fertilization and pH-value, there are numerous possibilities.

## Our products

### Peat mixture for propagation: Of German origin:

- **Floradur® Seed S:** with good water retention capacity, it is a special blend of white and black peat with a superfine structure for vegetable seedling trays.
- **Floradur® B Cutting:** special mixture of white, black peat and perlite with a superfine structure for universal sticking, with high aeration capacity; also for sowing.

- **Floradur® A Block:** special mixture of black and white peat with a fine structure for pressed vegetable clods

### Of Baltic origin:

- **Florabalt® Seed 2:** special mixture of white and black peat with a fine structure and water retention capacity; ideal for summer cuttings.
- **Florabalt® Seed SB:** special mixture of white and black peat with a superfine struc-

ture for vegetable seedling trays with a high-water retention capacity

- **Florabalt® B Cutting:** special mixture of white, black and perlite peat with a superfine structure for universal transplanting with a high air retention capacity, also suitable for sowing
- **Florabalt® A Block:** a special mixture of black and white peat with a fine structure for pressed vegetable clods





**Note:** we have more than 4,000 compositions in our database, which illustrate the long experience of Floragard experts and the need to offer customers the most suitable solution for their particular case. Our goal is to develop a perfect product adapted to the particular requirements of our customer.

#### **Peat moss potting substrate for horticultural production**

##### **Of German origin**

- **Floradur® B Pot Medium:** Germain potting substrate for small pots starting at from 7 to 9 cm; for bedding and balcony plants
- **Floradur® B Pot Medium Coarse:** Germain potting substrate for medium-size pots of approx. 8 - 11 cm; for bedding and balcony plants
- **Floradur® B Pot Coarse:** Germain potting substrate for large pots starting at approx. 12 cm; for bedding and balcony plants, for plants sensitive to salinity

##### **Of Baltic origin**

- **Florabalt® B Pot Medium Coarse:** Baltic potting substrate for medium-sized pots of approx. 8 - 11 cm
- **Florabalt® B Pot Coarse:** Baltic potting substrate for large pots starting at approx. 12 cm; for bedding and balcony plants, for plants sensitive to salinity

**Note:** it is possible to add to these products perlite, clay or other preferred minerals. There are also mixes available for potting specific crops.

#### **Potting mixtures for perennials and plants in nursery containers.**

##### **Of German origin**

- **Floradur® Pot Container:** special mixture for cover plants, shrubs and conifers: pots > 3 L
- **Floradur® Pot Perennial:** special mixture for perennial plants in pot; for spring and summer repotting (Pots > 12 cm).

##### **Of Baltic origin:**

- **Florabalt® Pot Container:** Special mix for container based on Baltic blonde peat for nurseries.
- **Florabalt® Pot Anthurium:** special mixture for Anthurium repotting
- **Florabalt® Pot Bromeliad:** special mixture for Bromeliads repotting

**Note:** it is possible to add to these products perlite, clay or other preferred minerals. They are also available mixtures for potting specific crops.

Our goal is to develop a perfect product adapted to the particular requirements of our customer.

#### **Mixtures suitable for organic farming of German origin:**

##### **Seedling / transplanting**

- **Floradur® Block Bio:** special mixture for pressed clods and for growing seedlings
- **Floradur® Pot Herbs Bio:** special mixture for growing aromatic potted plants, tomatoes, cucumbers, peppers and other potted vegetables (7-13 cm buckets).

##### **Potting / Container**

- **Floradur® Pot Bio:** special mixture for horticultural plants and perennials in pots; for repotting in pots or buckets of 7-13 cm.
- **Floradur® pot Container Bio:** special mixture for horticultural plants for repotting in 12-14 cm pots. (Pots > 14 cm)

**Peat mixture for the cultivation of small fruits:**

##### **Strawberries and raspberries**

- **Floradur® B Cutting:** special mixture of white, black peat and perlite, with a superfine structure for universal transplanting with a high air retention capacity, also suitable for sowing
- **Floradur® Pot Medium-Coarse Berries:** special mixture of white, black peat and

perlite for medium coarse potting, pots 8-13 cm

- **Floradur® Pot Coarse Berries:** Potting peat substrate for containers, boxes and ridge planting.
- **Floradur® Pot Container Berries:** extra coarse-fibrous peat substrates for containers, boxes and ridge planting

##### **Blueberries**

- **Floradur® Pot Blueberries:** Potting peat moss substrate for containers > 1L
- **Floradur® Pot Container Blueberries:** Extra coarse-fibrous peat moss substrate for large containers > 3L

##### **Peat specialities**

- **Hansatorf® 0-40 mm:** Baltic Blond Peat for soil improvement and growing on teens.
- **Florabalt® 0-5 mm:** finely sieved blonde peat of Baltic origin for the manufacture of fine growing substrate and pot
- **Florabalt® 0-7 mm:** finely sieved blonde peat of Baltic origin for the manufacture of fine growing substrate and pot
- **Florabalt® 7-20 mm:** medium-sieved Baltic blond peat for medium-sized and pot substrate
- **Florabalt® 10-20 mm:** medium-sieved Baltic blond peat for medium-sized and pot substrate
- **Florabalt® 10-30 mm:** coarsely sifted blond peat of Baltic origin for the manufacture of coarse structure growing substrate and pot
- **Florabalt® 20-40 mm:** coarsely sifted blond peat of Baltic origin for the manufacture of coarse structure growing substrate and pot

#### **For more information:**

sassi@floragard.de  
+49 152 2267 2961  
www.floragard.de





# 40<sup>TH</sup> EDITION OF SAUDI AGRICULTURE CONCLUDES WITH SUCCESS

**S**audi Agriculture, held under the patronage of the Ministry of Environment, Water, and Agriculture, successfully concluded at the Riyadh International Conventions & Exhibition Centre from October 23 to October 26, 2023.

This exhibition, certified by the Global Association of the Exhibition Industry (UFI) and organized by Riyadh Exhibitions Company Limited, provided an ideal platform that brought together leaders and decision-makers in the agriculture industry from the Kingdom and various countries.







This year, the exhibition achieved record-breaking numbers, with 380 companies and entities participating from 38 different countries.

The exhibition covered a wide range of sectors, including agricultural technologies, organic foods, poultry, livestock, dairy, mills, aquaculture, food processing, packaging, animal health, and veterinary services.

The exhibition showcased the latest innovations, cutting-edge solutions, and advanced agricultural engineering developed over four decades. It has become the leading platform

highlighting the advancements in Saudi Arabia's agricultural sector and its future prospects and aspirations. International participants expressed their admiration for Saudi Agriculture and their eagerness to participate in this year's edition.

Raid Madanat from Syngenta commented, "Saudi Agriculture serves as Saudi Arabia's gateway to the agriculture sector," and mentioned that his company received exceptional feedback from all participants, professionals, investors, and decision-makers.



# SPACE 2023: AT THE HEART OF THE GLOBAL FOOD CHALLENGE

The 37<sup>th</sup> edition of SPACE was held from Tuesday 12 to Thursday 14 September at the Rennes Exhibition Centre, featuring 1,207 exhibitors. Among them, 241 were exhibiting at SPACE for the first time and 365 were international companies from 39 different countries. These exhibitors welcomed 90,771 visitors, including 12,125 international visitors from 122 countries. Overall, these figures reflect a 23% increase in the number of international visitors, as well as a record number of countries represented.

**T**he three-day Exhibition, which took place in a warm and positive atmosphere, reflects the healthy economic situation of the farming industry, but also its concerns regarding the future, as production volumes for beef, milk, pork and poultry are

falling. At the same time, consumer demand for quality food at affordable prices has never been higher. The three days of intense activity were therefore more necessary than ever for all those involved in the dynamics of animal farming, to allow them to address

these issues, to alert political leaders to this unprecedented situation and to reflect together on solutions for the future. Once again, SPACE exercised its role to the full as a high-quality event that is vital for the future of animal farming. As the geopolitical context becomes







increasingly unstable, it is essential that we do not develop a tendency to depend on third countries to fill our plates.

