

AFRICAN AGRI MAGAZINE

October-December 2023

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Field-to-Lab Mycotoxin Testing Solutions

Rapid and precise detection tools to secure
a safe food supply chain

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- Lateral flow strip tests which reduce screening time and consumables use by 77%
- Simple to use IAC and HPLC combination for confirmatory testing
- Validated LC-MS/MS solutions for sensitive (sub-ppb) multi-toxin analysis in a single run



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ALTERNATIVE HYDRAULICS FOR: CASE • DEUTZ • FIAT • FORD • FOTON
• JOHN DEERE • KUBOTA • LANDINI • MCCORMICK • MASSEY • SAME
• DEDICATED GEAR PUMPS & VALVES • INTERNAL & EXTERNAL HYDRAULICS

Dear Readers,

Welcome to the October-December edition of Afri Agri Magazine! As we dive into this exciting issue, we are thrilled to present you with a compelling lineup of articles and features, focusing on key players and innovations in the African agricultural sector.

In this edition, we shine a spotlight on two remarkable companies making significant strides in the agricultural industry: Vicam.com/Mycotoxins and Hidros South Africa. These industry leaders are at the forefront of agricultural advancements, providing solutions that are vital for the growth and sustainability of the sector.

Vicam.com/Mycotoxins is a company dedicated to ensuring the safety and quality of agricultural products. Their cutting-edge technology and expertise in mycotoxin analysis play a crucial role in safeguarding food supplies from harmful contaminants. We delve into their innovative approaches and commitment to ensuring the well-being of consumers and the success of the agricultural value chain.

Hidros South Africa, on the other hand, is a pioneering force in the field of irrigation and water management. Their sustainable solutions are instrumental in helping farmers optimize their water resources and boost crop yields. Our in-depth feature explores Hidros' contributions to sustainable agriculture in Africa and their innovative irrigation technologies that address water scarcity challenges.

Throughout this issue, you'll also find a wide range of articles covering the latest trends, practices, and technologies in African agriculture. We aim to provide you with valuable insights, expert opinions, and success stories from the industry's frontlines. Our dedicated team of writers and experts have worked tirelessly to bring you the most up-to-date information and analysis on the ever-evolving agricultural landscape.

Afri Agri Magazine remains committed to serving as a platform for knowledge sharing, collaboration, and inspiration within the agricultural community. We believe that through the exchange of ideas and the celebration of the industry's achievements, we can collectively drive the growth and sustainability of agriculture in Africa.

As we round off the year, we extend our heartfelt thanks to our readers, contributors, and advertisers for your continued support. We look forward to another year of exploring the dynamic world of African agriculture, and we invite you to stay connected with us as we embark on this journey together.

Wishing you all a prosperous and bountiful season.

Sincerely,

Collen Geza
Editor-in-Chief
Afri Agri Magazine



CONTENTS

06- NEW HYDRO-TANDEM CONSTRUCTION TIPPING TRAILER FOR JOSKIN

11- NEW HOLLAND'S T7 METHANE POWER LNG TRACTOR MENTIONED IN TIME'S BEST INVENTION LIST 2023

20- COMMUNITY MEMBERS FROM MAKOKO VILLAGE EMPOWERED BY INNOVATION: AFRICA

25- PHOTOVOLTAIC IRRIGATION: A TURNING POINT FOR SUB-SAHARAN AFRICA'S SMALL-SCALE FARMS

30- SCALE UP: NOVUS' NEW BROILER-FOCUSED PROGRAMME TO ENHANCE FINANCIAL SUCCESS

34- ENHANCING EFFICIENCY AND EFFECTIVENESS OF AFRICAN FISHERIES

38- TOMATO-BASED SOLUTIONS TO REPLACE TRADITIONAL TREATMENTS IN LIVESTOCK ANIMALS

42- ABLACTO+: A GAME-CHANGING BIOSOLUTION FOR PIGLETS

46- BUHLER PARTNERS WITH ENTOCYCLE TO DRIVE ADOPTION OF LARGE-SCALE BSF FARMS

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NEW HYDRO-TANDEM CONSTRUCTION TIPPING TRAILER FOR JOSKIN

JOSKIN adds a new model to its range of construction tipping trailers: the Trans-KTP 24/54. It has a body capacity of 13 m³ and a maximum technically permissible load of 24 tonnes. A Hydro-Pendul hydraulic suspension system comes as standard, guaranteeing driving comfort and easy traction on rough terrain, as well as driving safety for high-speed road travel.



The new JOSKIN Trans-KTP-24/54 can carry up to 24 tonnes of technical load in its 13 m³ body. Slightly tapered, it is made of Hardox 450 steel and is 105 cm high. The 8 cm wider rear than the front makes sure the contents of the trailer flow out freely. The chassis of the Trans-KTP 24/54 is 700 mm wide, allowing the body to be fitted with wide tires (max. 666 mm) without exceeding the 255 cm width limit required in some fields of activity.

The narrower chassis provides a wider steering angle, while the larger-diameter wheels and hydraulic drawbar suspension enhance driving comfort. Unlike older models in the range, the drawbar suspension is now positioned on the front of the body. Its cylinders are no longer located inside the chassis, but on the outside for greater accessibility and visibility.

On this model, the traction point of the drawbar has been raised to increase the ground clearance and provide a good traction line, which

has also optimised the placement of the steering system. Equipped with an integrated eyelet, the narrow drawbar on this model increases the turning radius of the tractor without risking damage to the steering system.

The Trans-KTP-24/54 is fitted as standard with a chassis with Hydro-Pendul suspension, designed to ensure driving comfort over rough terrain and safety during high-speed road travel. The pivot point of the Hydro-Pendul has been slightly repositioned to optimise the traction line of the tipping trailer. The force arms that attach the axles to the chassis are fitted with silentblocks, reducing maintenance to a minimum and avoiding greasing. These force arms are placed behind each axle to increase the reaction force. The suspension cylinders of the Hydro-Pendul are fitted with maintenance-free 50 mm diameter industrial knee-joints.

For tipping, the new Trans-KTP 24/54 uses the hydraulic system of the tractor as standard.

A P.T.O.-driven hydraulic pump is also available as an option. To protect it from projections and the linkage arms, it is located in the chassis, behind the front part. All hydraulic lines are also incorporated into the chassis for an optimal protection.

The hydraulic oil tank has been repositioned laterally towards the outside of the chassis and is equipped with a fill level indicator. The body of the Trans-KTP 24/54 is attached to the chassis by enlarged tipping hinges for an optimal stability when tipping. For safety reasons, the tipping cylinder is fitted with a limit switch. The lights at the rear of the body have been repositioned in order to be better protected. The JOSKIN tipping trailer is fitted with newly-designed galvanised steel mudguards attached to the body as standard. The rubber mud flaps are also part of the standard equipment.

The JOSKIN Trans-KTP 24/54 JOSKIN is available immediately.



CNH INVESTS IN ADVANCED FARM TECHNOLOGIES TO EXPAND HIGH-TECH HARVESTING STAKE

CNH partners with California-based start-up Advanced Farming Technologies to drive industry and ecosystem innovation by collaborating across R&D and commercialisation

With a minority investment in the start-up specialising in the robotic harvesting of apples, strawberries and other fruits, CNH continues to support the acceleration of smart harvesting technologies. A continued downward trend in handpicking workforce availability exacerbates high labour costs. Shifting to robotic picking therefore shows great potential in significantly improving fruit farmers' productivity by harvesting high value crops up to five times more efficiently.

