

# CURRICULUM VITAE

Personal Information			
Name	Changying Niu	Gender	Female
Position Title		Professor, PhD supervisor	
Working Department		College of Plant Science & Technology, Huazhong Agricultural University	
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Research Interest			
<ul style="list-style-type: none"> <li>▪ Insect Physiology &amp; Molecular Biology</li> <li>▪ Sustainable Management of Tephritid pests</li> <li>▪ Environmental-friendly Pest Control Strategies and Application</li> </ul>			
Professional Memberships			
<ul style="list-style-type: none"> <li>▪ Member of International Fruit Fly Steering Committee</li> <li>▪ Specialist in Tephritid pests of Ministry of Agriculture of China</li> <li>▪ Fellow of the Hubei Province Entomological Society</li> </ul>			
Other Roles			
<b>Teaching Duties</b>			
<ul style="list-style-type: none"> <li>▪ General Entomology, Insect Physiology, Insect Physiology and Biochemistry Experimental techniques</li> </ul>			
Education & Working Experience			
<ul style="list-style-type: none"> <li>▪ 2010-Ongoing Professor, Huazhong Agricultural University, China</li> <li>▪ 2002-2009 Associate Professor, Huazhong Agricultural University, China</li> <li>▪ 2004-2005 Visiting Scholar in The University of Queensland, Australia</li> <li>▪ 2000-2002 Lecturer, Huazhong Agricultural University, China</li> <li>▪ 1997-2000 Doctor of Entomology, Zhejiang University, China</li> <li>▪ 1992-1995 Master of Entomology, Huazhong Agricultural University, China</li> </ul>			



- 1988-1992 Bachelor of Plant Protection, Huazhong Agricultural University, China

## Publications

1. Awawing A, Andongma, Lun Wan, Yong-Cheng Dong, Ping li, Nicolas Desneux, Jennifer A. White, **Chang-Ying Niu**<sup>✉</sup>. Pyrosequencing reveals a shift in symbiotic bacteria populations across life stages of *Bactrocera dorsalis*. *Scientific Reports* 2015, 5: 9470.
2. Yong-Cheng Dong, Lun Wan, Rui Pereira, Nicolas Desneux, **Chang-Ying Niu**<sup>✉</sup>. Feeding and mating behaviour of Chinese citrus fly *Bactrocera minax* (Diptera, Tephritidae) in the field. *Journal of Pest Science* 2014, 87(4): 647-657.
3. Giovanni Benelli, Kent M. Daane, Angelo Canale, **Chang-Ying Niu**, Russell H. Messing, Roger I. Vargas. Sexual communication and related behaviours in Tephritidae: current knowledge and potential applications for Integrated Pest Management. *Journal of Pest Science* 2014, 87: 385-405.
4. Yong-Cheng Dong, Nicolas Desneux, Chao-Liang Lei, **Chang-Ying Niu**<sup>✉</sup>. Transcriptome characterization analysis of *Bactrocera minax* and new insights into its pupal diapause development with gene expression analysis. *International Journal of Biological Sciences* 2014, 10: 1051-1063.
5. Zhi-Jian Wang, Yong-Cheng Dong, Nicolas Desneux, **Chang-Ying Niu**<sup>✉</sup>. RNAi Silencing of the HaHMG-CoA Reductase Gene Inhibits Oviposition in the *Helicoverpa armigera* Cotton Bollworm. *PLoS One* 2013, 8(7): e67762.
6. Yong-Cheng Dong, Zhi-Jian Wang, Anthony R. Clarke, Rui Pereira, Nicolas Desneux, **Chang-Ying Niu**<sup>✉</sup>. Pupal diapause development and termination is driven by low temperature chilling in *Bactrocera minax*. *Journal of Pest science* 2013, 86(3): 429-436.
7. Xiao-Wei Zhou, **Chang-Ying Niu**<sup>✉</sup>, Peng Han, and Nicolas Desneux. Field evaluation of attractive lures for the fruit fly *Bactrocera minax* (Diptera: Tephritidae) and their potential use in spot sprays in Hubei province (China). *Journal of Economic Entomology* 2012, 105(4): 1277-1284.
8. Peng Han, **Chang-Ying Niu**<sup>✉</sup>, Antonio Biondi, Nicolas Desneux. Does transgenic Cry1Ac + CpTI cotton pollen affect hypopharyngeal gland development and midgut proteolytic enzyme activity in the honey bee *Apis mellifera* L. (Hymenoptera, Apidae)? *Ecotoxicology* 2012, 21: 2214-2221
9. Peng Han, Xu Wang, **Chang-Ying Niu**<sup>✉</sup>, Yong-Cheng Dong, Jing-Quan Zhu, Nicolas Desneux. Population dynamics, phenology, and overwintering of *Bactrocera dorsalis* (Diptera: Tephritidae) in Hubei Province, China. *Journal of Pest Science* 2011, 84: 289-295.
10. Peng Han, **Chang-Ying Niu**<sup>✉</sup>, Chao-Liang Lei, Jin-Jie Cui, Nicolas Desneux. Use of an innovative T-tube maze assay and the proboscis extension response assay to assess sublethal effects of GM products and pesticides on learning capacity of the honey bee *Apis mellifera* L. *Ecotoxicology* 2010, 19: 1612-1619.
11. Peng Han, **Chang-Ying Niu**<sup>✉</sup>, Chao-Liang Lei, Jin-Jie Cui, Nicolas Desneux. Quantification of toxins in a Cry1Ac + CpTI cotton cultivar and its potential effects on the honey bee *Apis mellifera* L. *Ecotoxicology* 2010, 19: 1452-1459.
12. Yi-Peng Xu, Zheng-Pei Ye, **Chang-Ying Niu**, Yan-Yuan Bao, Wen-Bing Wang, Wei-De Shen, and Chuan-Xi Zhang. Comparative Analysis of the Genomes of *Bombyx mandarina* and *Bombyx mori* Nucleopolyhedroviruses. *The Journal of Microbiology* 2010, 48(1): 102-

