

Journée des Doctorants

Lundi 14 Mars (9 h -14h)

Amphi Ampère – Bât. Gabriel

Au programme: 8 posters, 11 présentations orales dont1 invité surprise + 1 buffet

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Biostimulation of grapevine: mode of action and possible agronomic uses

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Although there is a growing interest for the use of biostimulants in agriculture, only few methods allowing a precise description of their effects on plants have been reported. In the IRIS+ FUI project, two major and highly different worldwide crops, wheat (annual, monocotyledon) and grapevine (perennial, broadleaf), were chosen to deepen our knowledge of such compounds and explore their potential additional interest. The first objective is to develop in greenhouse conditions, a panel of tools and methods to study the impact of a series of biostimulants on the development (aerial and root system biomass measurements and corresponding phenotyping), and the physiology (photosynthetic activity, primary and secondary metabolites) of both plants. The second objective is to check if biostimulants, via their effects on the plant physiology, could be associated to resistance inducer-based control strategies against fungal aerial diseases. Unlike fungicides which directly target path! ogens, resistance inducers request plant metabolism dedicated to defense, a fitness-costly process. Hence, an improvement of both crops' physiological status by biostimulation is expected to increase its responsiveness to resistance inducer application.

Key words: Biostimulants, elicitors, grapevine, induced resistance, physiology

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