Advanced Farm Technologies' system comprises a number of key features including

robotic arms with gentle grippers, a serial-hybrid drive system, autonomous navigation and automated bin handling.

By using computer vision and a machine learning tech stack, the system picks the best fruit, either during the day or at night, while gently handling it to avoid bruising and damage. This automated platform also eliminates the need to carry a ladder from tree to tree – vastly reducing the strain of a repetitive and arduous task.

For more information, visit: <https://media.cnhindustrial.com/EMEA>

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WITH THE THULIT, LEMKEN PRESENTS ITS FIRST WEEDER HARROW AND ROUNDS OFF ITS RANGE OF MECHANICAL WEED CONTROL IMPLEMENTS

In developing this machine, the agricultural machinery specialist broke new ground to now launch a new concept with four beams and eight rows of harrow tines. Complex spring combinations are replaced by an innovative hydraulic tine pressure adjustment, which ensures that the tines deliver more even pressure across the full working surface.

The pressure can be continuously adjusted to up to five kilograms while driving. As a result, the Thulit does an outstanding job during the sensitive crop growth stages.

The tines are arranged with a line spacing of 31.25 mm and ensure blockage-free work. Stable, true-to-track and wear-free tine bearings ensure optimum weed removal. A straightforward quick-change system makes it easy to replace the harrow tines. The Thulit features precise and continuous ground contour following with consistent tine pressure, making it a highly versatile implement, even on very uneven ground and in ridge crops.

Due to its generous clearance height and clever design that removes the need for the usual springs, it is almost impossible to find plants getting caught underneath the frame. The flexible hydraulic system further supports width section control within the frame sections to avoid multiple passes across parts of the field.

Minimising the frame weight was a core aim in designing this machine. To achieve this, the number of moving parts was significantly reduced in comparison to similar models, ensuring that the Thulit can also be used easily with tractors with low lifting capacity. The driver has a clear view of the harrow tines during work and therefore a constant view of work results. For transport, the tines fold in automatically for an increased level of safety.

The Thulit harrow will initially be available in limited quantities in working widths of six and nine metres in spring 2024.

For more information, visit: www.lemken.com

SYSTEMS & COMPONENTS: SHOWCASING THE EVOLUTION OF MOBILE MACHINERY



Driven by rapid advances in sensor technology, Systems & Components trade fair taking place from 12-18 November in Hanover, Germany, will showcase the evolution of mobile machinery, presenting powerful assistance systems that unburden the driver and increase efficiency

Working alongside their OEM customers from the outset, the exhibitors at the B2B platform, taking place in parallel to Agritechnica, are developing market-relevant solutions that meet their customers' automation needs.

Smart sensors that not only measure but also process data into a usable form are already used extensively on off-highway commercial vehicles. Where several measurements of the same scenario, for example the state of a crop in the field, are taken using different sensors, 'sensor fusion' algorithms can combine and compare this data from different sources and offer more reliable recommendations.

At the Systems & Components trade fair, progress will be reflected in the phased

and demand-driven approach that technology providers are taking to development - starting with warning functions in the cockpit, through semi-autonomous systems that support the driver, to complete telematics packages that increase the efficiency of machines even in remote regions. Engineers, developers and fleet managers will be able to find a complete toolbox for almost all sensor applications in mobile machinery.

Exhibitors at the show draw on a broad technology portfolio from the automotive sector, which they are continuously developing for off-highway use, above all, 24 Volt compatibility and the IP69K rating. In addition to radar sensors, systems using other sensors like ultrasonics or cameras can be flexibly

configured and tailored to the requirements of the specific application.

In order to interpret the sensor data, powerful 'data fusion' algorithms that are increasingly using artificial intelligence (AI), provide a detailed representation of the environment surrounding the vehicle.

In advanced steering system solutions, sensor fusion facilitates autonomous operation in the field, such as precision farming with modern plant row recognition or precise section control. Using GPS, the machines follow specified routes with high accuracy, reducing overlapping and the associated excess use of pesticides or fertilisers.



NEW HOLLAND'S T7 METHANE POWER LNG TRACTOR MENTIONED IN TIME'S BEST INVENTION LIST 2023

Among a wide range of innovations across several categories, TIME Magazine has chosen New Holland's T7 Methane Power LNG tractor to be featured in their Best Invention List 2023

TIME has been expanding their categories in response to the rapidly-changing progress in fields such as artificial intelligence, sustainability and more, paying special attention to growing fields—such as the electric vehicle industry, green energy, and the metaverse.

This year's special mentions list featured 50 inventions recognised for their unique impact. New Holland's T7 Methane Power LNG (Liquefied Natural Gas) tractor is an industry first and the latest development in the brand's Methane Power tractor offering.

With its LNG power solution, this tractor more than doubles the autonomy capability of the current methane powered range: using liquefied methane delivers four times as much fuel storage capacity when compared to compressed gas (CNG).

The LNG tractor can be fueled by fugitive methane, strategically captured from livestock waste slurry lagoons.

The methane is converted into fuel-grade liquefied natural gas (LNG) using patented cryogenic processes solving the low boiling point challenge historically seen with this fuel source. So far, the LNG tractor has worked across multiple continents with prototypes being developed and tested to continue to deliver the best experience for our farmers around the world.

"This Mention reflects the long commitment New Holland has in sustainability and our role of leadership in the agricultural sector. This award is a milestone for the company so congratulations to everyone who worked so hard to achieve such incredible results," said New Holland brand president Carlo Lambro.

The MANN FILTER logo is displayed in white, bold, sans-serif capital letters within a black rectangular box.

**MANN
FILTER**

Ready for big business.

MANN-FILTER for agricultural machines.

A large, white rectangular sign with the MANN FILTER logo in black, bold, sans-serif capital letters. The sign is positioned in the background, partially obscured by a green tractor on the left and a farmer on the right.

**MANN
FILTER**

The text "Protect your machine!" is written in a bold, italicized, sans-serif font inside a blue starburst shape with a white border. The starburst is located in the upper right quadrant of the advertisement.

***Protect
your
machine!***



Whether for tractors, combine harvesters or forage harvesters: Agricultural machinery is subjected to the highest loads, particularly during the harvesting season. The lifetime and efficiency of your machine also depend on the right choice of filter, be it air, oil, fuel, cabin air or hydraulic filter: our comprehensive product range, featuring renowned manufacturers and common models, will help you find the right filter. Always choose 100% Original MANN-FILTER OE quality!

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You reap what you sow.

Rely on yellow and green when selecting filters.

Filters for agricultural machinery are subjected to the highest loads in operation – particularly during the harvesting season. The challenges here are the large amounts of dust and organic particles, as well as the enormous mechanical loads. MANN-FILTER products are synonymous with optimal protection for your machine, long running times and 100 % original equipment quality.

Performance that pays

Leading manufacturers of agricultural machinery have always trusted MANN-FILTER. And our many decades of experience in the development and manufacturing of efficient, filtration solutions. You too can rely on high performance MANN-FILTER products to provide longterm protection for your machine and therefore your investments.

With MANN-FILTER, you are always perfectly equipped

As the leading filter brand, we offer the highest quality – in original equipment and in the independent aftermarket. Avoid downtime and choose original MANN-FILTER products in 100 % original equipment quality.

Always the right filter

Whether you are looking for air, oil, fuel, cabin air, or hydraulic filters, our comprehensive MANN-FILTER product range, featuring renowned manufacturers and common models, will help you find the right filter.

A service that is second to none

Benefit from perfect service and personal customer care. Convince yourself and use our state-of-the-art information tools: in addition to the MANN-FILTER app, you can also access our comprehensive catalog online, in print form or on DVD.