#### Energy as a major theme

This edition was also dedicated to energy. This central theme of SPACE was explored in numerous discussions, conferences and debates. It was the focus of the Espace for the Future organised by the Chambers of Agriculture. This area, which was redesigned for this year's edition, provided SPACE visitors with all the necessary information to help them reduce their energy bills and diversify their activities around the opportunities offered by this market. Photovoltaics, wind power, methanisation, biomass... there are many avenues to explore and keeping informed is essential to maintain a profitable balance with the farm's main production.

#### The World of Animal Farming, a record number of countries attended

SPACE attracted an unprecedented number of international visitors, with 122 countries represented by the 12,125 visitors who came



to Brittany looking for solutions to help them develop or improve their farms. The many delegations from Africa (Benin, Cameroon, Côte d'Ivoire, DRC, Senegal, Togo, etc.) confirmed their growing interest in the solutions presented at SPACE to help them achieve food sovereignty. BPI's official participation alongside them encourages our companies to open up and develop their business in these new markets. Top buyers, invited to SPACE as

part of Business France's "Export Begins in France" programme, were fascinated by the diversity and quality of the products and services offered by SPACE exhibitors. These investors and leading companies in their own countries, came from Angola, Ethiopia, Kenya, Romania, Tunisia and Turkey to find new technologies in the fields of hygiene, health, genetics and breeding equipment at the Exhibition.

The European Association of Agricultural Journalists (ENAJ) also took part in this year's edition and





held its Annual General Meeting there.

Once again this year, the World of Animal Farming played to its full potential in Rennes, despite many professionals being unable to come due to visa refusals. This year saw an even greater number of such cases. A large number of applications were refused, particularly in India, Algeria, West Africa, etc., which has a significant impact on potential or existing business flows between France and the rest of the world.

#### The genetic showcase

SPACE is a unique showcase for dairy and suckler breed presentations and competitions. 500 cattle from 13 different breeds provided a continuous spectacle in the main ring during the three-day Exhibition. This year's edition of the Genetics Show featured two major events: the National Charolais Breed Competition and the European Simmental Breed Challenge. Ten other inter-regional competitions and genetic presentations complemented the programme. The "Meat Excellence" beef cattle auction, dedicated entirely to suckler breeds, and the



inter-breed "Genomic Elite Auction," a unique event in Europe, dedicated to dairy and mixed breeds, were a great success. SPACE also featured a large number of sheep, with 120 animals from 10 different breeds. Competitions and the Sheep Olympics were held throughout the day, with 136 young learners taking part.





# GENIUS: DISCOVER THE FERTILIZERS THAT MAKE PLANTS CLEVER IN NUTRIENT ABSORPTION

**G**enius series of fertilizers contain water soluble macronutrients (N, P, K) combined with trace elements and an organic agent. The organic agent contained in Genius helps in the chelation of trace elements and the better absorption of macronutrients. Genius fertilizers are made of high purity raw materials, which do not contain impurities and heavy metals. When diluted in water, they are perfectly dissolved and they do not create sediment in the tank. They are available in various N-P-K formulations, in order to cover the nutritional needs of all crops and to offer growers the possibility to choose the most suitable fertilizer for their crop.

## Benefits of Genius fertilizers:

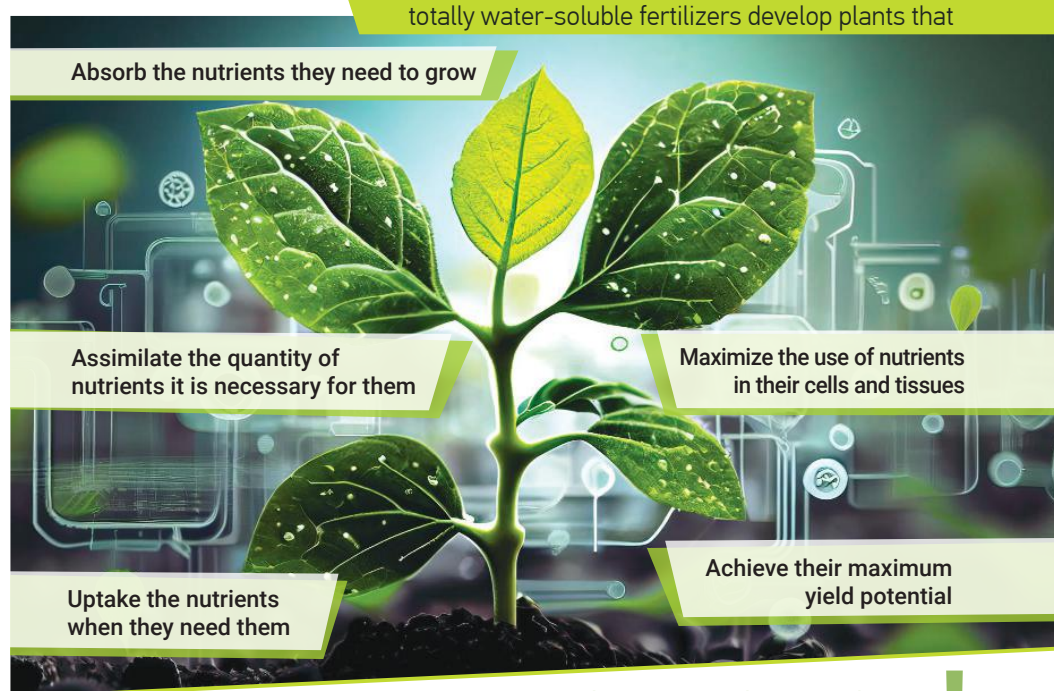
- They give plants exactly the nutrients they need to grow
- Help each plant assimilate the right quantity of nutrients necessary for it, on the best time
- Maximize the use of nutrients in plant cells and tissues
- Achieve the maximum yield potential

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

*Made in Greece by Humofert SA*

# Genius

totally water-soluble fertilizers develop plants that



Make your plants clever

Fertilize them with **Genius fertilizers**



Available NPK formulations:

20-20-20  
10-48-8  
19-19-19  
5-10-40  
30-10-10  
6-6-43  
15-30-15  
15-5-30+2%MgO  
18-18-18+2%MgO

(Tailor made formulations upon request)

- Produced by raw materials of high purity
- Chloride free
- Ideal combination of Nitrate, Ammonium and Urea Nitrogen
- High charge of trace elements
- Fortified with organic elicitors

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# “DESIGNED TO GROW” – GRODAN LAUNCHES NEW BRANDING INITIATIVE TO FOCUS PUBLIC AND POLICYMAKING ATTENTION ON SUSTAINABLE, SOILLESS GROWING TO FEED AND TREAT THE WORLD’S EXPANDING POPULATION

New direction also emphasises need to shift from regulating the method of production to the impact of production

**G**rodan, part of ROCKWOOL Group, is the world’s leading supplier of stone wool growing media solutions for professional greenhouse growers. Controlled Environment Agriculture (CEA) is designed to grow food and medicinal crops more resource efficiently than conventional soil-based cultivation, making it

possible to produce higher yields using less water, less land, less fertilisers and fewer if any chemical pesticides.

Why this matters? Because the global population keeps getting bigger while natural resources shrink. Having reached eight billion by late 2022, the world will add another two billion people in the next 30 years, many of whom

will live in urban environments. That means we will need to produce 50 percent more food than in 2012 to feed the world’s people.

Yet soil is being lost to degradation between 10 and 100 times faster than it is forming, while climate-induced water stress threatens productivity of





conventional soil-based agriculture in many parts of the world. Controlled Environment Agriculture is key to supplying urban and other populations with fresh, healthy food for the future.

