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Research Area

Plant-Insect interactions; Plant defenses; Insect behaviors; Parasitoids;
Biocontrol; Plant volatiles

Education Background

1. PhD 11/2012-08/2017 Institute of Biology, University of Neuchatel,
Neuchatel, Switzerland
2. M.S. 09/2009-07/2012 College of Plant Protection, Northwest A&F
University, Shaanxi, China
3. B.S. 09/2005-07/2009 College of Enology, Northwest A&F
University, Shaanxi, China

Work Experience

08/2018-now Associate Professor in Nanjing Agricultural University

Courses

Insect-Plant Biology (Autumn semester for graduate students)

Research Projects

1. Top talented scientists program of Nanjing Agricultural University, 1

million RMB. Director

Representative Research Achievements

(* corresponding author)

2020

Xu, H.; Zhao, J.; Li, F.; Yan, Q.; Meng, L. & Li, B.* (2020). Chemical polymorphism regulates the attractiveness to nymphs in the bean bug *Riptortus pedestris*. **Journal of Pest Science**, Online. DOI: 10.1007/s10340-020-01268-w.

Xu, H.*; Zhou, G.; Dötterl, S.; Schäffler, I.; Degen, T.; Chen L. & Turlings, T.C.J.* (2020). The distinct role of common cuticular aldehydes as pheromonal cues in two *Cotesia* parasitoids. **Journal of Chemical Ecology**, 46: 128–137.

2019

Xu, H.; Wang, X.; Chi, G; Tan, B. & Wang, J. * (2019). Effects of *Bacillus thuringiensis* genetic engineering on induced volatile organic compounds emission in maize and the attractiveness to a parasitic wasp. **Frontiers in Bioengineering and Biotechnology**, 7.

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2018

Ye, M., Veyrat, N., **Xu, H.**, Hu, L., Turlings, T.C.J. * & Erb, M. * (2018). An herbivore-induced plant volatile reduces parasitoid attraction by changing the smell of caterpillars. **Science Advances**, 4, eaar4767.

Xu H.* & Turlings, T.C.J.* (2018). Plant volatiles as mate finding cues for insects. **Trends in Plant Science**, 23(2): 100~111. (Cover Story)

2017

Desurmont, G.A.; Köhler, A.; Maag, D.; Laplanche, D.; **Xu, H.**; Baumann, J.; Demairé, C.; Devenoges, D.; Glavan, M.; Mann, L. & Turlings, T. (2017). The spitting image of plant defenses: effects of plant secondary chemistry on the efficacy of caterpillar regurgitant as an anti-predator defense. **Ecology and Evolution**, 7, 6304-6313.

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2016

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2015

Erb, M.*; Veyrat, N.; Robert, C. A.; **Xu, H.**; Frey, M.; Ton, J.; & Turlings, T.C.* (2015). Indole is an essential herbivore-induced volatile priming signal in maize. **Nature Communications**, 6, 6273.

Hu, G.L.; Yan, G.; **Xu, H.** & Hua, B.Z.* (2015). Molecular phylogeny of Panorpidae (Insecta: Mecoptera) based on mitochondrial and nuclear genes. **Molecular Phylogenetics and Evolution**, 85, 22-31.

2014

Xu, H.; Veyrat, N.; Degen, T. & Turlings, T.C.J.* (2014). Exceptional use of sex pheromones by parasitoids of the genus *Cotesia*: males are strongly attracted to virgin females, but are no longer attracted to or even repelled by mated females. **Insects**, 5, 499-512.

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