Everything
at a glance!

MANN-FILTER – benefits that pay for you

- ⊕ 100 % original equipment quality
- ⊕ Best market coverage in Europe
- ⊕ Safety and reliability, even under the heaviest loads
- ⊕ Comprehensive service
- ⊕ The highest original equipment expertise worldwide for over 65 years

MANN-FILTER – always the right choice.

The service life and efficiency of agricultural machines largely depend on the right filter selection. High quality filters are indispensable for the functional reliability of your machines. Don't compromise and opt for MANN-FILTER products in 100 % original equipment quality.

All MANN-FILTER products are manufactured according to the latest international production and test standards for the automotive and machine industry. They stand for best component quality, have shown to excel due to consistently high and reliable filtration performance and secure a long service life.

Air filter

High-dust applications and long operating times are not mutually exclusive. The proof lies in our air filters, which ensure long and efficient machine running times through their high dust holding capacity.

Oil filter

Oil filter elements from MANN-FILTER offer the highest filtration performance and protect the engine by perfectly cleaning the oil.

Fuel filter

High-quality MANN-FILTER fuel filters remove damaging dirt particles and water from the fuel. This reduces the possibility of damage through wear and corrosion.

Hydraulic filters

In environments with high operating pressures, our filters protect the hydraulic system of your machines against dirt particles, corrosion and abrasion. The high dirt holding capacity of the medium ensures a long filter service life and even removes the finest harmful particles.



SOLAGRA COLLABORATES WITH UDEL FOR AGRIVOLTAICS RESEARCH



SolAgra has recently contracted with the University of Delaware (UDel) for two agrivoltaic solar arrays that will be built at UDel's Newark and Georgetown campuses

These solar arrays are planned to be built and launched for the 2024 growing season, with facilities giving access to students and faculty of the College of Agriculture and Natural Resources, and offering them an opportunity to study the benefits of co-locating solar tracking systems with crop production.

The test crops will mostly comprise of high-value fruits and vegetables like tomatoes, peppers, lettuce and strawberries that are currently bearing the brunt of climate change. Faculty and students in the College of Engineering and Institute of Energy Conversion will gather data on solar electricity generation. Any mutual benefits demonstrated will highlight the potential of using agricultural land for large-scale dual-use PV installations.

SolAgra, which calls its patented technology SolAgra Farming, uses patented elevated solar arrays to produce green energy on farmland while simultaneously sustaining or improving the quality of crops being grown beneath the solar arrays. This unique agrivoltaics technology provides DynamicShifting and CounterTracking of elevated solar arrays to support the dual use of farmland.

Moreover, the company's Solar Platform and its hinged design not only allows multiple configurations for a plethora of crops, but also controls the mobility of the structure to help regulate the location of sunlight and shade landing on the field. This allows farmers to control the amount of shade the crops receive while maintaining solar power production.

In addition to enjoying the shielding from excess sunlight, rain and hail, the farmers are also entitled to receive a portion of the power sales revenue from SolAgra in lieu of land-lease payments.

"UDel is really excited to be partnering with SolAgra to be the first demonstration site for this new type of agrivoltaic system," said co-PI, Steven Hegedus, an electrical and computer engineering professor and senior scientist at UDel's Institute of Energy Conversion. "Two of the greatest challenges for the future are providing clean energy and food in a changing climate. It makes sense to find a common solution."

For more information, visit:
<https://www.solagra.com>



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TOMRA FOOD EMERGES AS WINNER OF INTERNATIONAL FOODTEC AWARDS 2024

TOMRA Food has been recognised for its accuracy in foreign material identification by winning the prestigious International FoodTec Award for ‘using artificial intelligence and cloud technology to improve food safety, quality, and traceability while increasing process efficiency’

When assisted by AI, sorting and grading machines can make more accurate ‘accept or reject’ decisions, recover more good product from compromised raw material, and more precisely classify the products on the line into different grades. TOMRA’s solutions attain these advantages by adopting the AI method of deep learning that uses pre-trained models to teach computers how to process data, such as complex patterns in photos. In combination with different sensor technologies, these images of foreign material captured by TOMRA sorters are analysed by a deep learning model that help to constantly improve the solution by continuously retraining the model. TOMRA’s Foreign Material Identi-

fication solution is integrated with the cloud-based data platform TOMRA Insight which automatically extracts data from sorting machines to provide real-time and retrospective insights into raw materials and machine performance. Through a user-friendly dashboard, machine operators get a chance to instantly respond to TOMRA Insight’s live data, and make adjustments to improve product consistency. Stored data can then be analysed to obtain higher-level insights which enable trend-monitoring and comprehensive analyses across a single or multiple seasons, within a specific region, and across regions. These insights empower users to optimise processes, drive efficiencies,

and enhance overall performance. “We are pleased that the jury of the International FoodTec Award has recognised TOMRA’s industry-leading innovations in AI and cloud-technology, and the importance of these solutions to customers. Digital solutions and AI are set to play an increasingly important role in meeting the needs and desires of food consumers, and in helping to feed the world’s growing population. This will require more food production and less food waste,” commented head of Digital at TOMRA Food and Recycling, Felix Flemming. For more information, visit: www.tomra.com



RIVULIS COMPLETES ACQUISITION OF JAIN IRRIGATION'S INTERNATIONAL IRRIGATION BUSINESS

On 3 April, Rivulis Pte. Ltd. announced that it has received full regulatory approval for the acquisition of multiple overseas subsidiaries which comprise the International Irrigation Business (IIB) of Jain Irrigation

With this acquisition, Rivulis will lead the mass adoption of modern irrigation solutions and digital farming by growers and business partners to create an irrigation and climate leader globally. The acquisition was finalised soon after all government authorisations and the precedent conditions required by the Share Purchase Agreement were obtained and completed.

Rivulis will finance the acquisition with additional investment from Temasek as well as newly issued shares to Jain India. In addition, debt issuances of Jain USA and NaanDanJain will be refinanced immediately post-Closing through a syndicated facility signed with leading banks including HSBC, Rabobank, State Bank of India, ING, Bank Leumi and the First International Bank of Israel.

“As mentioned during the deal announcement last June, we are thrilled to have both companies join forces to build a long-lasting, purpose-led company, spearheading the transformation of agriculture

through its focus on accessibility, innovation and sustainability. Since then, the employees of all companies have worked hard to jointly plan for this day, when we all become one company. Together, we will benefit from significant operational economies of scale and far reaching in-the-field presence, enabling us to be close to growers and business partners,” commented Rivulis CEO, Richard Klapholz.

“We will also benefit from the most comprehensive micro irrigation and digital farming offering and most importantly from a fully committed, diverse employee base. Water-efficient, environmentally sustainable technologies, such as micro irrigation, are needed to holistically address the global food and water security challenges. Together with our two shareholders, Temasek and Jain Irrigation, Rivulis’ next chapter will be an exciting one as we realise our GROW BEYOND mission to help growers achieve sustainable livelihoods and to become a global sustainability champion,” he added.

CAGEMAX: PURE QUALITY IN ANIMAL PROTEINS AND FATS



SALES MANAGER

Robin Stoltink

Cagemax from the Netherlands fulfills an important role as supplier of high-quality animal proteins and fats in recent years, Cagemax hasn't only grown its own worldwide business, but also its clients in the aquafeed, recent years, Cagemax hasn't only grown its own worldwide business, but also its clients in the aquafeed, Contributing to the healthy development of many animals worldwide through an assortment of proteins and fats. The company is recognized as a flexible partner that easily adapts to both changing legislations and dynamic market demand. Because one thing never changes: the market calls for quality, competitive pricing and optimal delivery reliability.