ROCKWOOL Chief Marketing Officer Mirella Vitale comments, "Being rooted in science, Grodan's soilless growing media and digital services allow for predictable crop production year-round – anytime, anywhere – with yields up to 40 percent greater than soil-based options, while using less land, water, fertilisers, and pesticides than conventional agriculture. That means we can feed and treat a growing population while

simultaneously reducing the burden on the land and other resources. In the best of senses, 'less is more' when it comes to future-proofing crop production.

Grodan Managing Director Hub Janssen adds, "Together with our data-driven digital systems to continuously monitor crops' health and growing needs, Grodan's stone wool substrates allow professional growers to steer crop cultivation efficiently and sustainably, sometimes with 10 or more growing cycles in a year. That also includes being able to recycle the stone wool substrates after fully exhausting its capacity. In a nutshell, this is the essence of Grodan's new 'Designed to grow' brand initiative".

#### **Changing course on regulations**

Another important issue is

## **Designed to grow with less water**

that current regulations focus almost exclusively on production methods. This is important but increasingly insufficient as demand for crop production grows while available resources shrink. To rectify this imbalance, ROCKWOOL and Grodan believe the regulatory focus needs to shift away from a focus on production methods toward greater emphasis on the broader impact of crop production – including the impact on other resources including land, water, and biodiversity as well as the circularity of the crop production.

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





## NUTRITION TECHNOLOGIES LAUNCHES VITALIS™ A LIQUID BIO-FERTILIZER FROM INSECT FRASS

**V**italis™ is a patent pending, 100% natural bioactive spray developed by Nutrition Technologies, derived from Black Soldier Fly (BSF) frass that has been fermented and enhanced with additional chitin and a microbial inoculant to create a highly effective plant protection product. The bacterial strain, *Bacillus halotolerans* was isolated from the BSF larvae itself, and has been shown to inhibit plant pathogens and improve plant drought tolerance. These components work together to enhance the plant's natural defences against pathogenic microbes, and to create healthy, disease resistant foliage and root zone. Vitalis™ can be used as a foliar spray or root drench on its own, or in combination with Diptia® bioactive fertiliser.

Nutrition Technologies has been working with BSF since 2015, and is the largest tropical producer of insect-based products in the world. Using Decomposition Ecology principles, we leverage natural systems to optimise the upcycling of nutrients - working with nature instead of against it. With a team of 20+ scientists, and a dedicated microbiology laboratory we have rigorously tested our products internally and with third parties.

Vitalis™ is precisely formulated to prevent fungal disease, boost beneficial microbes and provide

micronutrients to plants. Vitalis™ is derived from enriched Black Soldier Fly (BSF) frass, enhanced with a microbial inoculant and added insect chitin to provide highly effective protection for all kinds of plants. The bacteria, isolated from the larvae digestive system, is proven to inhibit plant pathogens by up to 96%, and the chitin comes from the exoskeleton of the mature larvae. This added



chitin supports the growth of chitin-degrading bacteria in the liquid, particularly effective at destroying pathogenic fungus. These components work together to enhance the plant's natural defences against pathogenic microbes, and to create healthy, disease resistant soil around the plant root zone, protecting against fungal pathogens in the soil.

### Conventional solutions and the need for innovation

Conventional disease control measures currently rely on

fungicides and aggressive sanitization such as burning the soil. For many fungal pathogens these methods are rarely effective, where they do work they are associated with damaged soils and provide the conditions for the development of fungicide-resistance strains. Vitalis™ enhances beneficial microbial activity in the soil, increasing nutrient availability and plant health. One bottle of Vitalis™ contains 12 billion beneficial bacteria and applying Vitalis™ is a quick way to improve the microbial profile of soils. The microbial activity leads to increased nutrient absorption through bacteria such as phosphorus solubilizing bacteria and can protect plants from fungal infections.

### Multiple modes of action future-proof the performance

Insect frass is a nutrient source for plants in nature where their complex mechanisms benefit from frass. The bacteria in Vitalis™ including *Bacillus halotolerans*, directly inhibit fungal pathogens and stop them from growing, and prevent spores from germinating. They do this using many methods, including the production of enzymes that cut open the fungal cell walls, and the use of Siderophores (molecules that bind to iron), which is needed by the fungi to grow. Limiting the availability of iron to the fungi inhibits its growth.

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



## SUNTERRA GREENHOUSES PARTNERS WITH PHILIPS LED LIGHTING TEAM TO MAXIMIZE YEAR-ROUND TOMATO AND STRAWBERRY PRODUCTION WITH HORTICULTURE LED LIGHTING

**S**ignify (Euronext: LIGHT), the world leader in lighting, supplied Sunterra Greenhouses, in Acme, Alberta, Canada, with Philips GreenPower LED lighting in 2021. Sunterra has since reported two successful production cycles over their tomato and strawberry ranges. Installing Philips LED technology has proven to be a game-changer for Sunterra Greenhouses. Now Sunterra is providing Albertan consumers with quality, fresh tomatoes and strawberries all year round.

The driving force behind Sunterra's decision to incorporate LED lighting into its new greenhouse build was the desire for year-round production of quality fruit while managing their energy costs. In a region where natural light levels during the winter are often insufficient for predictable cultivation, supplemental greenhouse lighting is necessary to increase the light levels during the dark period. Sunterra's newly-built Venlo greenhouses were outfitted with a hybrid solution of Philips LED toplighting compact and HPS lighting over their 17-acre range of

tomatoes. The strawberry production area of 7.5 acres is lit with 100% LED consisting of Philips GreenPower LED toplighting compact and Philips GreenPower LED flowering lamp.

### **A winning partnership**

Philips horticulture LED lighting was chosen during the vendor selection process after the team provided Sunterra with customized lighting designs, and investment and payback calculations. A team of Philips lighting key account managers, plant specialists, and application engineers from North America and the Netherlands created several different lighting scenarios and configurations.

Sunterra is a family

business that has been operating since 1970. The company's commitment to sustainability, innovation and excellence in crop production aligns seamlessly with Philips horticulture lighting's mission to lead the lighting industry with cutting-edge technology and sustainable practices.

As a vertically integrated operation, Sunterra sells its fresh strawberries and tomatoes in nine Sunterra Markets throughout Alberta including Calgary, Edmonton, and Red Deer. In addition, Sunterra's produce is available at local grocers and farmers' markets.

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





# BLACKBURN: THE WORLDWIDE LEADER IN MARKING FLAGS

**B**lackburn Mfg. Company was started by E.A. "Bud" Blackburn, my grandfather, in the basement of a small family homestead near Royal Nebraska. Bud's uncle, Ray Blackburn (a surveyor), asked him if he could come up with a machine to attach a piece of cloth or paper to a piece of wire instead of using the wooden lathes stakes that was the current way to mark during surveys.

Bud, a farmer by trade but a "tinkerer" at heart, would over the next couple of years, invent a Marking Flag machine to mass produce marking flags using a small

piece of vinyl attached to a wire staff. From there, the rest is history.

Today, Blackburn Mfg. Company produces on average 150 million marking flags per year! While our machines have been modernized over the years, Grandpa's original machine blueprint is what we use to build all our machines today.

Our flag machines are built in-house and can produce over six thousand flags per hour. We can build them as we need them and often have parts on hand to make repairs or new builds when necessary. We strive to follow Bud's legacy and ingenuity by creating

solutions for our customer's needs.

We have an amazing team that strives to provide you with high-quality, American-Made products at both our Nebraska and California locations. Customer service is our #1 priority; therefore, we make sure that we are doing everything possible to exceed your expectations with our marking products and continued service. We know that none of this would be possible without our loyal customers.

