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### 研究方向：

植物昆虫互作；植物防御策略；昆虫行为；寄生蜂；害虫生物防治；植物挥发物

### 教育经历：

1. 2012.11-2017.09：瑞士纳沙泰尔大学；化学生态学；博士研究生；导师，Ted Turlings 教授。
2. 2009.09-2012.07：西北农林科技大学；农业昆虫与害虫防治；农学硕士；导师，花保祯教授。
3. 2005.09-2009.07：西北农林科技大学；葡萄与葡萄酒工程；工学学士。

### 工作经历：

2018.09 — 今 南京农业大学植物保护学院 副教授

### 执教课程：

昆虫与植物互作生物学

### 承担课题：

1. 南京农业大学高层次人才引进启动基金

### 代表性科研成果：

(\* corresponding author)

## 2021

1. Fu W., Liu X., Rao C., Ji R., Bing X., Li J., Wang Y. and **Xu H.** \* (2021) Screening Candidate Effectors of the Bean Bug *Riptortus pedestris* by Proteomic and Transcriptomic Analyses. *Frontiers in Ecology and Evolution*, 9:760368. (IF=4.1)
2. **Xu, H.**; Zhao, J.; Li, F.; Yan, Q.; Meng, L. & Li, B. \* (2021). Chemical polymorphism regulates the attractiveness to nymphs in the bean bug *Riptortus pedestris*. *Journal of Pest Science*, 94: 463–472 (IF=5.9)
3. Wang, Z., Zhu, W., Chen, F., Yue, L., Ding, Y., **Xu, H.**, Sergio R. & Xiao, Z. \* (2021). Nanosilicon enhances maize resistance against oriental armyworm (*Mythimna separata*) by activating the biosynthesis of chemical defenses. *Science of the Total Environment*, 778, 146378. (IF=7.9)

## 2020

4. **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. (IF=2.4)
5. Liu, X. L., Zhang, J., Yan, Q., Miao, C. L., Han, W. K., Hou, W., Yang K., Hansson B. S., Peng Y., Guo J., **Xu H.**, Wang C., Dong S\*., & Knaden, M.\* (2020). The molecular basis of host selection in a crucifer-specialized moth. *Current Biology*, 30(22), 4476-4482. (IF=10.8)

## 2019

6. **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. (IF=5.1)
7. **Xu, H.**; Zhou, G.; Dötterl, S.; Schäffler, I.; von Arx, M.; Röder, G.; Degen, T.; Chen, L. & Turlings, T.C.J. \* (2019). The combined use of an attractive and a repellent sex pheromonal component by a gregarious parasitoid (封面文章). *Journal of Chemical Ecology*, 45: 559–569. (IF=2.4)

## 2018

8. 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 (IF=11.51)
9. **Xu H.\*** & Turlings, T.C.J.\* (2018). Plant Volatiles as Mate Finding Cues for Insects (封面文章). *Trends in Plant Science*, 23(2): 100~111。 (IF=14.1)

## 2017

10. 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. (IF=2.44)
11. **Xu, H.**; Desurmont, G.; Degen, T.; Zhou, G.; Laplanche, D.; Henryk, L. & Turlings, T.C.J.\* (2017). Combined use of herbivore-induced plant volatiles and sex pheromones for mate location in braconid parasitoids (封面文章). *Plant, Cell & Environment*, 40(3): 330~339. (IF=6.17)  
美国普渡大学 Ian Kaplan 教授评论了该文章: “A cry for help or sexual perfumes? An alternative hypothesis for wasp attraction to the scent of caterpillar-wounded plants”。

## 2016

12. Desurmont, G.A.\*; **Xu, H.** & Turlings, T.C., (2016). Powdery mildew suppresses herbivore-induced plant volatiles and interferes with parasitoid attraction in *Brassica rapa*. *Plant, Cell & Environment*, 39, 1920-1927. (IF=6.17)

