



## TECHNOLOGY INFO SHEET



# Copper resistant, fengycin-producing *Bacillus mojavensis* strain for controlling vegetable pathogens, its use and compositions containing it

### ***Development status***

Proof of concept

Development

#### **▶ Product development and Testing**

Entering to market

Market development

### ***IP status***

In priority year

PCT I.

PCT II.

#### **▶ National/regional phase**

Validation

### ***Challenge***

The use of effective processes to protect plants against pests and pathogens forms an integral part of the technologies available for intensive vegetable production. Generally, effective fungicides are applied in the intensively cultivated plant production to control diseases caused by pathogenic fungi. However, these fungicides are not permitted for use in organic farming – with the exception of inorganic preparations containing copper; thus, these plants do not enjoy appropriate preventive protection against attacks from pathogens, leading to a potential reduction in crops.

### ***Technology***

Researchers at University of Szeged selected a new copper-resistant *Bacillus mojavensis* strain, which produces an antagonistic effect on the most common pathogens in vegetable farming and promotes induced resistance in cultivated plants. The strain selected has been extraordinarily resistant to inorganic preparations containing copper in organic farming.

### ***Keywords***

Biocontrol preparation, *Bacillus mojavensis*, organic vegetable farming, plant protection

## ***Benefits***

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- ▶ Easy to apply to irrigation water during watering in the period of growing young plants.
- ▶ Resistant to copper-containing substances (entering the soil or other growth medium) used in organic farming.

## ***Development status***

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Technology development is completed. The following tasks are 1) to obtain permits in potential target countries and 2) to test the most recommended forms of the product for distribution considering storage life and usability.

## ***IP status***

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The Hungarian patent application (P1100498) was submitted in 2011.

PCT examination was extended to Europe (EP 12783651.8) and to the US (US 14/343,348) in 2014. US patent was granted in 2016 (Patent No.: 9,288,993)

## ***What we are looking for***

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The University is looking for partners who are interested in product development. The University is ready to negotiate partnering, R&D collaborations and other utilization forms.

### **Contact**



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