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







## QUALITY AND GUARANTEE: THIS IS WHAT YOU GET WITH SOUTHERN SEED PRODUCTS

**V**egetable seeds from Southern Seed's continuously evolving modern breeding have resulted in successful and established products on the worldwide market, particularly our Solanaceae range. Our variety TINKITE' F1 is the master of beef cluster tomato where the combining of the red shiny colour and the firm pulp makes it a very aesthetic tomato. Appearance has a great impact on the average consumer's choice, but that is not all: our tomato is also a guarantee in technical terms: with its average weight of around 280-320 grams per fruit, it has an excellent shelf life and high and intermediate resistances. If your requirements are cherries ones, we can offer you all colours. GUSTAVO F1 in red and SUMMER F1 in yellow

are two premium quality fruits, where the Italian care of products emerges. Both have a strong resistance to cracking and an excellent long shelf life. Together these two, BUZZ F1 is the particular small cherry tomato: A simple bite can release an infinite sweetness. With its high brix degree, around 12, it is used for raw consumption but also for cooked one. The peculiarity is the fruit weight of 6-8 gr. Not only tomatoes, but also peppers in yellow, orange and red, respectively PANAREA F1, ALICUDI F1 and STROMBOLI F1. Names' origin comes from islands Eolie, where nature is uncontaminated and the environment is perfectly balanced; Following this principle, these 3 snack peppers are thought to satisfy

consumers of all ages, easy to digest, very sweet flesh, perfect for every family's member. Another product that is characterized by a sweet and good taste is the elongated watermelon KAMELIA F1. Its weight is around 12-15 kg. It is also very tolerant to heat and cold temperatures, able to performance well in different transplant period. For Eggplant, it is necessary to mention VENERE NERA F1: It fits for fresh and also industry market. The satisfaction of customers will be always our first aim.

**For more information, visit our website at the following link: [www.southern-seed.com](http://www.southern-seed.com) and contact us export@southernseed.it tel. +39 0932 861054**



# WANGARA HORTICULTURAL LAUNCHES REBRAND AS GROWINNOVATE

You may know us as Wangara Horticultural, or WHS Australia, the trusted supplier of high-quality Easy-Fill™ bags to the MENA region for over 25 years. It is a name that has served us well, and built the foundation for our brand.

There comes a time for a thriving global company to match its mission and future vision to a name and logo that reflect their values. Over the past year, we have been sowing seeds of our own, behind the scenes, and working away at the next evolution of our business. Now, we are excited to announce the launch of our new look and company brand.

## Welcome to Growinnovate

Growinnovate is the exciting next step in our company's journey. The new name elevates our business, taking a holistic view of our company's operations, while at the same time creating a powerful, eye-catching difference in the market. It aligns the innovation, quality, and service that our loyal and valued customers know us for with a bold new direction.

Owner and company director Rick Pares says: "We worked with a leading digital branding agency to create a new look and name that combines our mission and vision in one. We empower our customers' growth, while delivering innovative solutions to the industry. The name Growinnovate strikes that balance perfectly."

Along with a new company name, you will notice a distinct new brand mark.

"Our new brand brings together the key elements of what Growinnovate represents: our expertise in

horticulture, our global reputation, and our culture of innovation and focused approach to developing new products," says Pares.

## Discover GrowinBag™: The original and the best

The original and revolutionary growbag, previously known as Easy-Fill™, is now presented under the new name GrowinBag™. This name allows our customers to easily identify our quality product, while having the peace of mind, that they are securing authentic Growinnovate products.

## Driving the industry forward

Standing alone as leaders in the field, Growinnovate remains the #1 choice for quality, eco-friendly grow bags, delivering innovative horticulture solutions that are designed to enhance plant health and boost growth, year-round.

We are proud to bring our new brand, Growinnovate, to the world, and are excited for you to join us in the next step of our journey.

**GROW  
INNOVATE**





# A NEW BRAND. A NEW LOOK. THE SAME MANAGEMENT TEAM.



GROWING  
A GREENER  
TOMORROW

While our company name and brand has changed, our exceptional management team has not.

You receive the same unrivalled knowledge, passion, and business acumen, built on a foundation of unwavering values and unrivalled commitment to customer service.

We would like to take the opportunity to introduce the people behind the company, that our customers and clients have come to know and trust over the years.



**Geoff Stowe**

Mr Geoff Stowe, Owner and Director of Growinnovate has been guiding the business through its global expansion, he plays a key part in the knowledge and culture transfer inherent in the new brand.

With family roots in the Swan Valley wine region of Western Australia, Geoff has been involved in the agriculture, horticulture, and tourism industries. This has enabled him to branch out beyond Growinnovate, holding a number of commercial interests in adjacent industries.

Horticultural innovation runs in his blood, and Geoff is excited to steer Growinnovate into its next stage of business evolution.



**Rick Pares**

Mr Rick Pares, Owner and Director, oversees Growinnovate's activities in the MENA region. As the personal contact for our customers, Rick is not just a voice over the phone, or the sign-off on an email. He takes an active interest in what our clients are achieving, visiting their sites to personally review growing conditions, and providing advice and insight on how to utilise our products to improve the business' operations.

Rick attributes this interest in our customer and client wellbeing to his family's farming background. Growing up on a broadacre farm in the Western Australian Wheatbelt, he knows what it takes for nurseries and growing businesses to thrive in even the toughest of conditions.



**Lina Stowe**

Mrs Lina Stowe is the marketing specialist at Growinnovate. A driving force in building the company's future direction, she is a passionate advocate for regenerative agricultural practices, and brings this focus and innovation to her position.

With a deep love of the land, agriculture, and organic growing, born from her strong family ties to farming and food production in her native home, Colombia, she is also a farm owner herself. This ensures she understands the challenges that our customers face in terms of growing thriving plants and gardens. She uses this knowledge to share best practices and what is happening in the horticultural world in articles and blogs.

When you contact our team, you know exactly who you are working with, and that peace of mind is worth its weight in gold.

**GROW  
INNOVATE**

Contact Growinnovate to discuss utilising a GrowinBag™ solution to help your business thrive.

+61 438 834 379 | [info@growinnovate.com.au](mailto:info@growinnovate.com.au) | [growinnovate.com.au](http://growinnovate.com.au)



## ■ Irrigation

**A**s a grower, you know the importance of having a reliable irrigation system in your arsenal of farming equipment. It not only makes watering crops more efficient, but it also helps save valuable time and resources for your operation. But just like any equipment, you need to make sure you're taking the proper care of it—no matter how strong or durable it is.

Bruno Perroni, Marketing Manager for EMEA & APAC for Lindsay, has some tips on maintenance and maximizing the life of your machine. Some of the strategies you may already be putting into practice, and some you may not be thinking about yet. Read on to find what they all are.

### **1. Perform regular maintenance on your irrigation system**

Every grower is working against the clock, which means there is no time for downtime. That's why regular maintenance of your machine is key to ensuring your machine stays in top working condition throughout the season.

According to Bruno Perroni, before the season is a busy time for growers. From planters to tractors to irrigation equipment, growers have a lot of pre-season maintenance to take care of, but a quick, visual inspection of the system before spring field work could prevent major, mid-season headaches.



# HOW TO MAXIMIZE THE LIFE OF YOUR IRRIGATION SYSTEMS







"The pre-season check along with an off-season maintenance program provided by your dealer will ensure your irrigation machine operates in peak condition," Perroni said.

Perroni also recommends checking the following components:

- **Pivot Point** - Make sure the pivot cables are securely connected, greasing and any drain plugs have been reinserted
- **End gun** - Make sure all plumbing is intact and appears to be in good working condition. Also, check for rodent damage, degradation of tubing and plugged plumbing
- **Driveline** - Check the air pressure and visually inspect tires at the last tower for any signs of wear. Also, check the seals on the wheel gearboxes and center drive for signs of leakage, and repair or replace as

necessary. And, if not done during the off-season, drain water from the bottom of these units and refill with oil

- **Sprinklers** - Inspect the entire system for missing or damaged sprinklers and repair or replace as necessary
- **Electrical** - Apply power to the system and check for proper operation in both directions

## 2. Replace parts that are wearing out or malfunctioning

With more routine maintenance and machine scans, you should be able to pinpoint any issues early. This not only helps get the most out of your machine, but it also keeps your irrigation system performing at its best all season long—today and down the road.

