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Bulgaria is bringing together researchers from 17 countries as part of a large-scale scientific project for innovations in legume breeding

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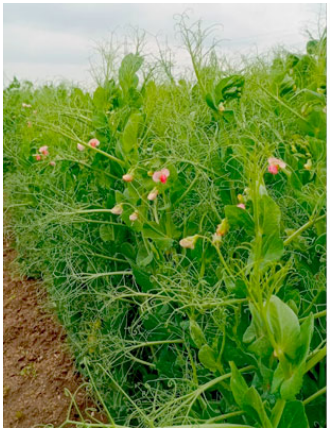


Bulgarian scientists are studying 153 pea accessions in search of varieties with high yield and nutritional value

Scientists, breeders, seed producers, and representatives of organizations for variety testing and registration from across Europe will gather in Plovdiv from 15 to 17 September 2026 for the Third Annual Meeting of the European project BELIS (Breeding European Legumes for Increased Sustainability). The host of the international forum and national representative in the international project consortium is the Center of Plant Systems Biology and Biotechnology (CPSBB).

The BELIS project, funded under the Horizon Europe programme, brings together 34 partner organizations – research institutes, universities, international organizations, and private companies working in the fields of breeding, seed production, agriculture, and variety testing and registration. The scientists are developing modern tools for breeding and improving variety testing systems and are building closer links between science, breeders, the seed sector, registration authorities, and agricultural producers. The main goal is to accelerate the creation of more productive, sustainable, and high-quality legume varieties and to strengthen the competitiveness of European breeding and agriculture.

The project involves partners from 17 countries: France, Germany, Spain, Italy, the United Kingdom, Belgium, the Netherlands, Norway, Denmark, Switzerland, Lithuania, Libya, the Czech Republic, Poland, Croatia, Serbia, and Bulgaria. The research activities cover 14 legume crops – seven grain legumes: pea, faba bean, soybean, chickpea, lentil, lupin, and common bean, as well as seven forage legumes: alfalfa, red clover, white clover, annual clovers, sainfoin, birdsfoot trefoil, and greater lotus (Lotus corniculatus).





Over the past three years, the research teams of CPSBB and the Maritsa Vegetable Crops Research Institute conducted a series of field and laboratory experiments with 153 pea accessions. The scientists studied their biometric characteristics, yield, protein content, and other important parameters, and the results obtained were also analyzed at the genetic level. As a result of the research, the most promising lines and varieties were identified. They were used for hybridization in order to confirm the genetic data and to create new varieties combining valuable characteristics such as high yield and high nutritional value.

The extensive genetic base accumulated within the project will make it possible to direct breeding toward specific characteristics sought by both agricultural producers and end consumers. In this way, scientific results can find direct application in the creation of a new generation of pea varieties that meet simultaneously the requirements for productivity, quality, and sustainable agriculture.

The Third Annual Meeting of BELIS will give partners the opportunity to review what has been achieved over the past year and to determine the next steps in the project.

Within the three-day programme, results related to genomic selection, the development and testing of molecular markers for desired biometric characteristics in legume crops, as well as the connection with people from production, industry, and science in the sector, will be presented. Special emphasis will be placed on the harmonization of variety testing systems in Europe and on how scientific results can more quickly reach breeders, seed producers, and agricultural producers.

The scientific presentations will be combined with interactive seminars, working groups, and poster sessions. A special stakeholder meeting will bring together scientists, breeders, and representatives of the sector, who will discuss how BELIS results can support innovation and the competitiveness of European legume breeding.



As part of the programme, participants will also visit the Konstantin Malkov Institute of Plant Genetic Resources in Sadovo, where they will exchange experience in the field of legume breeding and plant genetic resources.