# INSTITUTE OF WORLD AGRICULTURAL MARKETS

# **MEDIA DIGEST** 08.05 - 14.05.2023



# **THREE MAIN TOPICS**

•NME Will Launch a Platform for International Tenders for Russian Wheat

- Russian Researchers Constructed a Smart Greenhouse with Neural Network Control Technology
- Rabobank: Gene-Edited Crop Seed Adoption to Surge

# EDUCATION

EDUCATION / 08.05.2023

# Bionema Launches New Digital Biocontrol Training Platform

The Bionema Group Ltd has launched a new digital biocontrol Training platform, to help end-users maximise the potential of their highly effective biological-based products, which protect and naturally enhance crops. The course is devoted to commercial distributors and end-users, such as growers, farmers, greenkeepers, course managers, groundsman, foresters, agronomists, and integrated pest management practitioners using biocontrol, or preparing to switch over from chemicals. AgNews

#### EDUCATION / 11.05.2023

# SSAU Will Start Training Specialists for Greenhouse Complexes

Stavropol State Agrarian University (SSAU) is launching a new master's program for training specialists in greenhouse vegetable growing — Integrated protection and nutrition system of vegetable crops in protected ground. It will be implemented jointly with the industrial partner of the university, the largest producer of greenhouse vegetables Agro-industrial holding "Eco-culture". The program is aimed at specialists working in greenhouse complexes. The first admission of masters to study under the new program will take place in 2024. <u>SSAU</u>

## EDUCATION / 12.05.2023

# Kurchatov Institute Branch May Open in Grozny

During a working visit to Chechnya, Mikhail Kovalchuk, President of the NRC "Kurchatov Institute", held a meeting with Ramzan Kadyrov. The Chechen leader suggested discussing the possibility of an Institute branch in Grozny. "We have outlined the directions in which we can move together. I think we have excellent ground for development," Kovalchuk said. The Kurchatov Institute and Chechen State University named after A.A. Kadyrov have signed an agreement on cooperation. Possible areas of joint work include biosecurity and agriculture. <u>Checheninfo</u>





EDUCATION / 14.05.2023

# Agricultural Universities of Pakistan and China Step up Cooperation

Sargodha University (Pakistan) has signed an agreement with South China Agriculture University (China) to get benefits after sharing experiences of each other in educational fields. The both universities will promote mutual cooperation in education, research, teaching, training, capacity building and other fields. There will be mutual exchange of faculty, students, researchers, experts and other technical staff. UrduPoint Network



#### SCIENCE / 09.05.2023

# Gene-Editing Technology Produces First Calf Resistant to BVDV

Scientists from the University of Nebraska–Lincoln (USA) have produced the first gene-edited calf with resistance to bovine viral diarrhea virus (BVDV), a virus that costs the U.S. cattle sector billions of dollars annually. If the modification turns out to be effective, it could help reduce the volume of drugs used in animal production, according to Phys.org. Scientific article published in PNAS Nexus. <u>Drovers</u>

#### SCIENCE / 09.05.2023

# Scientists Make Advance in Breeding High Resistant Starch Rice

This study, conducted by the Institute of Genetics and Developmental Biology and the Zhejiang University, have shown that the loss of function of two genes contributes to an increase in resistant starch (RS), providing insights into the generation of high-RS varieties in rice and possibly other cereals. In contrast with rapidly digested starch, RS is a type of special starch that is transferred to the large intestine for slow fermentation, which is beneficial to intestinal health and may accelerate metabolism. <u>AgNews</u>



#### SCIENCE / 12.05.2023

## Lab-Grown Meat Could Be 25 Times Worse for the Climate than Beef

Scientists from the Department of Food Science and Technology at the University of California (USA) have calculated that laboratory-grown meat can be significantly more harmful to the climate than real beef. According to the authors, billions of investment dollars have been specifically allocated to the cultured meat sector because of the fact that this product will be more environmentally friendly than beef. However, new research has found that meat produced from artificially cultured cells could be up to 25% worse for the environment than standard beef. Science

#### INSTITUTE OF WORLD AGRICULTURAL MARKETS / MEDIA DIGEST / 08 TO MAY 14



# INNOVATION

### INNOVATION / 08.05.2023

# Russian Researchers Constructed a Smart Greenhouse with Neural Network Control Technology

Russian scientists have created a smart greenhouse, where artificial intelligence monitors plants. It determines the comfort degree of each plant using a video camera and changes the microclimate parameters depending on results. This approach allows to reduce energy costs for planting cultivation, as well as to change the cultivation strategy in a timely manner. This is the first such system in Russia, where a video camera is used to control plants. Izvestia

#### INNOVATION / 08.05.2023

# Spanish Scientists Are Working on a Technology for Determining Olive Maturity

Researchers in Andalusia are developing a new tool that will allow farmers to use artificial intelligence (AI) to determine when their olives are ready to harvest. Citoliva, a non-profit researching olive oil technology, said the AI-based predictive model could improve yields and decrease production costs. They estimate it will be ready for commercial use in two years. <u>Olive Oil Times</u>