When it comes to replacing parts, be sure to check all hoses and other components for signs of wear and tear. You should also inspect any moving parts for signs of corrosion or damage that can lead to a decrease in efficiency. If any components need replacing, replace them with ones made specifically for the machine model you have.

## 3. Keep an eye on water

We often talk about water in terms of monitoring, managing and conserving it. However, when it comes to your machine, you also want to think about things like proper drainage of water in the pipes or watching for water ingress on gearboxes.

What else can water tell you about your machine? Well, changes in color, odor or clarity of the water could be an indicator of potential contaminants or other issues affecting your system. Wet spots or drips around the base of the machine could indicate a leak. And flow issues could be a sign of debris, buildup or a clog in pipes or sprinklers.

With proper monitoring and maintenance though—like inspecting your system pre and post season or cleaning out nozzles and filters regularly—you can ensure that your pivot irrigation machines stay in optimal condition throughout its lifespan, said Perroni.

## 4. Regularly lubricate your machine

"A good irrigation system doesn't take very much. Just ensuring that the moving parts are properly lubricated goes a long way," says Perroni.

Lubrication plays an important role in prolonging the life of your machine. A well-lubricated pivot will run smoothly and use less energy, meaning it will last longer with less wear and tear. So, be sure to regularly lubricate all bearings, gearboxes, drums and pivots. The frequency of lubrication depends on the system's use level, sun exposure and weather conditions.

Additionally, be sure that all filters are clean and functioning properly. The filters should be checked at least once a month and replaced if necessary.

## 5. Schedule annual maintenance inspections with your dealer

Maintenance inspections aren't just for when there's a problem. Bruno Perroni encourages growers to think of "annual system inspections as a preventative measure." He continues by saying, "it's the little things you notice which prevent the bigger issues. Tires running low on air, drivetrain couplers showing wear, drain plugs not draining, exposed wiring, rodent damage."

These inspections help detect issues before they become major problems, thus saving you significant repair costs. Inspect all gearboxes, drives, tires and electrical wires, starting from the center drive and moving outward. This guarantees that the whole system is checked, and all problems are identified and fixed quickly.

By following these five tips and strategies, you can help extend the life of your pivot irrigation system and keep it functioning at peak performance for decades to come. If you ever have questions on how to maximize the life of your machine, or are ready to schedule an annual inspection, remember that your local Zimmatic dealer is always here for you and your operation.

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



# LEADERS IN AGRICULTURE RETAIL AND LANDSCAPING



**Shaheen M. AlRubaie**  
General Manager



**E**stablished in 1985, AlShaheen Nurseries has been ever since developing itself as one of the leaders in the field of agriculture retail and landscaping. AlShaheen Nurseries provides a complete set of agriculture and gardening services. The team is run by well qualified engineers and experienced supervisors, with a long and successful track record in agriculture projects execution. The company is located in Shuwaikh, 4<sup>th</sup> Ring Road, Nurseries Area. It's our pleasure to introduce our wide range of services we offer the following:

- Landscaping and planting

division for indoor and outdoor gardens. Wholesale division (For Agricultural Companies only).

- Maintenance team for agricultural projects and house gardens.
- Designing and implementing irrigation systems.
- Wide range of indoor and outdoor plants.
- Wide range of flower and vegetable seeds.
- Different sizes and colors of plastic net shades.
- All kinds of natural and chemical fertilizers.
- Peat Moss, potting soil, hydroton.
- Agent and distributor of indoor and outdoor pots of different shapes and sizes.



AlShaheen Nurseries showroom is considered as a garden center for selling indoor and outdoor plants – Grass – Peat Moss – Potting Soil – Plastic Net Shades – Pots – Rocks – Seeds – Natural and Chemical Fertilizers – Agrilite – Irrigation Sys. – Water pumps – Insect







killer – Hydroton – Palm bags.  
The Company aims to provide many items to serve different customer's tastes, in addition to provide the best quality and less prices under one roof.

AlShaheen Nurseries owns a farm in Wafra area specialized in growing plants, flowers, and paspalum grass, runs by well qualified engineers to provide the market and the agricultural companies with the best varieties and quality. The farm is considered one of leading farms in Wafra in growing plants, flowers, and paspalum grass.

The Project Division is run by well qualified team of engineers

and supervisors to design landscape and maintain gardens. There is a team for designing & implementing irrigation systems.

The wholesale division was established in 2000 to provide

the Ministries and the agricultural companies with plants, garden tools and irrigation systems. Since then, the division has been supplying some of the leading government and private projects.







# NEW PUMA 185-220 TIER 3 TRACTORS PROVIDE USERS WITH MULTIPLE PERFORMANCE BENEFITS

**T**he latest Puma series tractors from Case IH offer multiple upgrades over the models they replace, covering areas from serviceability to productivity to comfort, and incorporating technology that maximises efficiency. They look, feel, drive and are built differently to their predecessors.

Designed to meet the needs of agricultural business users who need a productive tractor with technology features that maximise efficiency, the new Puma 185, Puma 200 and Puma 220 have respective maximum power

outputs of 200hp, 220hp and 240hp, rising to 225hp, 245hp and 260hp when a power boost is automatically engaged during PTO and road transport operations. Identifiable by their distinctive new front-end styling, which can include LED upgrades to the standard lighting package, the new models can be specified with PowerDrive 19-speed full powershift or CVXDrive continuously-variable transmissions.

The new Puma tractors are powered by an updated Tier 3 FPT NEF engine, which is turbocharged and intercooled and, like the unit on the outgoing Puma tractors, is equipped with an internal exhaust gas recirculation (EGR) system. Fuel consumption has been cut by an average 3.6%, while engine service intervals have been extended by 25% to 750 hours, the best industry figure in this power class, and the transmission oil

change interval is now 1,500 hours, up from 1,200 hours, with benefits for maximum field time/minimal downtime, and for ownership costs. To meet local requirements and protect the engine from low quality fuel, a heavy-duty fuel filter is optional. Diesel capacity is 372 litres, an optional auxiliary tank adding a further 86 litres, with the combined 458-litre total representing a 13% increase over outgoing Puma models, for longer gaps between refuelling.

A low engine idle speed management feature reduces engine speed if the tractor has been left running with no driver in the seat, to further minimise fuel consumption, while a flat transport boost on PowerDrive models improves road haulage performance and delivers more power at high engine speeds.

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

**The new Puma series tractors can be ordered from February 2024 onwards from Case IH dealerships across Middle East and African countries.**



# AGROINTELLI AND THEIR INNOVATIVE ROBOTTI, AIMING A GREENER FUTURE FOR AGRICULTURE

**A**grointelli, the pioneering Danish field robotics company, is excited to participate in the upcoming COP28 and showcase the company's contribution to the agricultural industry and global sustainability efforts.

In a recent interview with him, The CEO and Founder of Agrointelli, Prof. Eng. Ole Green, shared their company's mission, achievements, and commitment to environmental responsibility.

The primary focus of Agrointelli's is on the autonomous Robotti, designed to revolutionize agriculture through cutting-edge robotics and automation. With Robotti, the company aims to make precision farming more efficient and accessible for farmers globally.

Mr. Ole stated, "Our primary goal is to revolutionize agriculture by providing farmers with cost-effective and user-friendly tools. Robotti is already making a difference in 16 countries, offering autonomous operation, simplicity, reliability, customization, precision, safety, and a low environmental impact. It's a game-changer and designed to enhance farming operations worldwide."

Robotti already made a significant impact in countries such as Western and Eastern Europe, Great Britain, Canada, and Australia. It offers numerous advantages, including 24/7 autonomous operation for peak efficiency, simplified maintenance, and easy access to parts to minimize downtime. Its customizable functions cater to individual farming needs,

ensuring precision and reliable task execution. Safety features with task completion notifications, while its eco-friendly design minimizes soil impact and reduces the carbon footprint.

