

# Microbial products for plant biostimulation and biocontrol

Jonathan Gerbore<sup>1\*</sup>

<sup>1</sup> Biovitis SA, Le Bourg, 15400 Saint-Etienne-de-Chomeil, France

\* Contact : [jonathan.gerbore@sabiovitis.fr](mailto:jonathan.gerbore@sabiovitis.fr)

The evolution of regulations and the emergence of new societal expectations have encouraged farmers to change their practices towards more sustainable production, serving the population, environment and territories. In this context the development of environmentally friendly products, such as biostimulants and biocontrol, that enhance plant tolerance to numerous biotic and abiotic stresses is essential. Among them, the natural potential of products based on microorganisms gains year after year attention.

Indeed, the soil environment is a source of original organisms that are still under exploited to respond to prominent problematics in agriculture, with microorganisms being the widest diversity on Earth, from prokaryotic cells (bacteria, archea) to eukaryotic cells (fungi, protozoa, oomycete) and representing an inexhaustible source of natural solutions to explore in order to develop safe and original products.

Firstly, this presentation will focus on the potential of microorganisms for Biostimulation purposes. Identifying efficient candidates to this end, produce them and develop a stable “living product” is a real challenge, overcome daily by dedicated industries.

Secondly, this presentation will focus on specific experiments and results to characterize the potential of an oomycete strain to fight against Grapevine Trunk Disease, a destructive disease of vineyards worldwide, and especially in Europe where all vine areas are concerned, with an annual cost of more than 1.1 Billion € to replace dead plants.

**Key-words:** Biostimulation, Biocontrol, Grapevine Trunk Disease, Pythium