Reliable

Where the needs remain the same, the dynamics are constantly moving. Cagemax is the stable factor in

a market that's always changing. Constantly deploying its expertise and extensive network to offer a good price and exceptional quality. Logistics have been mastered down to the last detail and proprietary storage and trans-shipment facilities are in place. Enabling the team to

always meet the

fluctuating market demand. Cagemax stays in direct and continuous contact with many manufacturers so they can always offer customers the choice between different qualities and origins. Tailor-made. Not just in its product range, but also in advice. The experts are always on top of industry trends and know their products like no other.

Dynamic

This knowledge and expertise were initially limited to ingredients for the pet food industry. Over the years, the business has also expanded its scope to the compound feed, aquafeed, fertilizer and bioenergy industries. On the supply side, Cagemax is able to purchase large volumes. On the demand side, customers can count on an attentive service and high-quality raw materials. The company can cope with the dynamics of

the market and has thus managed to bind customers worldwide. Because of the understanding that if you want to be irreplaceable, you must continue to distinguish yourself.

Cagemax understands like no other that quality is the key to success and the continuity of the business. That's why the company is GMP+ certified and operates in full compliance with the HACCP principles and practices. Every market has its own quality requirements. For the supply of raw materials for the bioenergy industry, Cagemax has been certified to meet the strict ISO 22000 standards with a SKAL-certificate that guarantees that the delivered biological or bio-organic products are produced under the European and production directives. We stand for constant product quality. That's why every incoming load is carefully analyzed in an accredited laboratory. With an eye for quality, delivery, reliability, flexibility and the will to think along with relations, Cagemax has grown out to be the biggest supplier of high-quality animal protein and fats in Europe.



Cagemax feed ingredients; pure quality in animal proteins and fats



Brontosaurus
Diplommatina
silvatica



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www.cagemax.com
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Oude Bosscheweg 9
5301 LA Zaltbommel
The Netherlands

CAGEMAX

COMMUNITY MEMBERS FROM MAKOKO VILLAGE EMPOWERED BY INNOVATION: AFRICA

More than 3,800 community members of the Makoko Village in Mpumalanga now join the millions of people across Africa whose lives have been transformed by the installation of Innovation: Africa's solar water pumping systems



The recently completed water project, sponsored by Mdluli Safari Lodge, includes a borehole drilled to more than 80 m that yields more than two litres of water every second and delivers up to 60,000 litres of water each day to the community members.

The system which includes a 10 m tower, solar panels, an alarm system, and a solar-power water pump provides water to distribution points throughout the village. Besides social impact, the water projects sponsored by Innovation: Africa are offering villagers the chance to become economically empowered through local job creation. Moreover, community-based entrepreneurs can now make a living, growing and selling fresh produce from their gardens and community farms.

Sivan Yaari, founder and CEO of Innovation: Africa explained that the installation of solar water pumping systems would help empower communities,

while freeing them from the burdens and illnesses that result from searching for and consuming contaminated water. In addition, this initiative also supports women empowerment and encourages women to pursue school and work.

Chris Schalkwyk, executive manager of the Mdluli Safari Lodge believes that the official opening of the borehole at Makoko is a major milestone in the journey of Mdluli Safari Lodge, which has always aimed to have a far-reaching social and economic impact as a travel destination of choice in the Kruger National Park.

“The multiplier effect of a project of this scale has no limit. By vastly improving the community's access to safe and clean drinking water, we can create an ecosystem of possibility and opportunity, be it in agriculture, business, job creation or education. The opening of these taps today reflects our belief that the true responsibility of

tourism in South Africa, above and beyond a magical experience for each and every guest, is broader community impact,” said Schalkwyk.

“We believe that renewable energy is the key to break cycles of poverty and because with every new solar and water system installed, we are one step closer to combatting Africa's water crisis. Our mission for 2023 is to reach the next ‘one million in impact’ mark through sustained water and solar projects.

We aim to complete 240 additional projects across Uganda, Malawi, Tanzania, Zambia, South Africa and Cameroon. With more sponsorship partners, coupled with our experienced team of managers, field officers and civil, water and electrical engineers across our countries of operation, we are confident we will reach this goal,” concluded Yaari.

WATER AND SOIL CONSERVATION ACTIVITIES TO RENOVATE AGRICULTURAL TERRACES IN ERITREA



According to Mesfun Berhane from the agriculture and land department at the central region, praiseworthy water and soil conservation is being carried out with a view to redressing the environment

The popular campaign for water and soil conservation is focused on the construction and renovation of agricultural terraces. Berhane went on to say that so far, 1,019 ha of terraces have been constructed and 2,582 ha renovated, with a registered 31% increase compared to the previous year.

Berhane also said that the construction of 314 ha of terraces on reserved lands will be carried out through the students' summer work programme as well as government employees, members of the defense forces, construction companies, and associations.

Indicating that there was a plan to construct 3,370 cu m of stone water diversion schemes, Berhane pointed out that in the past six months, 3,774 cu m have been constructed, which was above the plan. He further noted that a Temameo dam has been inaugurated, 51% of the construction of the Adi-Qe dam has been finalised, and two dams in Adu-Hawsha and Afdeyu are under construction.

In the central region, there are 133 big and small dams, and over 1,500 ha of vegetable and fruit farming are being cultivated through irrigation.

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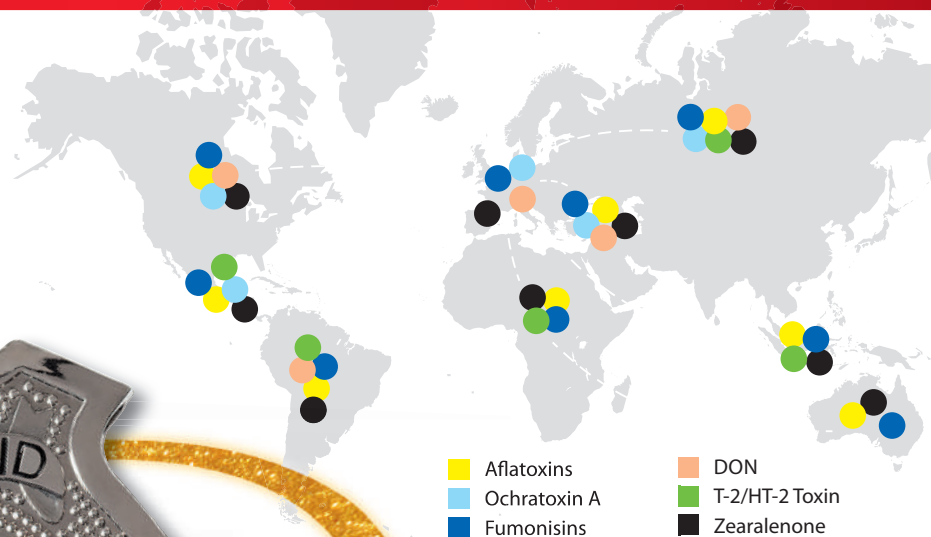
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PHOSAGRO PLANS TO DOUBLE MINERAL FERTILISER EXPORTS TO AFRICA



PhosAgro Group, one of the world's largest producers of phosphate-based fertilisers, plans to double its fertiliser exports to Africa in the next three years

According to Mikhail Rybnikov, PhosAgro CEO, who was also a speaker at the Russia–Africa Economic and Humanitarian Forum, the company supplies eco-efficient products to around 100 countries around the world. These products do not contain concentrations of cadmium or other toxic substances that are hazardous to human health or soils. At the same time, Africa is one of PhosAgro's priorities for international development.