Agrointelli's participation in COP28 showcases its commitment to leading the way toward a more efficient and eco-conscious future for agriculture. The company is dedicated to driving positive change in the agricultural industry. Mr. Ole Green emphasized, "We recognize the vital role technology plays in reducing the environmental impact of farming. Our presence at COP28 allowed us to engage with the global community, share insights, and collaborate on innovative solutions for a more sustainable future."





# A NEW HUMIC ACID SOLUTION FROM EUROPE: A REVOLUTIONARY PRODUCT FOR THE GCC MARKET

**P**reco Invest is a Czech company that specializes in the production and sale of organic feed additives and fertilizers based on peat-sapropel concentrate. Peat-sapropel concentrate is a natural substance that contains humates and humic acids, amino acids, vitamins, minerals, and microelements. These substances have beneficial effects on soil, plants, seeds, animals, and humans.

Preco Invest offers two main products for different applications:

**1. PRECOCARE:** a peat-sapropel concentrate for livestock and poultry. It improves digestion, immunity, growth, and meat quality of animals. It also reduces ammonia and methane emissions from animal manure. PRECOCARE can be used for various types of animals, such as:

| Animal  | Daily dosage per 1kg of live weight | Effect                                                                                            |
|---------|-------------------------------------|---------------------------------------------------------------------------------------------------|
| Cattle  | 0.5 ml with feed                    | Increases milk yield and fat content, reduces mastitis and ketosis                                |
| Poultry | 2l / 100l of drinking water         | Increases egg production and quality, reduces feather pecking and cannibalism                     |
| Sheep   | 0.5 ml with feed, silage            | Increases wool yield and quality, reduces parasites and diseases                                  |
| Horses  | 200ml / 600 kg of live weight       | Improves hoof health and coat condition, reduces colic and stress                                 |
| Goats   | 0.5 ml with feed, silage            | Increases milk yield and quality, reduces mastitis and ketosis                                    |
| Rabbits | 0.4 ml with feed                    | Increases daily weight gain and feed conversion ratio, reduces coccidiosis and enteritis          |
| Ducks   | 2l / 100l of drinking water         | Increases egg production and quality, reduces feather pecking and cannibalism                     |
| Turkeys | 2l / 100l of drinking water         | Increases daily weight gain and feed conversion ratio, reduces respiratory diseases and mortality |

**PRECOCARE has many advantages over conventional feed additives for livestock and poultry. Some of these advantages are:**

- It is crafted from natural ingredients, ensuring safety for both animals and humans. It's completely free from synthetic chemicals, hormones, antibiotics, or GMOs, safeguarding animal







health and consumer well-being.

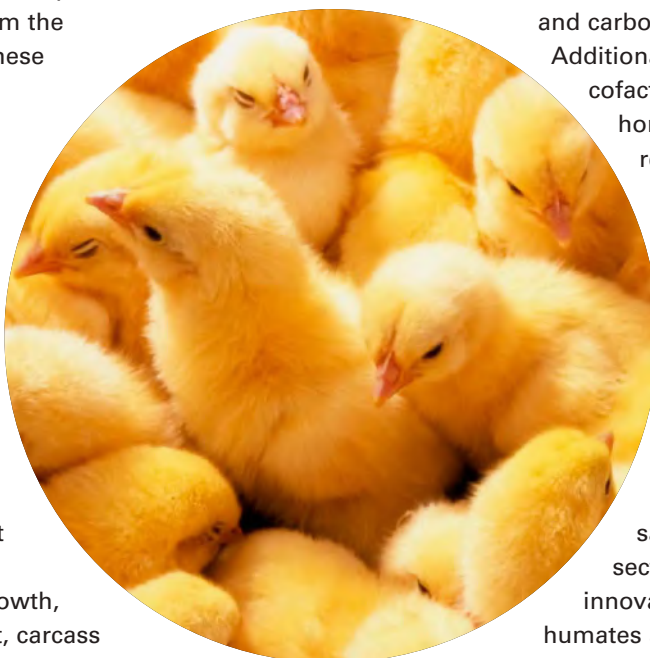
- Packed with humic acids, our formula boasts a range of biological benefits. Humic acids bind to toxins, heavy metals, radionuclides, and pathogens in animals' digestive tracts, effectively eliminating them from the body. Additionally, these acids stimulate the immune system by enhancing antibody production, cytokines, and macrophages, while bolstering antioxidant defenses against oxidative damage.

- Amino acids, essential for protein synthesis, are a key component of the product. They enhance animals' growth, muscle development, carcass quality, and meat yield. Amino acids also play pivotal roles in regulating hormonal balance, enzyme activity, neurotransmitter function, and gene expression.

- The compound includes vital vitamins that support animals' metabolism, energy production, nervous system, blood, vision, skin, bone health, and reproductive

systems. These vitamins serve as protective shields against deficiencies that can lead to various diseases in animals.

- It is enriched with minerals, crucial for animals' physiological functions. These



minerals maintain acid-base balance, water equilibrium, nerve impulses, muscle contractions, blood clotting, oxygen transport, enzyme activation, hormone secretion, and bone formation. They are vital in preventing growth retardation, anemia, osteoporosis, and other

disorders in animals.

- The product contains essential microelements, required in small quantities for normal animal function. These elements participate in critical biochemical reactions, including oxidation-reduction, methylation, carboxylation, and phosphorylation, essential for DNA, RNA, protein, lipid, and carbohydrate synthesis.

Additionally, microelements act as cofactors for enzymes, hormones, and vitamins, regulating animal metabolism effectively.

Preco Invest is committed to providing high-quality products that meet the needs of customers and consumers. The company works hard to offer consumers high-quality products that satisfy their needs in various sectors of activity. To create innovative solutions based on humates and humic acids, the company constantly conducts scientific trials in different climate zones.

Recently, a new local branch PRECOFERT was established with the goal to promote and support organic, sustainable agriculture in the GCC region.

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**For more information, visit**  
**[www.precofert.ae/feed-additives/](http://www.precofert.ae/feed-additives/)**  
**or email directly at [info@precofert.ae](mailto:info@precofert.ae)**





# BREED DIFFERENCES FOR TASTE AND HEALTH PARAMETERS IN CHICKEN

*Written by: Dr. T. Kotaiah,  
Indbro Research & Breeding Farms Pvt.Ltd.,  
Hyderabad, INDIA*

**T**he first consideration of the consumer while deciding on eating food is TASTE.

The family that goes out to eat, looks for a tasty food. The second thing the consumer looks in to the food is the Nutritive value, Hygiene and the Cleanliness. The third point of concern is the Price. When the prices of a particular food item is discounted, the volume of sale goes up in the middle class and lower middle class segment. Meat being a

choice food, the eating frequency and the quantity gets reduced once the prices go up very high. More and more middle class and lower middle class people will start eating non vegetarian food, once the prices go down. The frequency of purchase also goes up.

Different religions have their preferences in eating non vegetarian food. Some do not eat pork. Some do not eat Beef. Chicken and eggs have no taboo. Poultry production is getting faster and more efficient, thanks to the technology engaged in the production.

The geneticists are selecting fast growing chicken every year for breeding and the weight gain is increasing. This is also noticed by the reducing number of days to get the same weight while growing.