## 2015

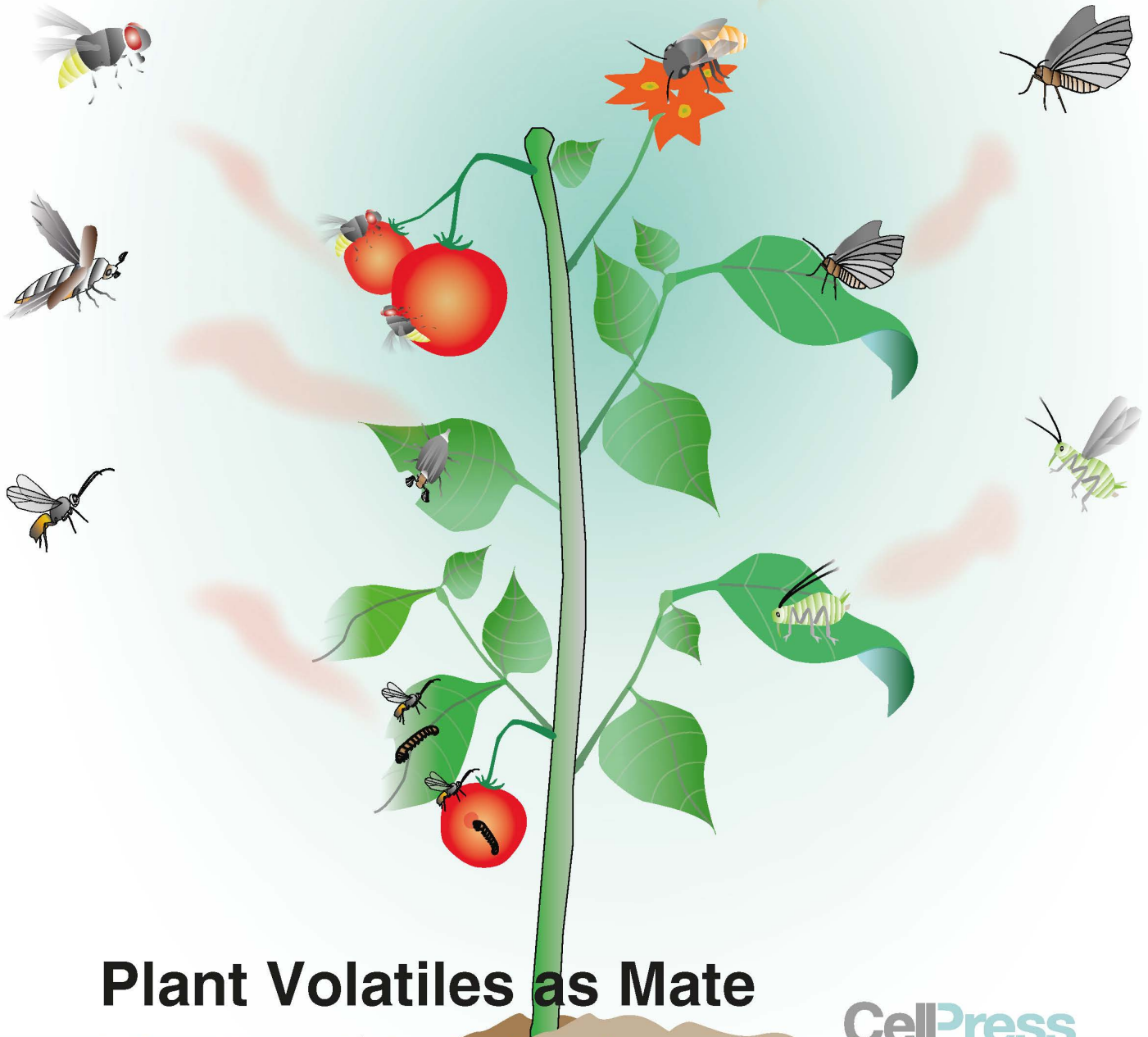
13. Erb, M.\*; Veyrat, N.; Robert, C. A.; **Xu, H.**; Frey, M.; Ton, J.; & Turlings, T.C.\* (2015). Indole is an essential herbivore-induced volatile priming signal in maize. *Nature Communications*, 6, 6273. (IF=11.33)
14. Hu, G.L.; Yan, G.; **Xu, H.** & Hua, B.Z.\* (2015). Molecular phylogeny of Panorpidae (Insecta: Mecoptera) based on mitochondrial and nuclear genes. *Molecular Phylogenetics and Evolution*, 85, 22-31. (IF=3.79)

## 2014

15. **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. (IF=1.85)

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