PhosAgro exports fertilisers to 21 African countries, with the leading importers being South Africa, Senegal, Côte d'Ivoire, Mozambique and Tanzania. Over the past year, the company has increased its exports to Africa by a quarter. In the next three years, the PhosAgro expects to double its exports yet again. One of the factors enabling the company to expand its export potential to Africa is the launch of a new plant in Volkhov, with a production capacity of a million tonnes, which is located near Baltic ports focused on exporting products to friendly countries.

By the end of 2023, the Company plans to develop no fewer than six innovative products as part of the Innagro project in partnership with Innopraktika. Moreover, to ensure the uptake of innovations in Africa, PhosAgro is helping train local farmers through the launch of its Pro Agro Lectorium educational platform. This is an easy-to-use online service designed specifically for African farmers, with

educational lectures on sustainable agriculture, the basics of plant nutrition and the correct use of mineral fertilisers. In addition, PhosAgro, in partnership with UNESCO, awards grants every year for research on environmental protection as part of the Green Chemistry for Life programme.

PhosAgro's portfolio includes 57 brands of fer-



tilisers, including 16 brands containing micronutrients. The company's extensive product line makes it possible to take into account the specifics of various African regions and to offer customers the best solutions.



WATER SECURITY IS KEY FOR DEVELOPMENT AND STABILITY IN SOUTH SUDAN, WORLD

The report also shows that water insecurity is an existential threat to South Sudan, with the lack of access to safe water supply and sanitation being a core issue of concern for the dignity and well-being of millions of South Sudanese.

More than 60% of the population are using water from contaminated water sources

such as surface water and unprotected wells, while 75% of the population are practicing open defecation. In addition to this, South Sudan also experiences frequent droughts, especially in the south-east and north-east, which affect the mobility of pastoralists and farmers who rely on natural resources for their livelihoods.

The report highlights five priorities:

1. The country needs to strengthen the policy and institutional frameworks to guide water sector investments and ensure their sustainability.
2. It is essential to address the water supply and sanitation crisis by strengthening service delivery models for rural populations, enabling sustainable use and management of groundwater resources, and promoting climate-resilient solutions.
3. Advancing disaster risk preparedness and early warning systems will help prevent flood losses and economic damages that are hindering growth prospects.
4. There are substantial opportunities to harness the productive potential of water through investments supporting domestic fish production, wetland restoration, and flood-recession agriculture.
5. A comprehensive portfolio of water management infrastructure solutions is needed over the long term, with careful attention to the social and environmental impacts of investments.

PHOTOVOLTAIC IRRIGATION: A TURNING POINT FOR SUB-SAHARAN AFRICA'S SMALL-SCALE FARMS



A new study published in 'Environmental Research Letters', reveals that solar powered irrigation systems have the potential to meet more than a third of the water needs for crops across small scale farms in sub-Saharan Africa

As part of the research project Renewables for African Agriculture (RE4AFAGRI) in a new study led by the International Institute for Applied Systems Analysis (IIASA), an international research team developed an open-source modelling framework that used various datasets pertaining to agriculture, water, energy, expenses, and infrastructure.

The purpose of this framework was to calculate local irrigation needs, determine the necessary size and cost of technology components like water pumps, solar PV modules, batteries, and irrigation systems, and assess the economic prospects and sustainable development impacts of adopting solar pumps.

Giacomo Falchetta, lead author of the study and a researcher in the Integrated Assessment and Climate Change Research Group of the IIASA Energy, Climate, and Environment Programme

explained that an average discounted investment of US\$3bn would be required annually, increasing yields of smallholder farmers and resulting in annual profits amounting to more than US\$5bn. Additional co-benefits would include significant food security and energy access. "Reducing the irrigation gap with cost-effective solar pumps can boost food production and improve nutrition, contributing to SDG 2 (Zero Hunger). Furthermore, surplus electricity generated by these systems could serve other energy needs, aligning with SDG 7 (Affordable and Clean Energy)," said Falchetta.

IIASA Transformative Institutional and Social Solutions Research Group leader, Shonali Pachauri also pointed out one of the important highlights of the study, emphasising the importance of strong land and water resource management infrastructure and governance, without which a widespread deployment of solar pumps may drive

an unsustainable exploitation of water sources and reduce environmental flows. "Consequently, both investing in infrastructure, such as reservoirs for water management during seasonal variations, and enhancing water resource governance, are critical factors for ensuring the sustainability of widespread solar pump deployment," noted Pachauri.

Overall, the analysis along with the novel open-source modelling framework can support public and private actors working along the water-energy-food-economy nexus in identifying economically feasible areas and quantifying the potential net economic benefit of developing solar irrigation, all of which can help foster investment in the sector.

For more information, visit: <https://iiasa.ac.at/>

FAO ALONG WITH GOVERNMENT OF JAPAN LAUNCH PROJECT TO MITIGATE DROUGHT IMPACT IN EASTERN AFRICA REGIONS

A new project, 'Mitigating the impact of drought for the most vulnerable pastoral and agro-pastoral communities in Djibouti, Kenya, and Uganda,' has been launched as a joint initiative of the Government of Japan and the Food and Agriculture Organisation of the United Nations (FAO), targeting drought-affected herders and agro-pastoralists in Djibouti, Kenya and Uganda

The joint programme is implemented at the time when the Horn of Africa is experiencing severe drought, as a result of five consecutive poor rainy seasons – the worst in 40 years. The decline in food security in these areas has urged the the Government of Japan and FAO to launch the project to alleviate the vulnerability of a total of 69,120 beneficiaries in the three countries.

Appreciating the contribution of the Government of Japan to alleviate the plight of vulnerable communities in the Horn of Africa, David Phiri, FAO Subregional Coordinator for Eastern Africa and Repre-

sentative to the African Union and United Nations Economic Commission for Africa, reaffirmed that, with this contribution, FAO would be in a better position to keep herders and pastoral communities on their feet by reducing their exposure to shocks and building their livelihoods bases.

Moreover, in order to boost pastoralists' resilience, the FAO will promote risk reduction management, early warning systems and enhanced knowledge and education, thereby helping communities cope with climate change implications.



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GOVERNMENTS URGED TO IMPLEMENT THREE-POINT ACTION PLAN TO STOP BIRD FLU SPREAD



Backed by latest scientific evidence, the report titled 'Bird flu: Only major farm reforms can end it', is urging governments to implement a three-point action plan which includes mass vaccination of flocks, radical restructuring of the poultry industry and changing the way pigs are farmed

According to the report, wild birds that are often considered to be the cause of bird flu are actually the victims of the disease, which is spiralling out of control due to the rise of factory farming. On 22 August, the animal welfare and environmental NGO wrote to the UK, Europe and US governments, urging them to work with the World Organisation for Animal Health (WOAH) and the United Nations Food and Agriculture Organisation (FAO) to implement this action plan without delay.

Although wild birds are generally less affected by the bird flu virus, it can evolve into the dangerous Highly Pathogenic Avian Influenza (HPAI) upon entering overcrowded factory farm poultry sheds. With their constant supply of hosts, these factories therefore create the ideal environment for the spread of the disease, allowing infections to spread rapidly, and for highly harmful new strains to emerge. Since 2021, more than half a billion farmed birds have died or been culled globally as a result of bird flu. Most of these were broilers confined in factory farms where they are crammed closely together in huge sheds, or egg-laying hens that live confined in cages around the size of an A4 sheet of paper.

and take urgent action to end factory farming we will simply be unable to stop its rapid spread across the globe or reduce the risk of a serious human pandemic developing," said author of the report and chief policy adviser at Compassion in World Farming, Peter Stevenson. "Cramming animals together in factory farms is not only totally inhumane, it is creating the perfect place for bird flu and other viruses to spread and mutate into more dangerous strains."

