

Dilateral cooperation between Bulgaria and China under a NSF project for enriching the diversity of grain-legume crops

Author(s): доц. д-р Николая Велчева, ИРГР Садово; проф. д-р Цветелина Стоилова, ИРГР – Садово

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In the period 11-14.07.2023, IPGR-Sadovo welcomed partners from the Chinese Academy of Agricultural Sciences under a bilateral project on the topic "Enrichment of the diversity of grain legumes between Bulgaria and China – introduction and evaluation in relation to global climate change", Contract KP-06-China/7/20.11.2020 of the Research Fund. The project leader on the Bulgarian side is Prof. Petar Chavdarov, PhD.



Prof. Lishia Wang, PhD, and Prof. Suhua Wang, PhD, from the Institute of Crop Sciences in Beijing were welcomed by the Director, Assoc. Prof. Katya Uzundzhalieva, PhD, who presented the main scientific fields, achievements and research projects of IPGR, part of the Agricultural Academy. The programme at IPGR included a working meeting with the research team, presentation of the field collection of grain legumes, familiarization with the work of the gene bank, methods for long-term seed conservation and the history of agricultural science in the Institute's museum.



The diversity of local grain legumes – common bean and cowpea, was presented by the curator of the collection, Prof. Tsvetelina Stoilova, PhD. Prof. Lishia Wang, PhD, acquainted her Bulgarian colleagues with the work on conservation, documentation, characterization, evaluation and utilization of the grain legume collection at the Institute of Crop Sciences of the Chinese Academy of Agricultural Sciences. Issues related to the implementation of the project work programme were discussed. Assoc. Prof. Gergana Desheva, PhD, presented the gene bank in Sadovo and its working methodology. The Chinese scientists visited the long-term seed storage chamber. Chief Assistant Prof. Bozhidar Kyosev, PhD, presented the joint Chinese-Bulgarian Laboratory of Molecular Biology of Plant Genetic Resources, established at the gene bank. The analyses performed there, as well as opportunities for joint work, were discussed.

In the Institute's museum, Assoc. Prof. Nikolaya Velcheva, PhD, acquainted the guests with the history of the Experimental Station in Sadovo and of the founder of agricultural science in Bulgaria – agronomist Konstantin Malkov. Valuable historical documents related to the life and scientific work of prominent figures of agricultural science, periodicals, reports, proceedings of Jubilee conferences, honorary diplomas and awards of the IPGR team were presented. Issues related to the documentation of the plant gene pool and the development of an information system for the gene bank were discussed.



In connection with the project topic, the interest of the partners from China is focused on the local diversity of grain legumes – common bean and cowpea, and on enriching the collections through expeditions in rural areas of the country.



During the visit of the Chinese scientists to Bulgaria, a private family company in the town of Sadovo, engaged in the cultivation and roasting of peanuts of the varieties developed at IPGR, was visited.



The winery „DiVes Estate“, located on the historical hill Simeonova Mogila in Pomorie municipality, was also visited. There the Chinese scientists took part in an aroma tour and tasting of a collection of five Bulgarian lavender varieties. The plantations are terraced around the winery with a picturesque view of the Black Sea. The programme also included familiarization with the technology for the production of high-quality Bulgarian wines and a tasting. Results were presented from trials with different crops using biological products – the biostimulant Amalgerol Essence and nitrogen-fixing bacteria, offered on the market by the company "Medi plus R".



The Bulgarian team offered the scientists from China a rich cultural programme in Sofia, Plovdiv and Nessebar.

At the end of September, Prof. Tsvetelina Stoilova, PhD, and Assoc. Prof. Nikolaya Velcheva, PhD, from IPGR-Sadovo will carry out a working visit to China under the project, where they will have the opportunity to visit and become acquainted with the work of the Chinese gene bank.