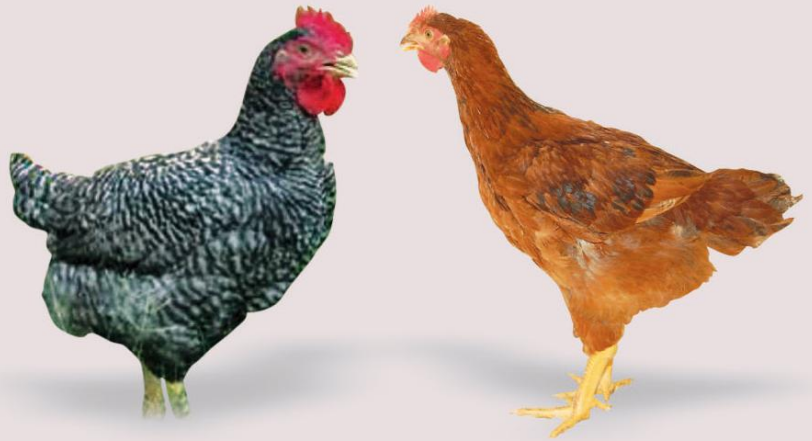
The nutritionists are devising better foods, feeding equipment and feeding practices to produce more and better meat from the same bird to get the maximum genetic gain expressed. This is by adjusting the nutrients but not by adding performance enhancers as many think.

The concept of poultry health care is by preventive approach.





# INDBRO COLOUR BROILERS Poultry ■



- Multi Coloured / Slow Growing
- Tasty & Healthy Chicken

Do not expose the bird to diseases in the short time of its life. Steps like isolated farms, "All in All Out" rearing, Gaps between the batches, absolute restriction of movement of visitors and dedicated flock wise work force prevent the entry of the diseases.

As a result, the hen is laying 330 eggs in 360 days of laying

cycle. The breeders are working in the direction of keeping the birds for 560 days (100 weeks) to get 500 eggs.

The broiler bird of 2.0kilos is ready in less than 35days and in spite of increase in feed prices, the chicken prices have not increased that high as other meats. The chicken consumption has already over taken the consumption of other meats all over the world.

## CHICKEN VARIETIES

Many varieties of chicken are sold in the same area. The easily available and in large volumes is the BROILER chicken. White coloured birds with tender meat.

Birds with short legs and broad Breasts. They are also called Double Breasted Broilers. Most of the broiler meat is sold without skin. These birds grown for short time are tender. We see large sized birds like 2.5 to 3kilos also when the birds are grown for more days due to market glut. The second type of birds, the consumers look for are Country chicken or Native chicken. These birds are generally look slender, tall without any fat. The meat is tough. Some people like to eat Native chicken with skin and the skin burnt before the pieces are made. The consumer is ready to pay high prices for this niche item. The differences in prices is

**N=42 for broiler where as N=24 for all other genotypes and for all parameters. Parameters with different superscript varies significantly (P<0.05) within the row.**

| Genotypes/Parameters  | BROILER                | SLOW GROWING           | DUAL PURPOSE            | NATIVE                  | NATIVE CROSS            | P value |
|-----------------------|------------------------|------------------------|-------------------------|-------------------------|-------------------------|---------|
| Colour/appearance     | 6.8730.08 <sup>b</sup> | 7.2730.13 <sup>a</sup> | 7.0430.10 <sup>ab</sup> | 6.8530.14 <sup>b</sup>  | 6.9530.12 <sup>ab</sup> | 0.101   |
| Flavor                | 6.6430.05 <sup>b</sup> | 7.1330.13 <sup>a</sup> | 6.8930.10 <sup>ab</sup> | 6.8630.14 <sup>ab</sup> | 7.0030.10 <sup>ab</sup> | 0.018   |
| Tenderness            | 6.7730.10 <sup>b</sup> | 7.1930.11 <sup>a</sup> | 6.9730.10 <sup>ab</sup> | 6.6830.14 <sup>b</sup>  | 6.7730.212 <sup>b</sup> | 0.035   |
| Juiciness             | 6.7230.08 <sup>b</sup> | 7.2130.11 <sup>a</sup> | 6.9730.09 <sup>ab</sup> | 6.6530.12 <sup>b</sup>  | 6.8130.12 <sup>b</sup>  | 0.005   |
| Overall acceptability | 6.7030.08 <sup>c</sup> | 7.3230.10 <sup>a</sup> | 7.0530.08 <sup>ab</sup> | 6.8930.13 <sup>bc</sup> | 6.9730.07 <sup>bc</sup> | 0.000   |



The performance, carcass and meat characteristics of both the birds is as follows.

| CHARACTERISTIC                                 | SLOW GROWING BROILER | BROILER |
|------------------------------------------------|----------------------|---------|
| NO OF DAYS TO 2KG WEIGHT                       | 49                   | 35      |
| FCR ( FEED CONVERSION RATIO)                   | 1.8                  | 1.6     |
| MORTALITY                                      | 2.5%                 | 5.0%    |
| TRANSPORT LOSS                                 | 5.6%                 | 6.7%    |
| DRESSING PERCENTAGE                            | 69.63%               | 72.56%  |
| • BREAST MEAT                                  | 22.94%               | 29.15%  |
| • THIGH & DRUMSTICK                            | 27.51%               | 25.18%  |
| WINGS                                          | 18.44%               | 12.47%  |
| • WATER HOLDING CAPACITY                       | 16.0%                | 14.25%  |
| • FREE WATER                                   | 14.50%               | 11.27%  |
| • MUSCLE FIBRE DIAMETER                        | 57.50                | 64.16   |
| • SHEAR FORCE VALUE                            | 9.07                 | 7.16    |
| • MOISTURE                                     | 74.34%               | 67.52%  |
| FAT%                                           | 7.01%                | 6.49%   |
| PROTEIN                                        | 18.85                | 20.03   |
| COLOUR                                         | 7.27                 | 6.87    |
| • FLAVOUR                                      | 7.13                 | 6.64    |
| TENDERNESS                                     | 7.19                 | 6.77    |
| JUICINESS                                      | 7.21                 | 6.72    |
| CHOLESTEROL CONTENT                            | 39.58                | 35.33   |
| COLOUR INTENSITY OF MEAT                       | DARKER               | WHITE   |
| • OVERALL ACCEPTABILITY                        | 7.32                 | 6.70    |
| • OVER ALL ACCEPTABILITY OF RESTRUCTURED BITES | 6.75                 | 6.33    |
| • SCORE OF UNTRAINED PANELISTS                 | 72%                  | 28%     |
| • NO OF PANELISTS 168                          | 121                  | 47      |

3 to 4times.

### SLOW GROWING BROILERS

In advanced countries like Europe and USA, they found that the heavy breasted white meat is found to be tough with white stripes, condition called “Woody Breast”. The taste of the broiler chicken is found to be bland (no taste). This characteristic came out in response to selection for fast growth. Scientifically, the bird puts on the muscle so fast, the blood vessels and blood supply does not cope up with the growth. The muscle meat is tightly knit, the gaps between the muscle fibres diminish and the “water holding capacity” goes down. The Poultry Producers now offer different broiler gaining weight slowly, called “Slow growing broiler”. The slow growing broilers are genetically slow growing, taking 60 to 80 days to get 2kg weight. These birds are grown with more space. The chicken is found to be tasty with better water holding capacity. The altered meat, fat ration gives a different taste and the health parameters are considered to be more favourable.

### N.R.C. PROJECTS

When we think of buying chicken, we see ...

1. **BROILER** – Started in 1970s,

### INDBRO BROWN LAYER



- Prolific Layer of Large Brown Eggs 345 – 80 Weeks

### INDBRO COLOUR BROILER PARENTS



- Slow Growing & Fits into Welfare Standards
- Female Parents Laying 225 Hatching Eggs
- Hatchability Over 85%

### INDBRO ASSEEL



- Uniform Growth Sturdy Birds
- No Fat-Healthy-Multi Coloured
- Pea Comb
- Thin Legs
- 100 Days
- Tasty & Tougher Meat



started growing in volumes. Never Looked back. Tender chicken with good nutritive value at a reasonable price. More and more shops are serving Broiler chicken in every street corner. More than 95% of the birds are alive before the consumer buys it. If a colony is coming up, place for chicken shop is planned by the builder in advance. Apprehensions on use of growth promoting medicines and chemicals.