Apart from birds, the avian flu also spread to mammals including otters, foxes, dolphins, sea lions, mink, and domestic dogs and cats, among others. Moreover, the virus has also developed the ability to spread from one mink to another – something it previously had not been capable of in mammals; thereby making it far more dangerous. If it develops the same ability to spread between humans, it becomes a real pandemic risk.

Compassion in World Farming's END.IT campaign is building a global movement to end factory farming and transform our global food system to ensure the future health of animals, people and our planet.

To sign the petition visit: www.END.IT

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SCALE UP: NOVUS' NEW BROILER-FOCUSED PROGRAMME TO ENHANCE FINANCIAL SUCCESS

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Novus International on 28 August debuted a new Scale Up programme focused on improving meat production and carcass quality through sustainably driven intelligent nutrition, thereby enhancing the financial success of broiler products

The programme's strategies, which are customised to meet the farm's goals, include MINTREX Zn Trace Mineral to support meat and carcass quality, MINTREX Cu Trace Mineral to support performance, and the REDUCE AND REPLACE strategy, which is shown to reduce the excretion of zinc (up to 37%), copper (up to 41%) and manganese (up to 35 %).

Commercial and research trials have confirmed that these strategies indeed help in optimising the broiler bird performance by improving survivability, reducing the incidence of wooden breast and white striping, improving bone strength, supporting broiler performance under intestinal challenge, and reducing foot pad issues and skin scratches.

Furthermore, the Scale Up programme offers technical support, laboratory analysis of feed, and access to NOVUS' Xpert Link Network, which enables Novus customers to receive unique suggestions, recommendations, and insights from

external partners. These include industry professionals from outside NOVUS possessing extensive knowledge and experience in areas including nutrition, management and feed manufacturing.

NOVUS Executive Technical Service Manager Bob Buresh, who works directly with poultry customers expressed his excitement regarding the programme, which he said underscored the company's long-term commitment to sustainably support the industry through results-driven programmes. "Through the Scale Up Programme for Broilers, we will continue to support our customers' goals of achieving optimal performance and meat quality and yield in an environmentally sustainable manner," said Buresh.

The programme which was launched in the US on 28 August will be available for customers in Asia, Europe, the Middle East, and Africa later this year.

For more information, visit: Novusint.com

HELPING FARMERS GET FEED MIXES RIGHT

Farmers can now optimise chicken nutrition with new mobile app that helps them save money and improve profits

Designed by poultry nutrition experts at the Poultry Science Department at the University of Georgia in the US, the new Feed-Mixer app aims to achieve the right nutrient balance in chicken feed, thereby addressing a major challenge that chicken farmers face. Rising commercial feed costs coupled with limited supply of certain grains often causes farmers to self-mix their chicken feed, thus making it difficult to achieve the right balance. The FeedMixer app therefore, acts as a perfect solution by allowing users to choose the type of chickens they are feeding, and select the available ingredients, in the proportions they intend to blend. The app will indicate

whether their chosen mix delivers adequate energy, protein, fibre, vitamins and minerals to nourish the birds without wastage. In addition, the app also allows users to calculate whether their feed mix is cost effective by putting in the cost of the ingredients they use.

Maureen Stickel, director of International Programme Development at the World Poultry Foundation, emphasised that the FeedMixer app includes a large library of feed ingredients, along with their nutritional values to guide farmers on feed mixes for layers, broilers, and dual-purpose birds at various ages.

“The FeedMixer app is designed for ease of use by people with a

basic poultry background – including backyard and emerging chicken farmers. With the app, we are trying to make it simple for farmers to use local ingredients to formulate a diet that meets basic poultry nutrition requirements and achieve their basic production goals,” said assistant professor/extension specialist at the University of Georgia’s Department of Poultry Science, Sean Chen.

To download the app via Android and IOS, visit: <https://play.google.com/store/apps/details?id=com.worldpoultryfoundation.feedmixer> and <https://apps.apple.com/us/app/feedmixer/id6448705400>



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microorganisms, and the remaining pathogens will not stand a chance against Intra Hydrocare, which is effectively till the last nipple due to its strong stabilised character. This way, it is possible to prevent the drinking water system from acting as a transmission route for pathogens and infecting pigs and poultry.

Intra Hydrocare is the only hydrogen peroxide-based biocide certified and safe for use in drinking water while animals are present in the poultry house, at a dosage up to 250 ml per 1,000 litres of water.

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ENHANCING EFFICIENCY AND EFFECTIVENESS OF AFRICAN FISHERIES

The second meeting of the Fish Trade and Enterprise Development Working Group, which is a part of the African Fisheries Reform Mechanism (AFRM), took place in Gaborone, Botswana from 20-21 July 2023

The primary objective of this gathering – which marked the second assembly of the restructured Working Group on Fish Trade and Enterprise Development within the AFRM – is to boost the efficiency and effectiveness of fisheries and aquaculture projects throughout Africa. The initiative looks to foster regional integration, bolster the capabilities of African Union (AU) Member States and regional entities in providing knowledge-based advisory services, and contribute to the achievement of Agenda 2063.

Minister of Agriculture for the Republic of Botswana, Fidelis Molao observed that there is a significant and concerning increase in the disparity between the supply and demand of fish. In response to their

declining state, allocating additional resources towards the advancement of aquaculture and the effective management of capture fisheries was seen as a necessity.

In addition, Molao highlighted that despite being in its early stages of development, the Government of Botswana acknowledged the country's aquaculture sector potential and proceeded to implement the approved 2021-2026 Aquaculture Strategy. Furthermore, the government in collaboration with the Food and Agriculture Organisation (FAO) is in the process of developing the Aquaculture Policy, which is scheduled to be complete by 2024.

In addition to the opening session, the two-day event comprised tech-

nical sessions on setting the scene presentations, prioritisation of issues and identification of two key items for knowledge products, and synthesising of issues for the two knowledge products.

Overall, the meeting helped bring together representatives from AU member States, Regional Economic Communities (RECs), Regional Fisheries Bodies (RFBs), and other stakeholders to strategise on policies and initiatives. It also presented a vital opportunity for stakeholders to collaborate and explore avenues for promoting fish trade and enterprise development in Africa. Through concrete actions and strategies, this gathering will contribute to the AU's vision of a thriving and sustainable fisheries sector across the continent.



DE HEUS LAUNCHES NEW ULTRA-MODERN AQUAFEED PLANT IN UGANDA

De Heus Animal Nutrition has successfully held the groundbreaking ceremony for its new state-of-the-art aquafeed plant in Njeru, near Jinja

The facility will be the first dedicated aquafeed plant in Uganda and marks an important milestone for the company. At full capacity, the plant will have the capability to produce approximately 50,000 metric tonnes of fish feed per year, catering to the growing demand in the East African market.

Uganda possesses immense potential for aquaculture, given its large lakes and favorable water temperatures that support year-round fish farming. By launching this plant, De Heus aims to provide a positive boost to the aquaculture industry in Uganda and the surrounding coun-

tries. Although the industry has shown promising growth in recent years, it requires affordable and reliable quality feeds for further development. Currently, most feeds are imported, but the company's local factory will offer a shorter, more flexible supply chain.

