

**INSTITUTE OF WORLD  
AGRICULTURAL MARKETS**

# **MEDIA DIGEST**

**25.09 – 01.10.2023**



## THREE MAIN TOPICS

- [Japanese Scientists Trained AI to Translate Sounds Made by Chickens](#)
- [China Approved Pork Imports from Russia after 15 years](#)
- [Palm Oil Prices Seen Rising in 2024](#)



### EDUCATION

EDUCATION / 26.09.2023

#### South Korea and Kenya Will Train Young Specialists

The Korea Institute of Marine and Fisheries Technology will collaborate with Pioneer International University (Kenya) to train young Kenyans and provide them with opportunities to enter the Korean job market. With a population of more than 51 million, South Korea is grappling with a chronic shortage of skilled workers, prompting the government to enhance the number of visas issued to foreign workers and the number of programs to train them. [The Star](#)

EDUCATION / 27.09.2023

#### Vologda Agricultural University Will Launch a Training Program in Digital Farming Technologies

Vologda State Dairy Farming Academy named after N.V. Vereshchagina and AgroSignal have signed a strategic partnership agreement. Academy teachers, together with company specialists, will introduce students to the principles of operation of geographic information systems, teach them how to use modern digital tools for the agricultural sector, and also tell them how to analyze data.

[GlavAgronom](#)



EDUCATION / 29.09.2023

#### A Forum on Digital Technologies Was Held at Irkutsk State Agricultural Institute

From September 26 to 29 at Irkutsk State Agricultural Institute named after A.A. Ezhevsky hosted the forum “Digital Technologies in Education, Science and Agriculture”. The program included 2 scientific and practical conferences, a competition of scientific papers for students and advanced training courses. The main attention of the conference participants was focused on using specialized software products and IT resources.

[Russian Ministry of Agriculture](#)



### SCIENCE

SCIENCE / 27.09.2023

#### Scientists Found a Way to Reduce Pesticide Use

Scientists from Crimean Federal University (CFU) have developed a method for treating soil, seeds and plants, which can significantly reduce the use of chemicals to combat pests and diseases. The method is based on the impact of non-ionizing radiation, which destroys pathogenic microflora and insect larvae. The introduction of innovation will significantly reduce the harmful impact on the environment. CFU specialists have already elaborated agricultural equipment designed to process vineyards using a new method.

[GlavAgronom](#)

**SCIENCE / 28.09.2023**

**Geneticists Discovered Why Carrots Have Orange Color**

Scientists have deciphered and compared the DNA structure of more than 600 varieties of carrots, which helped them prove that they were domesticated in the 9th-10th centuries AD in Western or Central Asia. In addition, they identified mutations in three genes that cause carrots to accumulate vitamin A and turn orange. This was reported by the press service of the University of North Carolina. The study results were published in the journal Nature Plants.

[New Scientist](#)

**SCIENCE / 28.09.2023**

**Genes Were Found that Influence the Micronutrient Concentration in Wheat**

Scientists at the Kurchatov Genome Center of the Institute of Cytology and Genetics (ICG) SB RAS have identified four genes that are associated with an increase or decrease in the concentrations of calcium, potassium, manganese, magnesium, zinc, iron and copper in wheat. These data will make it possible to more accurately select Russian wheat varieties, the press service of the institute reports. The results were published in the journal Plants. The study was carried out using a multivariate analysis method, rare for genetics, which allows us to assess how changes in nucleotides in a gene affect various traits.

[TASS](#)

**SCIENCE / 29.09.2023**

**Earthworms Boost Global Grain and Bean Yields by 140 Million Tonnes per Year**

American ecologists have for the first time assessed the global contribution of earthworms to agricultural efficiency and concluded that they account for about 6.5% of the world's cereal crops and about 2.3% of beans, equivalent to 140 million tonnes of agricultural products. The press service of Colorado State University (CSU) reported. Details of the study were published in the journal Nature Communications. [The Guardian](#)



**INNOVATION**

**INNOVATION / 27.09.2023**

**JBS Will Build a Cell-Based Meat Production Center**

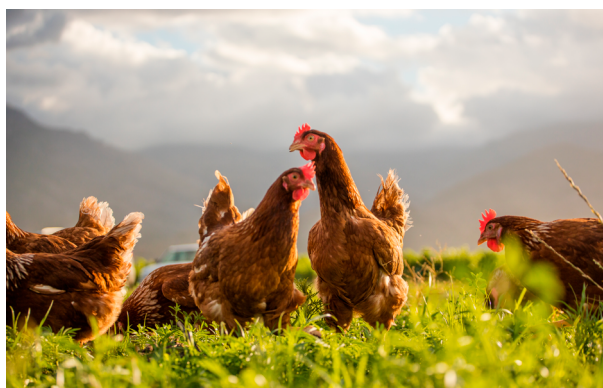
Major meat producer JBS in Brazil will launch a 60 million dollars center for growing animal cells in bioreactors (cultured meat). The biotechnology center will focus on scaling the technology and reducing production costs. The project is part of JBS's efforts to become a leader in the cultured meat industry. [Green Queen](#)



**INNOVATION / 28.09.2023**

**Japanese Scientists Trained AI to Translate Sounds Made by Chickens**

Japanese researchers have successfully utilized AI to translate the vocalizations and sounds made by chickens, a breakthrough referred to as the "AI Chicken Language Translator." This achievement is detailed in a preprint, although it has not yet undergone peer review. The system is capable of decoding a range of chicken emotions, including anger, fear, hunger, excitement, contentment, and distress. [Industry Tap](#)



**INNOVATION / 29.09.2023**

**Scientists Created a Reliable Nanotrap for Greenhouse Gases**

Chemists from the USA and South Korea have developed a nanomaterial capable of holding large quantities of fluorinated gases, which are used to replace ozone-depleting compounds, for example, in refrigeration systems. These are powerful greenhouse gases that require special storage conditions. The innovative material could provide a simple and safe way to reduce the risk of leaks, the researchers write in a paper in the journal Science.