## 2. SLOW GROWING BROILERS

– Getting popular as Welfare chicken in western countries. Supposed to be having tasty meat. Considered raised ORGANIC. Priced higher than broilers.

**3. DUAL PURPOSE BIRDS** – Male birds sold out by 8/9 weeks. Females lay eggs and sold at the end. Vanaraja, Giriraja, Rainbow rooster – Distributed under Livelihood mission.

**4. NATIVE CHICKEN** – Looks colourful, tall and agile. Grown for longer time and has tough meat. Availability is getting low and priced very high – niche market.

**5. NATIVE CROSSES** – Availability of country chicken is low and priced high. Many country chicken crosses are being made available.

Basing on this knowledge, Indbro Research & Breeding Farms Pvt. Ltd ran two contract research projects with National Research Center on Meat at Hyderabad. The first project consisting of testing 5 types of meat at different weights of slaughter. 1. White Broilers, 2. Slow growing Broilers, 3. Low input dual purpose birds, 4. Dual purpose birds crossed

The fatty acid composition of both the birds is as follows.

| FATTY ACID COMPOSITION             | SLOW GROWING BROILER | BROILER |
|------------------------------------|----------------------|---------|
| <b>SATURATED FATTY ACIDS (SFA)</b> | 2.8                  | 5.73    |
| Myristic acid C14:0                | 0.06                 | 0.12    |
| Palmitic acid C16:0                | 1.98                 | 4.33    |
| Stearic acid C18:0                 | 0.76                 | 1.28    |
| <b>MONO UNSATURATED (MUFA)</b>     | 2.82                 | 7.27    |
| Palmitoleic acid C16:0             | 0.26                 | 0.94    |
| Oleic acid C18:1                   | 2.3                  | 5.88    |
| Eicosenoic acid C20:1              | 0.07                 | 0.00    |
| Erucic acid C22:1                  | 0.19                 | 0.45    |
| <b>POLY UNSATURATED (PUFA)</b>     | 1.81                 | 3.08    |
| Linoleic acid C18:2                | 1.65                 | 2.90    |
| Gamma Linoleic acid C18:3          | 0.10                 | 0.09    |
| Dihomogamma Linoleic acid C20:3    | 0.00                 | 0.09    |
| Arachidonic acid C20:4             | 0.06                 | 0.00    |

**RATIO BETWEEN SFA:MUFA:PUFA** 1.54:1.55:1

1.86:2.36:1

The Ideal ration between SFA:MUFA:PUFA is 1:1:1 for better health. Slow growing have a narrow ration compared to fast growing broiler.

with native and 5. typical Native birds. We compared the meat yields and meat characteristics at weights of 1.5kg, 2.0kg, 2.5kg and 3.0kgs. We could not find birds above 2kg in the last categories.

Considering all parameters like ease of rearing, economy in production, meat characters, fast growing white broilers and slow growing coloured broilers are found to be interesting. A detailed analysis of meat characters including the organoleptic analysis (taste panel analysis) were taken up in the 2nd research project. The work on both the projects were taken up by the principal scientist at the institute and the material requirements were met by our company. We supply the necessary birds of particular

weight. Some parameters like Fatty acid analysis and Cholesterol analysis were done outside the laboratory of NRC by the same scientists team.

## PRACTICAL RESULTS

The results of trials conducted at NRC Meat are presented here with. Simultaneously we served both the chickens in restaurant to known people. The difference in taste of chicken is palpable. We started marketing the slow growing broiler chicken as "indbro chicken". The consumers who are aware of taste recognized the superiority of the slow growing broiler over the white broiler in the very first instance. The repeat orders are 90%.

**For more information, contact**  
[drkotaiah@indbropoultry.com](mailto:drkotaiah@indbropoultry.com)





3

# HVLS FANS FOR ANIMAL COMFORT

**V**ETROMASTER HVLS fans are applied in agriculture: in the cowsheds, pigsties, stalls for young cattle, milking parlors and hen houses.

For the health and productivity of animals, it is important to balance the temperature throughout the height of the room, create an optimal microclimate, control the level of humidity and eliminate drafts.

HVLS fans perfectly cope with each of these tasks, allow to maintain the health and productivity of animals, personnel, and hence the profitability of the business.

## WHY FANS ARE ESSENTIAL IN ANIMAL BARNES;

- Helps the animals to overcome unscathed the periods characterized by high temperature
- One fan covers an area three times bigger than its own diameter. One HVLS Fan replaces twelve to thirteen (12-13) standard alley fans.

• Animals do not bunch up. Regardless of where they are in the barn, a Vetromaster Fan moves air over all of them

• The large, slow-moving, aluminum foils terrorize birds and chase them out of the barn. In addition, the fans create a special atmospheric condition where flies refuse to fly

- Virtually noiseless

## IMPROVED VENTILATION AND INDOOR AIR QUALITY

- Eliminate condensation buildup
- Air flows up to 800 000 cm/h
- Maximum rotation speed 70 RPM
- Quick installation
- Spare parts sale
- Fan control with touch screen display (Full management of fans based on Temperature, Humidity values and estimation of THI – temperature and humidity index)
- Silent
- Minimum maintenance
- Major cost benefits low energy consumption
- IP65 protection rate

## EFFICIENCY CALCULATION

Dairy cattle stop eating when they suffer from heat stress. When they don't eat,

milk production slows or comes to a halt – a bottom-line breaking challenge for dairy farmers in an already highly competitive business.

High volume low speed (HVLS) fans are the newest ventilation option available to dairy and livestock farmers. These large fans, which range in size from 16 to 24 feet, provide energy-efficient air movement throughout the barn at a fraction of the energy cost of high-speed fans.

Correctly installed and adjusted ventilation, prevents milk dropping during the warm period of the year. In winter ventilation ensures that the room is less gassy.

For more information, visit [www.rotor.ae](http://www.rotor.ae) or contact, +971 (4) 494-03-94

## LARGE CEILING VM 700 FAN

### DURABLE HOUSING

galvanized steel, can be painted in any RAL color

### POWERFUL ENGINE

with a warranty of up to 5 years

### SPECIAL WINGLETS

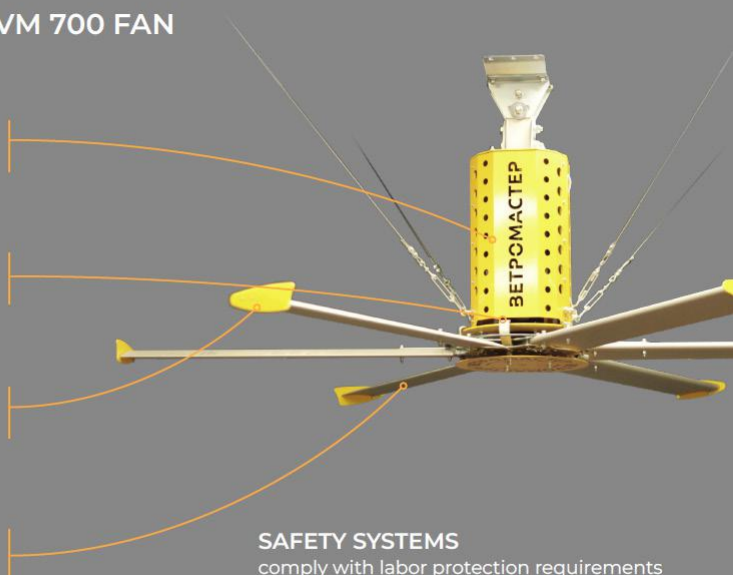
form a directional airflow

### BALANCED BLADES

made of aircraft aluminum, fan diameter from 3 to 7 meters

### SAFETY SYSTEMS

comply with labor protection requirements







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FROM FEED TO FOOD  
FOR THE MIDDLE EAST AND AFRICA**



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