The impact of this plant goes beyond employment at the facility itself. De Heus anticipates a significant positive effect on employment among fish farmers and suppliers, as the company aims to replace imports and source raw materials such as maize, cassava, soy, and others locally as much as possible.



YIELD 10 CHOOSES OPTION TO FINALISE LICENSE AGREEMENT FOR OMEGA-3 CAMELINA TECHNOLOGY

Agricultural bioscience company, Yield 10 on 18 October announced that the company had chosen the option to ink the an exclusive global, commercial license to UK-based Rothamsted Research Limited's advanced omega-3 production technology

The Rothamsted team over the last decade, has demonstrated their technology which enables the sustainable, plant-based production of omega-3 nutritional oils in Camelina seed. Moreover, evaluations of the oils in salmon feeding and human clinical studies demonstrated lipid lowering effects.

Omega 3 fatty acids have great market opportunities. As a result of overfishing, their supply has experienced increased pressure over the recent years. Under the collaboration with Yield10, additional intellectual property has been developed by Rothamsted for next generation omega-3 Camelina varieties. However, in response to customer interest, Yield10 has elected to prioritise the current EPA8 omega-3 Camelina as the initial profile for commercialisation.

Yield10 and Rothamsted are also pursuing commercial development of Camelina to produce omega-3 oil containing both EPA

and DHA fatty acids as a sustainable alternative to oil obtained from ocean-harvested fish, which serves as an essential ingredient for fish feed used in aquaculture.

"The Rothamsted team has advanced the omega-3 Camelina technology to where it is ready to begin commercialisation," said PhD, president and CEO of Yield10 Bioscience, Oliver Peoples. He further mentioned the company's plan to introduce improvements in the varieties through the deployment of their herbicide tolerance and performance traits.

"Commercially, we are on a promising path to commercialising elite omega-3 varieties of Camelina that combine good agronomics in the field while also producing high-value, high-purity omega-3 oils possessing very attractive economics," Peoples added. For more information, head over to: www.yield10bio.com

TAKING SUSTAINABLE SHRIMP FARMING ONE NOTCH UP



One of the world's top five shrimp producers, Grupo Almar recently announced a joint multi-year partnership with nutrition, health, and beauty innovators, dsm-firmenich, committing to measure and improve the company's environmental footprint using dsm-firmenich's smart sustainability platform Sustell

In addition to using Sustell across all their shrimp production, Grupo Almar through this collaboration also plans to unlock dsm-firmenich's sustainability experience and expertise.

Ecuador is known to be the largest shrimp producer in the world, with approximately 10% of its exports, by weight, being produced by Grupo Almar. Aligning with their company vision, Grupo Almar has chosen dsm-firmenich and Sustell to mark the beginning of their sustainability journey.

The collaboration will help to accurately measure and validate its carbon footprint as part of a full ISO 14040/44 compliant lifecycle assessment (LCA) based environmental footprint. Having looked through a multiple array of options, the company finally decided to take inspiration from the significant progress made by the salmon industry in measuring

and improving its environmental footprint.

"We are committed to continue moving forward, both in technology and in sustainability. Through our partnership with a global heavyweight in animal nutrition and health, dsm-firmenich, we have our sights set firmly on improving the sustainability of our industry," said chief operating officer of Grupo Almar, Wolfgang Harten. "We chose Sustell to go beyond measurement by taking ownership of our full environmental footprint, managing our footprint 24/7 within our own teams and organisation."

In addition to supporting Grupo Almar's own environmental footprint reduction, the partnership will also enable the wider shrimp production value chain to improve its sustainability.

Commenting on the announcement,

Pamela Nath, director of the Sustainable Shrimp Partnership (SSP) stated, "We welcome this announcement and the concrete efforts this embodies, demonstrating that Ecuadorian shrimp production is committed to producing shrimp with sustainable practices. We hope that this will continue to inspire and motivate the industry to go even further in improving the sustainability of shrimp production."

Starting January 2024, full environmental footprinting of Grupo Almar's shrimp production will commence, providing internationally validated footprint results for the full year 2024 onwards.

For more information, visit: <https://almar.ec>; <https://www.dsm-firmenich.com/corporate/businesses/animal-nutrition-health.html>; and https://www.sustell.com/en_US/home.html

TOMATO-BASED SOLUTIONS TO REPLACE TRADITIONAL TREATMENTS IN LIVESTOCK ANIMALS



Global agri-food business AB Agri partners with agritech company Aceae Nutra to develop a new tomato-based product that could offer a natural way to reduce traditional treatment in animals

The two companies are working together to assess its application in livestock animals. Tomatoes being grown by AB Agri will be used in trials to determine the effectiveness of the product as a feed material.

“The industry is looking for ways to responsibly reduce the use of traditional treatments that bring either environmental or resistance concerns and this product is an exciting new prospect that offers real potential to achieve this goal,” said head of innovation at AB

Agri, Natasha Whenham. She further explained the company’s commitment to nurture new technologies that have the potential to make a real impact in the production of responsible, affordable food – and turning those ideas into industry-relevant solutions.

“The data we have generated from initial lab-based trials is really promising,” said director of Aceae Nutra, Andrew Bottley, expressing his delight to be working with AB Agri to take the product to the next stage.

TCP LAUNCHED TO COMBAT FMD AND TBD INDUCED CATTLE DISEASES



The Food and Agriculture Organisation of the United Nations (FAO) along with Mozambique and Zimbabwe, launched a US\$500,000 Technical Cooperation Programme (TCP) to combat the spread of Foot-and-Mouth (FMD) serotype O and theileriosis, thereby improving food and nutrition security and market access

Animal disease outbreaks like FMD often affect beef and related product exports, thereby negatively impacting the economy. FMD has been reported in Mozambique and Zambia, although no cases have been confirmed in Zimbabwe and until recently, South Africa. Moreover, since Zimbabwe shares borders with both countries, chances of spread are very high.

On the other hand, major tick-borne diseases (TBDs) namely theileriosis, babesiosis, ehrlichiosis and anaplasmosis have been affecting cattle in South Africa and Zimbabwe, with more than 60% of TBD-induced ruminant deaths since 2017 being attributed to theileriosis, a fatal protozoal infection of cattle.

“The rise in cattle fatalities in

Zimbabwe due to theileriosis, and the imminent threat of spread of FMD serotype O in the region, jointly necessitated the development of this ‘Emergency support to mitigate theileriosis disease in Zimbabwe and the risk of FMD serotype O in Southern Africa’ project (TCP/SFS/3908),” said Patrice Talla, FAO subregional coordinator for South Africa and FAO representative to Zimbabwe, Lesotho and Eswatini.

In 2018, FMD serotype O which was the considered exotic to South Africa, was also reported in Zambia, later spreading to Namibia, Malawi and Mozambique. Building on Namibia’s success in repelling the serotype O incursion, the TCP will intensify surveillance efforts and build capacity through training of

key personnel and farmers to reduce the risk posed by FMD serotype O not only in Mozambique and Zimbabwe but the rest of the region. Also, the TCP complements country level efforts that are currently in place and is therefore not considered a stand-alone intervention by the FAO.

“In recent years, FAO has supported countries in the region to respond to several livestock-related emergencies occasioned by animal disease outbreaks and natural disasters. Technical assistance in the control of transboundary animal diseases (TADs), particularly efforts in mitigating the spread of the new serotype O of FMD virus has already been offered in Malawi, Comoros and Zambia,” added Talla.