[TASS](#)

**INNOVATION / 29.09.2023**

**Aerospace Monitoring Laboratory Will Be Created in the Stavropol Region**

An aerospace monitoring laboratory for agricultural land will be created at Stavropol State Agrarian University. According to scientists, aerospace monitoring will increase pasture productivity by at least 25%. As the university press service explained to TASS, the site will be created in 2024. The laboratory will make it possible to create three-dimensional terrain models, analyze pastures and predict the biodiversity of territories for the efficient use of feed resources. [TASS](#)



**WORLD MARKET**

**WORLD MARKET / 25.09.2023**

**Egypt Negotiates Loan Deal with the UAE to Finance Grain Purchases**

Egypt is at the stage of negotiations with one of the banks of the United Arab Emirates (UAE) in order to obtain financing for subsequent purchases of wheat. This was announced by the Egyptian Minister of Supply and Internal Trade Ali al-Muselhi. As noted by Al-Ghad TV channel, he also thanked the UAE for providing his country with 100 million dollars annually for the purchase of grain for five years. [FW Africa](#)



**WORLD MARKET / 28.09.2023**

**China Approved Pork Imports from Russia after 15 years**

The General Administration of Customs of China has authorized the supply of pork from Russia. The press service of Rosselkhoznadzor reported this on September 28. "Restrictions on the import of pork from Russia, previously established by the current General Administration of Quality Supervision, Inspection and Quarantine, as well as the Ministry of Agriculture of the People's Republic of China through an announcement in 2008, no longer apply," the statement said. Rosselkhoznadzor noted that since 2013 it has been working to return access to pig products to China. [Izvestia](#)



**WORLD MARKET / 28.09.2023**

**Namibia Suspends Poultry Imports from South Africa amid Bird Flu Outbreak**

In response to the ongoing highly pathogenic avian influenza (HPAI) outbreak in South Africa, Namibia has taken the precautionary measure of suspending imports of live poultry, birds, and poultry products from its neighboring country. The suspension, announced by Namibia's Ministry of Agriculture, is effective immediately and will remain in place until further notice. Namibia, which relies heavily on imports from South Africa, particularly for chicken products, consumes an estimated 2,500 tonnes of chicken every month.

[FW Africa](#)



**WORLD MARKET / 29.09.2023**

**India Expanding Grain Storage Capacity**

As part of a larger effort to boost modern grain storage capacity, the Food Corporation of India (FCI) plans to complete construction of numerous 3-million-tonne-capacity wheat silos throughout the country by November. India, which is the world's second largest producer of wheat and rice and has currently banned exports of those grains to combat rising food prices, needs more modern grain storage facilities to reduce post-harvest waste. The FCI has already completed construction of 1-million-tonne and 2-million-tonne silos and eventually, as part of this grain storage expansion project, plans to build wheat silos with 9.4 million tonnes of capacity during the next three to four years at 196 locations across the country. [World Grain](#)

**ANALYTICS / 28.09.2023**

**Palm Oil Prices Seen Rising in 2024**

Crude palm oil (CPO) prices in 2024 are likely to average at least 11% more than this year as El Nino weather patterns are expected to reduce output in top producer Indonesia, the Indonesian Palm Oil Association (GAPKI) said on Thursday. In 2024, average CPO prices, including cost, freight, and insurance (CIF Rotterdam), could rise to 1,000 dollars per metric ton from around 900 dollars in the current year, said Fadhil Hasan, head of foreign affairs division at the association. [Nasdaq](#)



**ANALYTICS**

**ANALYTICS / 27.09.2023**

**Rabobank: Pork Trade Competition Increasing**

Global pork consumption is poised for growth, and in its recently-published report on global pork trade, Rabobank notes that while competition among major pork exporters has intensified, the competitive landscape will continue to shift. According to Rabobank's report, the advantage will likely be in the hands of low-cost producers, such as Brazil and the US. Europe's position, meanwhile, is expected to weaken, primarily due to an increase in market and regulatory requirements concerning animal welfare and sustainability. [Pig Progress](#)



**ANALYTICS / 29.09.2023**

**The European Commission Lowered Its Estimates for Grain and Corn Production**

The European Union's wheat and maize estimates were lowered in the latest European Commission monthly supply and demand data, though supplies of the grains were increased on the strength of imports, Reuters reported. For soft wheat, EU production was estimated at 125.3 million tonnes, down from 126.1 million forecast a month ago and slightly below last year's harvest of 125.7 million. Output for maize, harvested mostly in the fall, was lowered to 59.8 million tonnes, well above last year's drought-hit 52.1 million tonnes, though a continued downward revision from last month's projection of 61.7 million and July's 63 million. [World Grain](#)

