

Master Internship

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The role of induced Volatile Organic Compounds (VOCs) on the host preference of *Halyomorpha halys* (Hemiptera: Pentatomidae)

In the framework of this project, we are looking for a Master student who can carry out this study in the framework of a Master thesis.

Background

The brown marmorated stink bug (BMSB), *Halyomorpha halys* (Stål, 1855) (Hemiptera: Pentatomidae), is an invasive alien species native of East Asia (China, Japan, Korea).

This insect has become one of the main phytophagous pest in orchards such as apple, pear or even peach. In Europe, the first reports date back to 2007 in Switzerland, where the population density has remained very low.

The first discovery of a population settled in Italy dates back to September 2012, in the province of Modena, following which, the species has developed rapidly in the neighboring regions.

This invasive species has become a serious agricultural pest in orchards and various vegetable crops. The economical damage is important with serious consequences for farmers.

H. halys is polyphagous and, according to bibliography, not strongly attracted by plant volatiles alone. We hypothesize that the combination of VOCs with combined factors may affect the attraction of *H. halys* to the plant.

Research questions

The main aim of this project is to understand the host preference of BMSB and if the VOCs emitted by damaged plants or fruits may affect the choice of the most suitable host.

Interested? We look forward to receiving your complete application in PDF format by email only at diana.laforgia@agroscope.admin.ch "

Duration

6-12 months. The starting date is flexible.

Research group

Agroscope, Entomology and Nematology group, Rte de Duillier 50, 1260 Nyon, Switzerland.

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