TRIAD: ALLTECH'S NEW SWINE PRODUCT PROMOTING SUCCESSFUL FARROWING AND PIG LIVABILITY

Alltech has introduced Triad, an innovative solution that promotes successful farrowing and pig livability through a palatable, proprietary blend of Alltech ingredients

Peer-reviewed research has suggested that supplementation of these compounds in combination can support the parturition process, reduce the incidence of stillborn pigs, and boost the number of wean pigs per sow.

"It is exciting to bring a solution to market with such a strong return opportunity," said Andy Rash, general manager of Alltech's US swine business. "Minimising stillborns and low-viability pigs at the rate in which we can with Triad is a direct improvement in profit, as more pigs equal more profit."

Sow throughput can be compromised by a higher incidence of stillborn pigs and pre-wean death losses, decreasing overall

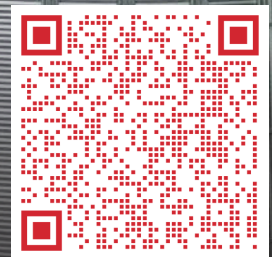
performance for swine producers. Effective during short feeding intervals, Triad supports sows during parturition and lessened pre-wean mortality, driving more pigs and more pounds long-term.

"Helping producers keep more pigs they work so hard to produce in the production chain is a great challenge to address," Rash said. "The industry makes such a large investment in total pigs born, but focusing on pigs weaned is the real opportunity."

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ABLACTO+: A GAME-CHANGING BIOSOLUTION FOR PIGLETS

World leader in biological solutions, Novozymes has signed a joint development and commercialisation agreement with Danish industrial biotech company, Bactolife to finalise the development and launch of the biosolution, Ablacto+

Post weaning diarrhea (PWD), a major, global swine health challenge is estimated to result in an annual production loss of US\$1-2bn. Generally occurring in newly weaned pigs, PWD is caused by *E. coli* infections and is known to be one of the major drivers for antibiotic use in weaner pigs.

This is where the new biosolution, Ablacto+ can be put into use. The promising product can potentially stabilise the gut of piglets and reduce the severity of PWD. As a functional feed additive, Ablacto+ consists of binding proteins that significantly reduce the risk of gastrointestinal infections including PWD.

“Post weaning diarrhea is one of the biggest challenges in the global swine industry. We are very excited to join this partnership with Bactolife. Together, we will be able to develop innovative biosolutions that can stabilise the gut of piglets, increase productivity, and significantly reduce the use of antibiotic use among pigs,” said Sofie Louise Trads, director of Animal Health at Novozymes.

The product, which has already proved successful in large scale swine trials, is expected to be launched in 2026.

For more information, visit: <https://www.bactolife.com/ablacto/>

New insights into healthy piglet weaning confirm role of the microbiota and immune transfer



LALLEMAND

LALLEMAND EXPERTS PRESENT NEW STUDY AT PIG RESEARCH SUMMIT 2023

Swine experts from Lallemand along with global experts gathered at the Pig Research Summit – THINK Piglet Health & Nutrition 2023 which took place from 21-22 September in Copenhagen, Denmark

The team presented new data on the lactic acid bacteria *Pedococcus acidilactici* CNCM I-4622, with the aim of monitoring its acidification and hygiene-enhancing properties in pig liquid feed. Good feed hygiene is crucial in liquid feed systems since it helps in increasing milk production in sows. This is a result of improved feed utilisation which leaves more energy available for milk production.

Following 10 hours of incubation at 30°C, the feeds containing *P. acidilactici* CNCM I-4622 were better and faster acidified than the control feed. Feed pH also remained significantly lower for up to 24 hours. At the same time, the concentration of L-lactic acid in the feed

was significantly higher with the lactic acid bacteria.

P. acidilactici CNCM I-4622 acidification properties helped reduce the development of total coliforms, which indicated better feed hygiene. This came as a result of enhanced lactic acid production. Consequently, due to a potential improvement in feed efficiency, *P. acidilactici* CNCM I-4622 could be considered as a tool to increase milk production of sows in liquid feed production systems.

For more information, visit: <https://www.lallemandanimalnutrition.com/en/europ>



SFR INTENSIFIES COLLABORATION WITH FEEDVALID

Schothorst Feed Research (SFR) and FeedValid are intensifying their collaboration on a number of issues including additional research into new and existing animal feed ingredients, consultancy and training and education programmes

According to Wilfried van Straalen, senior researcher and ruminant advisor at SFR, the experiences and insights into the world of circular raw materials and animal feed ingredients that FeedValid brings are valuable to SFR, giving them a broader perspective on developments in the feed ingredients market.

Jannet de Jong, head of Innovation and R&D at FeedValid highlighted that the company would be sharing their knowledge about circular raw materials through SFR training, while also contributing to research to help stimulate innovation within the sector. In addition, SFR's exper-

tise could be harnessed for FeedValid's existing ingredients for various issues such as the digestibility coefficients of circular feed materials or the rumen resistance of their sugared protein sources.

"At FeedValid we specialise in processed animal feed ingredients. We have a wide range of ingredients with a low CO2 footprint and always anticipate emerging raw materials," nutritionist Anouk Hagens of FeedValid said. He also emphasised that their close collaboration with SFR would help provide up-to-date information and knowledge to their customers.



STRENGTHENING COMMODITY TRADING ECOSYSTEM ACROSS NIGERIA AND GHANA

Nigeria on 24 August, announced the signing of a memorandum of understanding (MoU) with Ghana Commodities Exchange (GCX), to strengthen the commodity trading ecosystem across Nigeria and Ghana

The collaboration aims to transform the agricultural sector and foster cooperation to enhance market integration and promote best practices. The collaboration will apply to areas related to commodities trading, warehousing, quality standards, and market infrastructure development. In addition, both organisations will collaborate on capacity building initiatives, with both exchanges deploying their resources to facilitate cross-border trading of warehouse receipts and increase market liquidity of commodities.

One of the main objectives of the Ghana Commodity Exchange is to link Ghanaian smallholder farmers to markets and oppor-

tunities that help secure their incomes while delivering economic prosperity, and establishing Ghana as a regional and global trading hub for all commodities.

Expressing optimism about the partnership, the president/CEO, AFEX Nigeria, Akinyinka Akintunde, emphasised that the MoU signing reflected their resolute commitment to revolutionise the agricultural landscape. "Through this strategic partnership, we will set new benchmarks in quality standards, and fortify market infrastructure. Our joint efforts will not only amplify market liquidity but also empower stakeholders and unlock value for Nigeria and Ghana's value chain."



BUHLER PARTNERS WITH ENTOCYCLE TO DRIVE ADOPTION OF LARGE-SCALE BSF FARMS

One of the world's leading processing technology groups, Bühler on 30 August, collaborated with insect technology company, Entocycle to encourage the adoption of large-scale black soldier fly (BSF) farms

Starting from concept and basic engineering to execution of BSF facilities worldwide, the two companies aim to provide solutions and expertise to serve customers in this segment. To address key challenges regarding the absence of in-house breeding operations and techniques to ensure a steady supply of industrial scale BSF larvae, Bühler and Entocycle will offer scalable end-to-end solutions, thereby significantly bringing down the time to market for companies setting up an insect facility.

Keiran Whitaker, founder and CEO of Entocycle

expressed his excitement about the collaboration, emphasising the impact that BSF farming would make in creating a sustainable and efficient global food system. "The industrial use of BSF is rapidly gaining traction among businesses seeking alternative feed protein sources and more sustainable practices. To accelerate scaling this industry we must contribute to lowering the hurdles for companies to enter this business," stated Andreas Baumann, head of Market Segment Insect Technology at Bühler.

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Mann Filter 13

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