



吴顺凡

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研究方向：

- (1) 害虫抗药性监测与抗性治理；
- (2) 杀虫剂毒理与抗药性机理；
- (3) 昆虫行为调控与害虫遗传控制。

教育经历：

2008. 09- 2013. 06, 浙江大学, 农业昆虫与害虫防治, 农学博士

2004. 09- 2008. 06, 河南科技大学, 植物保护, 农学学士

工作经历：

2016. 01- 今, 南京农业大学植物保护学院, 副教授, 硕导

2017. 09- 2018. 09, 杜克大学神经生物学系, 访问学者

2014. 09- 2019. 12, 东南大学生命科学研究院, 博士后

2013. 06- 2015. 12, 南京农业大学植物保护学院, 讲师

执教课程：

植物化学保护学

植物保护通论

植保通论实验

农药学研究前沿 (英文课程)

承担课题:

1. 江苏省农业科技自主创新资金 “江苏省农业重大病虫害抗药性监测与早期预警技术研发” (2019-2020) 负责人
2. 国家自然科学基金面上项目 “硫激肽及其受体抑制褐飞虱取食行为的分子机制” (2018-2021) 负责人
3. 国家重点研发计划项目 “华南及西南水稻化肥农药减施技术集成研究与示范” (2018-2020) 子课题负责人
4. 国家自然科学基金青年基金 “褐飞虱 5-羟色胺受体作为新型杀虫剂靶标的药理学研究” (2015-2017) 负责人
5. 国家自然科学基金面上项目 “吡蚜酮对褐飞虱机械感受器的影响及其分子机制研究” (2015-2018) 参加

代表性科研成果:

1. **Shun-Fan Wu**#, Chao Guo#, Huan Zhao#, Meng-Shi Sun, Jie Chen, Cai-Hong Han, Qiong-Lin Peng, Huan-Huan Qiao, Ping Peng, Yan Liu, Sheng-Zhan D. Luo & Yu-Feng Pan*. (2019) Drosulfakinin signaling in fruitless circuitry antagonizes P1 neurons to regulate sexual arousal in *Drosophila*. **Nature Communications**, 10(1): 4770.
2. **Shun-Fan Wu***, Ya-Long Ja, Yi-Jie Zhang, Chung-Hui Yang* (2019). Sweet neurons inhibit texture discrimination by signaling TMC-expressing mechanosensitive neurons in *Drosophila*. **eLife**, 8,

e46165.

3. **Shun-Fan Wu**, Xiao-Min Jv, Jing-Mei Huang, Cong-Fen Gao*. (2019) Molecular features and expression profiles of octopamine receptors in the brown planthopper, *Nilaparvata lugens*. **Pest Management Science** 75(10): 2663-2671.
4. **Shun-Fan Wu**, Bin Zeng, Chen Zheng, Xi-Chao Mu, Yong Zhang, Jun Hu, Shuai Zhang, Cong-Fen Gao*, Jin-Liang Shen. (2018) The evolution of insecticide resistance in the brown planthopper (*Nilaparvata lugens* Stål) of China in the period 2012–2016. **Scientific Reports** 8: 4586.
5. **Shun-Fan Wu**, Jian Li, Yong Zhang, Cong-Fen Gao*. (2018) Molecular characterization and expression profiling of ryanodine receptor gene in the pink stem borer, *Sesamia inferens* (Walker). **Pesticide Biochemistry and Physiology**. 146: 1-6.
6. **Shun-Fan Wu**, Xiao-Min Jv, Jian Li, Guang-Jian Xu, Xiao-Yi Cai, Cong-Fen Gao*. (2017) Pharmacological characterisation and functional roles for egg-laying of a β -adrenergic-like octopamine receptor in the brown planthopper *Nilaparvata lugens*. **Insect Biochemistry and Molecular Biology**. 87: 55-64.
7. **Shun-Fan Wu**, Xi-Chao Mv, Yao-Xue Dong, Li-Xiang Wang, Qi Wei, Cong-Fen Gao*. (2017) Expression pattern and pharmacological characterisation of two novel alternative splice variants of the glutamate-gated chloride channel in the small brown planthopper

Laodelphax striatellus. **Pest Management Science**. 73: 590-597.

