Bio-tech

TaqMan primer and probe sets for detection of Limestonevirus bacteriophages

About the solution

T The subject of the invention is a set of TaqMan primers and probes designed for the detection of Limestonevirus bacteriophages in environmental samples such as soil, plant material and water. The developed sequences enable quantitative and qualitative analysis of viruses in real time, with a detection limit of approximately 100–1000 virions per millilitre.

The kits are highly specific to phages pathogenic to bacteria of the genus Dickeya spp., allowing for quick and accurate determination of the number of virions without the need for a classic plaque assay.

The invention is a tool supporting the development of phage preparations for biological plant protection and monitoring of bacteriophage titres at the stage of production and field applications.

IP Protection

The invention is protected by a patent application in the Polish Patent Office under the number: **P.446082**

Research Team

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Applications

- Rapid titering of Limestonevirus phage preparations for plant protection,
- Environmental surveillance of phage presence in soil, plants and water,
- Quality control and validation of phage products targeting Dickeya spp.

Technology readiness level

TRL 4 - Technology validated in laboratory conditions.

Cooperation opportunities

- Supply of primer/probe kits and implementation in R&D laboratories,
- Joint field validation and adaptation of assays to specific sample matrices,
- Licensing of protocols and/or commercial sale of ready diagnostic kits.

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