

GDM innovates and expands the edited soy market in South America

A second variety, developed for drought tolerance, is approved for conventional planting in Brazil and now Argentina. Soybeans with a low presence of raffinose and stachyose sugars are also approved for conventional planting in both countries and have just been validated in Colombia.

Data released by the Brazilian consultancy AgRural shows that Brazil's planting of the 2022/23 soybean crop was below average compared to the same period last year due to dry and hot weather, mainly in the country's Midwest. This historical problem always brings anxiety to producers and agribusiness authorities.

GDM – one of the largest international corporations in plant genetic improvement, responsible for the genetics present in 40% of all the seeds used in world leguminous production – has increased the presence of edited soybeans classified as non-GMO (Genetically Modified Organisms) in the South American market. The company's objective is to continue improving seeds that will be available on the market.

The company had the second edited soy classified by CTNBio (Comissão Técnica Nacional de Biossegurança - National Technical Commission on Biosafety), an entity linked to the Ministry of Science, Technology, Innovations, and Communication, responsible for implementing the new National Biosafety Policy regarding certain Genetically Modified Organisms (GMOs) as non-GMO in May of this year and on November 25 in Argentina. The variety was developed to be more drought and heat tolerant.

"The global soy market suffers a lot from the impact of the rainfall regime. In this variety, we modified a gene that interferes with the plant's response to drought and heat. These plants are advancing to the field evaluation stages, in which we hope to prove their effect.", explains André Beló, manager of New Improvement Techniques at GDM.

About the first edited soybean

In addition to this drought-tolerant edited soybean, GDM obtained the classification of the first edited soybean in Brazil. This variety has greater nutritional value because it has fewer raffinose and stachyose sugars, indigestible by monogastric animals, such as poultry, pigs, and humans. "The company continues to produce larger volumes of seeds of this variety for final validations before the commercial launch," explains the executive.

It was necessary to alter a gene native to the soybean to obtain this soybean. The new protein version of this gene resulted in a 50% and 75% reduction of stachyose and raffinose, respectively. "This variety was developed to create value for animal nutrition, improving not only the nutritional part, but the health of the animals," emphasizes Beló.

In September, GDM obtained a favorable evaluation from the Argentine government for this variety in the country, classifying it as non-GMO. The company carried out similar consultation with the Colombian government and obtained a favorable opinion in December. The next step is to intensify contacts with local companies interested in using this soybean.

Research Excellence



GDM is a global leader in plant genetic improvement. Responsible for the genetics of 40% of global soybean production, it invests heavily in research and development and commercialization of varieties. Spending around \$400 million on research in Brazil alone last year. Of the company's more than 1,000 employees worldwide, more than 500 are dedicated exclusively to Research and Development programs. In Brazil, around 64% of employees are dedicated to R&D.

The company is already consolidated as one of the world's leading suppliers of soybean genetics. For this, it seeks to deliver the most advanced technology to multipliers and producers to guarantee gains in productivity and profitability of its planted areas. GDM's genetic improvement program aims to develop products with broad productive potential, producing more within the same area.

About GDM

GDM is a global plant genetic improvement company that applies state-of-the-art technology for the research, development, and commercialization of maximum productivity soybean varieties and other extensive crops, generating several businesses that add value to the organization's growth.

The company operates in more than 15 countries, such as Brazil, Argentina, and the United States, contributing to the continuous improvement of world agricultural productivity. The group invests a large number of human and economic resources in developing research and testing programs that result in varieties adapted to different environmental conditions, providing the producer with the best solutions for crops.