AGRICULTURAL PROBIOTICS

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Xtrem is a spin-off Company founded in 2013 from a microbial research group of the University of Granada.

BUSINESS MODEL

- Production & commercialisation of biostimulants and biopesticides based in microbes and its metabolites.
- Development agreements and/or licensing of new technologies and products to agrofood companies.

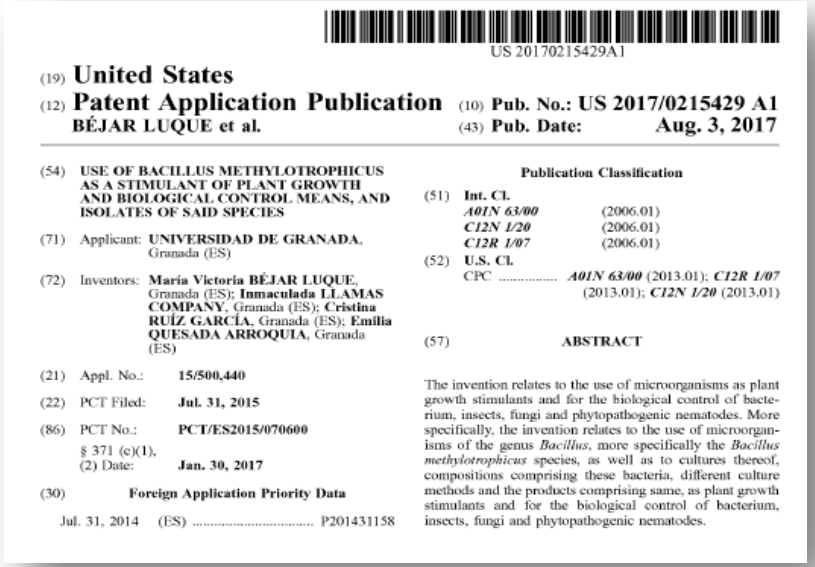
MARKET

- Biostimulants: ~3 B$ (>10% CAGR)*
- Biopesticides: ~6,6 B$ (>18% CAGR)*

*Businesswire

IP/COMPETITIVE ADVANTAGES

- Patent application for a proprietary biostimulant **(ALREADY IN THE MARKET!)** and biopesticide.
- Proprietary collection of extremophile microorganisms.
- Target → fungal pathogens causing high economic losses, like ***Verticillium*** (no treatment available so far)
- Proven activity vs. several pathogens in different crops.



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(54) **USE OF BACILLUS METHYLOTROPHICUS AS A STIMULANT OF PLANT GROWTH AND BIOLOGICAL CONTROL MEANS, AND ISOLATES OF SAID SPECIES**

(71) Applicant: **UNIVERSIDAD DE GRANADA**, Granada (ES)

(72) Inventors: **María Victoria BÉJAR LUQUE**, Granada (ES); **Inmaculada LLAMAS COMPANY**, Granada (ES); **Cristina RUÍZ GARCÍA**, Granada (ES); **Emilia QUESADA ARROQUIA**, Granada (ES)

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(57) **ABSTRACT**

The invention relates to the use of microorganisms as plant growth stimulants and for the biological control of bacterium, insects, fungi and phytopathogenic nematodes. More specifically, the invention relates to the use of microorganisms of the genus *Bacillus*, more specifically the *Bacillus methylotrophicus* species, as well as to cultures thereof, compositions comprising these bacteria, different culture methods and the products comprising same, as plant growth stimulants and for the biological control of bacterium, insects, fungi and phytopathogenic nematodes.

FUNDING

FFF → 50.000€

SOFT LOANS → 200.000€

GRANTS → 220.000€ (SME Instrument Phase I + National grants)

TARGET → 400.000€ (2018 + 2019) to:

- **Develop new products**: biopesticide and biostimulant.
- Increase the **production capacity** by outsourcing external facilities
- Boost the **Commercial Department**.

MANAGEMENT TEAM

R&D team from University of Granada

Javier Velasco, PhD - Business Development (>20 years experience)

Borja Torres – CEO

Working with:

Distributor

HEROGRA® ESPECIALES

Consultant

IP Attorney

HOFFMANN EITLE

CRO for efficacy and biosecurity

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