

## NEW STRAINS OF ANTAGONISTIC BACTERIA AS A BIOLOGICAL PLANT PROTECTION PRODUCT

The offered technology provides a microbiological plant protection product used both in prevention and treatment of plants infected by pectinolytic bacteria such as *Pectobacterium* and *Dickeya* which cause soft rot and potato blackleg. The product can be used to control *Ralstonia* and *Clavibacter*, bacteria responsible for brown rot and ring rot. These diseases pose a high risk to both economically important crops and ornamental plants worldwide.

The developed preparation contains a combination of new, selected isolates of antagonistic bacteria. The invention is distinguished by its high effectiveness, both in counteraction of single species of pectinolytic bacteria as well as their mixtures. The use of naturally occurring antagonistic interactions between organisms makes the preparation a fully ecological product. Unlike chemical or physical plant protection products, antagonistic bacteria can penetrate the infected plant and spread through all its tissues, providing the plant with adequate protection. Due to the fact that the offered bacterial strains are naturally present on plants and are able to survive in a wide range of temperature conditions, the solution is characterized by high viability bacterial populations after their application and stability of the product.

### Commercialization opportunities



- ➔ Licensing agreement
- ➔ Transfer of ownership
- ➔ Partnership in order to further research or commercialization

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### IP Status



The invention was submitted for patenting according to Polish (P.423806) and international (EP18210901) procedures.

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### Implementation progress



TRL 4  
Technology validated  
under laboratory conditions