



## POST-DOC OPPORTUNITY

at the University of Neuchâtel, Switzerland

We are looking for an

### ENTOMOLOGIST/NEMATOLOGIST/CHEMICAL ECOLOGIST

The project will be part of our research on plant-mediated interactions in the rhizosphere and the principal aim is to develop novel methods for the employment of entomopathogenic nematodes against root pests. The successful applicant should have experience with applied entomology, nematology and/or chemical ecology. A strong background in chemistry will be a plus. He or she should be qualified to take on a leadership role in a highly collaborative project. The work requires extensive traveling and fieldwork. The successful candidate will also contribute to a master's course on Integrated Pest Management.

The project follows up on our previous work involving the chemical ecology of plant-herbivore-nematode interactions. See:

- Rasmann, S., T. G. Köllner, J. Degenhardt, I. Hiltbold, S. Töpfer, U. Kuhlmann, J. Gershenzon, and T. C. J. Turlings (2005). Recruitment of entomopathogenic nematodes by insect-damaged maize roots. *Nature* 434: 732-737
- Degenhardt, J., I. Hiltbold, T.G. Köllner, M. Frey, A. Gierl, J. Gershenzon, B.E. Hibbard, M. R. Ellersieck, T. C. J. Turlings (2009). Restoring a maize root signal that attracts insect-killing nematodes to control a major pest. *Proc. Natl. Acad. Science USA* 106: 13213-13218
- Hiltbold I., M. Baroni, S. Toepfer, U. Kuhlmann and T. C. J. Turlings (2010). Selection of entomopathogenic nematodes for enhanced responsiveness to a volatile root signal can help to control a major root pest. *Journal of Experimental Biology* 213: 2417-2423
- Hiltbold I., B.E. Hibbard, B.W. French and T.C.J. Turlings (2012). Capsules containing entomopathogenic nematodes as a Trojan horse approach to control the western corn rootworm. *Plant and Soil* 385: 11-25
- Hiltbold I., G. Jaffuel, T.C.J. Turlings (2015). The dual effects of root cap exudates on nematodes: from quiescence in plant-parasitic nematodes to frenzy in entomopathogenic nematode. *Journal of Experimental Botany* 66: 603-11
- Turlings, T.C.J., I. Hiltbold and S. Rasmann (2012). The importance of root-produced volatiles as foraging cues for entomopathogenic nematodes. *Marschner Review for the "Rhizosphere 3" Special Issue. Plant and Soil* 358: 51-60

The position is available starting November 2015. Apply by sending a brief statement of interest and your CV (with publication list and three references) by email to Prof. Ted Turlings ([ted.turlings@unine.ch](mailto:ted.turlings@unine.ch)). He can also provide further details on the project. Deadline for applications: August 1<sup>st</sup>, 2015