8. **Shun-Fan Wu**, Hua-Yang Yu, Tian-Tian Jiang, Cong-Fen Gao*, Jin-Liang Shen. (2015) Superfamily of genes encoding G protein-coupled receptors in the diamondback moth *Plutella xylostella* (Lepidoptera: Plutellidae). **Insect Molecular Biology**. 24: 442-453.
9. **Shun-Fan Wu**, Gang Xu, Gong-Yin Ye*. (2015) Characterization of a tyramine receptor type 2 from hemocytes of rice stem borer, *Chilo suppressalis*. **Journal of Insect Physiology**. 75: 39-46.
10. **Shun-Fan Wu**, Gang Xu, David Stanley, Huang Jia*, Gong-Yin Ye*. (2015) Dopamine modulates hemocyte phagocytosis via a D1-like receptor in the rice stem borer, *Chilo suppressalis*. **Scientific Reports**. 5: 12247.
11. **Shun-Fan Wu**, Gang Xu, Yi-Xiang Qi, Ren-Ying Xia, Huang Jia*, Gong-Yin Ye*. (2014) Two splicing variants of a novel family of octopamine receptors with different signaling properties. **Journal of Neurochemistry**. 129: 37-47.
12. **Shun-Fan Wu**, Fei Wang, Jia Huang, Qi Fang, Zhi-Cheng Shen, Gong-Yin Ye*. (2013) Molecular and cellular analyses of a ryanodine receptor from hemocytes of *Pieris rapae*. **Developmental Comparative and Immunology**. 41: 1-10.
13. **Shun-Fan Wu**, Fang-Da Sun, Yi-Xiang Qi, Yao Yao, Qi Fang, Huang Jia, David Stanley, Gong-Yin Ye*. (2013) Parasitization by *Cotesia chilonis*

influences gene expression in fatbody and hemocytes of *Chilo suppressalis*. **PLoS ONE** 8, e74309.

14. **Shun-Fan Wu**, Jia Huang, Gong-Yin Ye*. (2013) Molecular cloning and pharmacological characterization of a tyramine receptor from the rice stem borer, *Chilo suppressalis* (Walker). **Pest Management Science**. 69: 126-134.

15. **Shun-Fan Wu**, Yao Yao, Jia Huang, Gong-Yin Ye*. (2012) Characterization of a β -adrenergic-like octopamine receptor from the rice stem borer (*Chilo suppressalis*). **Journal of Experimental Biology**. 215: 2646-2652.

16. **吴顺凡**, 徐刚, 齐易香, 夏仁英, 黄佳*, 叶恭银*. 昆虫多巴胺及其受体的研究进展。昆虫学报 56: 1342-1358, 2013.

17. **吴顺凡**, 姚洪渭, 卢增斌, 李秀花, 黄佳, 叶恭银*. 稻田常用农药对四地区二化螟盘绒茧蜂雌成蜂的触杀毒性。植物保护学报 39: 369-375, 2012.

18. **吴顺凡**, 郭建洋, 黄佳*, 叶恭银. 昆虫体内章鱼胺和酪胺的研究进展。昆虫学报 53: 1157-1166, 2010.

社会服务工作:

中国昆虫学会药剂毒理专业委员会委员

昆虫学和农药学 SCI 期刊 IBMB, IMB, PMS 以及 PBP 等杂志审稿人

荣誉奖励:

第一届赵善欢奖学奖教基金优秀青年学术奖 2014 年 8 月;

浙江省优秀毕业生

2013 年 4 月;

博士研究生国家奖学金

2011-2012 年;

写给考生的话

“热烈欢迎报考本实验室研究生，利用实验室研究平台与资源，帮助解决基础及应用科学问题，为人民服务、实现自我价值而快乐奋斗。”