Second symposium on Plant BioProtection Sciences and Technologies

Marrakesh, November 19-22, 2019

Instructions for abstract submission

The abstract should be written according to the following instructions:

- Abstracts must be submitted before ***June 28th 2019*****.**
- Abstracts must be sent to heyvaert@iar-pole.com as ".docx" file
- Abstracts should not exceed one page
- Title should be written in the Calibri 14 bold police
- Authors should be listed in the Calibri 11 police with the name of the speaker in bold characters
- Affiliation of the authors should be indicated in the Calibri 9 italic police
- Text should be written in the Calibri 10 police, maximum 500 words
- Neither references nor figures are allowed

All files bigger than 5MB would need to be sent via a downloading platform

PLANT BIOPROTECH ABSTRACT FORM

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YOU WISH YOUR PRESENTATION TO APPEAR AS:

- ☐ An oral communication
- ☐ A poster

Scientific abstracts should be printed according to the model below:

Resistance induced by Burkholderia phytofirmans PsJN against Botrytis cinerea in grapevine

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Plant growth-promoting rhizobacteria (PGPR) are of great interest since they are beneficial naturally occurring soil bacteria that colonize plant roots and confer beneficial effects. They can increase yield, stimulate plant growth, reduce pathogen infection, and reduce biotic and abiotic stresses. Among these PGPRs, endophytes are defined as those bacteria that are able to colonize the internal tissue of the plant without causing external signs of infection or negative effects on their host. *Burkholderia phytofirmans* PsJN, classified as an ePGPR, was first isolated from surface-sterilized onion roots infected with the mycorrhizal fungus *Glomus vesiculiferum*. This rhizobacterium significantly promotes growth and protects the grapevine against biotic (grey mould disease) and abiotic (cold) stresses. If mechanisms implied in cold tolerance induced by PsJN were elucidated, the protective effect induced by the PGPR against *B. cinerea* however remains elusive. To unravel the mechanistic of pathways involved in the observed resistance, different traits of the tripartite interaction between *Vitis vinifera* L., *Botrytis cinerea* and *Burkholderia phytofirmans* were highlighted. Among these aspects, direct antimicrobial action of PsJN, the ability of the bacterium to prime defense responses and carbohydrate metabolism of grapevine will be presented.