#### INNOVATION / 08.05.2023

# New Robot Aims to Transform Japanese Farming

Japanese researchers have developed a robot that can help farmers practising a new farming method, involving growing mixed plant species together in high density. However, it requires complex operations since varying species with different growing seasons and growing speeds are planted on the same land. The robot was named SynRobo. It has a four-wheel mechanism that enables movement on uneven land and a robotic arm that expands and contracts to help overcome obstacles. The robot can move on slopes and avoid small steps. Far Eastern Agriculture

INNOVATION / 11.05.2023

# New Web-Based Platform Predicts Yields of Key African Crops

AKADEMIYA2063, a non-profit research organization, has elaborated a new tool, which uses cutting-edge machine learning techniques and satellite remotely sensed data to predict agricultural yields for nine key crops across Africa. The webbased Africa Agriculture Watch platform combines remote sensing data and machine learning techniques to support informed decision-making in African food production systems. The tool is designed to support farmers, policymakers, and local communities in crisis management, monitoring, and mitigation efforts. <u>EIN Newswires</u>





WORLD MARKET / 09.05.2023

# China Boosts Corn Imports from South Africa

China has received its first significant shipment of corn from South Africa, another signal it is striving to diversify its global sources of grain in its drive for food security. The 53 thousand tonnes corn cargo bought by state-owned trader COFCO Group arrived into Machong port in southern Guangdong province. China approved corn imports from South Africa several years ago, but COFCO's purchase is the first significant volume to reach the country. More shipments are expected as South Africa exported 108,104 tonnes of yellow feed corn to China between March 25 and April 14 this year. <u>World Grain</u>

#### WORLD MARKET / 11.05.2023

# NME Will Launch a Platform for International Tenders for Russian Wheat

National Mercantile Exchange (NME) is going to launch a platform for international tenders for the purchase of Russian wheat by the end of the year. This was announced by the director of NME Nikita Zakharov. The mechanism is created "by analogy with international tenders." "We have already developed rules for the admission of foreign participants and will soon send them for registration to the Central Bank of Russia," he added. Egypt and Turkey are considered as the main contenders in the NME. Tenders will be held in the format of exchange auctions, where domestic exporters will be responsible for the offer. <u>Frank Media</u>

#### WORLD MARKET / 11.05.2023

# Kenya to Start Supplying Cattle to Indonesia

Cabinet Secretary, Ministry of Trade, Investment and Industry, Government of Kenya Moses Kuria held a meeting with a delegation from Indonesia. The parties agreed to start deliveries of 700 thousand head of cattle from the African country. Kenya plans to carry out the first shipment of cattle by August 2023. The agreement with Indonesia became a new step for Nairobi to diversify its exports of agricultural products. Food Business Africa

#### WORLD MARKET / 14.05.2023

# Construction of the Largest Free Trade Zone in Vietnam Gets Underway

Construction of the Xuan Cau Industrial Park and Free Trade Zone in the northern port city of Hai Phong kicked off on May 13. Xuan Cau is set to become an industrial and logistics base adjacent to Lach Huyen International Seaport. It is expected to see its first phase completed in 2025, the second phase in 2030, and the third in 2033. The project counts among projects for Hai Phong to realize its economic development strategy based on three pillars: seaport logistics, high-tech industry, and service — tourism. Vietnamnet



#### INSTITUTE OF WORLD AGRICULTURAL MARKETS / MEDIA DIGEST / 08 TO MAY 14



#### ANALYTICS / 09.05.2023

### Rabobank: Gene-Edited Crop Seed Adoption to Surge

Adoption of gene-edited crop seeds is expected to increase significantly in the next 5 to 10 years, according to a Rabobank report, with adoption rates expected to surpass 50% during that period. The document cautioned that several challenges must be overcome to maximize the potential of GE technology. They include "the complexity of the traits of interest, the often more unstable performance of complex traits, the potential longterm risks such as allergic and toxic reactions, which are difficult to detect in the short term, disruption to trade flows following export bans of GE crops, and access to technology." The United States has been the frontrunner in terms of GE applications. World Grain

#### ANALYTICS / 11.05.2023

## A 50 Million Tonnes Aquaculture Supply Gap Would Exist by 2050

According to a new report published by nonprofit financial think tank Planet Tracker, even in the most optimistic scenario of improving current aquaculture practices, a 50 million tonnes supply gap would still exist by 2050, meaning change is critical. Analysis by Planet Tracker found that while technological solutions could contribute up to 5 million additional tonnes of seafood by 2050, embracing regenerative aquaculture could produce an additional 45 million tonnes of seafood and meet growing demand. The Fish site

#### ANALYTICS / 11.05.2023

### Destatis: in Germany, Meat Substitutes Continues to Gain Popularity

In 2022, companies in Germany produced 6.5% more meat substitutes compared to the previous year, according to the Federal Statistical Office (Destatis). In 2022, 104,300 tonnes of meat substitutes were produced. The value of these products increased in 2022 compared to the previous year by 17.3% to 537.4 million euros (585,77 million dollars). The number of companies producing in Germany also increased from 44 in 2021 to 51 last year. Euromeat

