

Bulgarian scientists participate in a research consortium from Europe, Africa, and South America for the development of a new generation of plant protection products

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The Bulgarian Center of Plant Systems Biology and Biotechnology (CPSBB) has joined academic institutions from Europe, Africa, and South America to develop a new generation of natural plant protection products.

The large-scale scientific project CropPrime, which brings together the international scientific consortium, aims to develop innovative and environmentally friendly products for protecting plants from abiotic and biotic stress.

The project is worth EUR 1 million and is funded under the European Union programme HORIZON - Marie

Skłodowska-Curie Actions Staff Exchange (MSCA-SE), which implements research activities through staff mobility and institutional knowledge transfer.

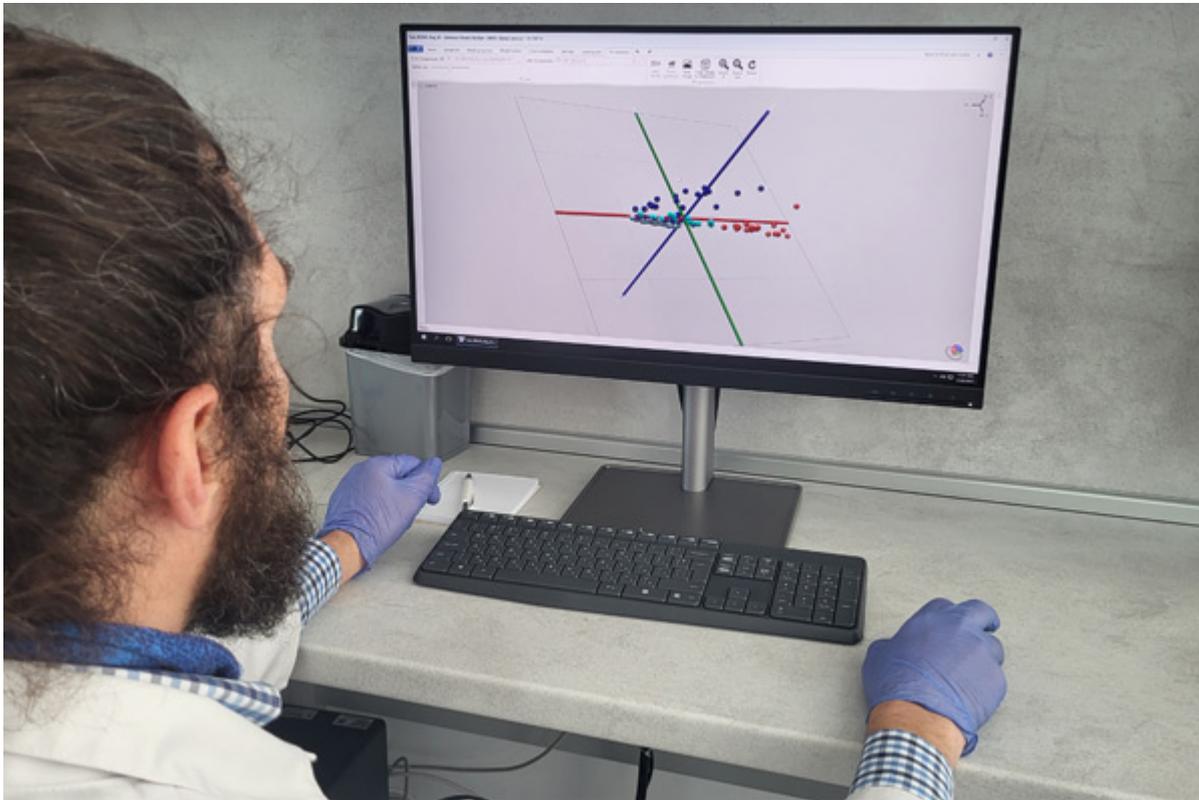


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Researchers from Mendel University in Brno (Czech Republic), the VIB-UGent Center for Plant Systems Biology, Ghent (Belgium), the Biology Centre of the Czech Academy of Sciences (Czech Republic), the Institute of Molecular and Cellular Biology of Rosario (Argentina), the James Hutton Institute (United Kingdom), the University of Johannesburg (South Africa), as well as the biotechnology company BioAtlantis Ltd. (Ireland), participate in the scientific consortium.

The ambitious scientific project has a duration of four years and aims to develop plant biostimulants based on natural compounds and extracts. The scientists will investigate and develop fungicides based on plant RNA molecules to reduce fungal infections in economically important crops with an efficiency equivalent to that of synthetic fungicides. The developed plant fungicides will aim to provide at least a 90% reduction of pathogenic infections and will be biodegradable and free of toxic effects on the environment. The research will focus on studying the impact of bioactive molecules isolated from seaweed extracts.



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The results of the scientific project will contribute to the development of innovative natural products that can be effectively used by farmers and agronomists for the prevention and protection of crops from adverse climatic conditions (drought, heat, cold, water, etc.) – stresses that are increasing due to global climate change. The consortium's expert experience will be directed towards optimizing existing plant protection formulations based on natural products in order to ensure an efficacy that is statistically equivalent to synthetic products.

More information about the project:

<https://www.cropprime.eu/>