13. Li-Zhen Chen, Jin-Jie Cui, Wei-Hua Ma, **Chang-Ying Niu**, Chao-Liang Lei. Pollen from Cry1Ac/CpTI-transgenic cotton does not affect the pollinating beetle *Haptoncus luteolus*. *Journal of Pest Science* 2010, 84: 9-14.
14. Li-Zhen Chen, Wei-Hua Ma, Xiao-Ping Wang, **Chang-Ying Niu**, Chao-Liang Lei. Analysis of pupal head proteome and their alterations in diapausing pupae of *Helicoverpa armigera*. *Journal of Insect Physiology* 2010, 56(3): 247-252
15. Yun-Xia Cheng, Li-Zhi Luo, Xing-Fu Jiang, Lei Zhang, **Chang-Ying Niu**. Expression of pheromone biosynthesis activating neuropeptide and its receptor (PBANR) mRNA in adult female *Spodoptera exigua* (Lepidoptera: Noctuidae). *Archives of Insect Biochemistry and Physiology* 2010, 75(1): 13-27.
16. Xue-Zhen Li, **Chang-Ying Niu**✉, Qiu-Ying Huang, Chao-Liang Lei, David W. Stanley. Life cycle of *Chetoneura shennonggongensis* (Diptera: Keroplatidae: Keroplatinae) from Jiangxi Province, China. *Insect Science* 2009, 00:1-9
17. Zhong-Jiu Jiao, **Chang-Ying Niu**✉, Xian-Wei Liu, Chao-Liang Lei, Wen-Xuan Bi. Descriptions of Chinese species of the subgenus *Diestrammena* (*Gymnaeta*) Adelung (Orthoptera: Rhaphidophoridae). *Zootaxa* 2008, 1917: 55-60
18. Daliton De Souza Amorim, **Chang-Ying Niu**✉, Xue-Zhen Li, Chao-Liang Lei, Arthur K. Clarke *Chetoneura shennonggongensis*, a new species of cave-dwelling Keroplatini from China (Diptera: Keroplatidae), with a discussion of the position of *Chetoneura*. *Zootaxa* 2008, 1716: 59-68.
19. **Changying Niu**✉, Chaoliang Lei and David J. Merritt. Temperature-dependence of bioluminescence of the Australian glow-worm *Arachnocampa flava* Harrison (Diptera: Keroplatidae). *Luminescence* 2008, 23:86
20. Jian Wang, Fen Zhu, Xin-Miao Zhou, **Chang-Ying Niu**, Chao-Liang Lei. Repellent and fumigant activity of essential oil from *Artemisia vulgaris* to *Tribolium castaneum* (Herbst) (Coleoptera: Tenebrionidae). *Journal of Stored Products Research* 2006, 42(3): 339-347.
21. Yong Jiang, Chao-Liang Lei, **Chang-Ying Niu**, Zhong-Ling Zhang. Semiochemicals from ovaries of gravid females attract ovipositing female houseflies, *Musca domestica*. *Journal of Insect Physiology* 2002, 48: 945-950.

## Patents

- National Application patent: The design, producing and application of protein bait for *Bactrocera minax*. Publication number: CN101878781 A
- Utility model patent: The device for potential risk analysis of genetically modified crops and pesticides on beneficial insect honeybees. Publication number: CN201682891 U
- Utility model patent: Special traps for *Bactrocera minax*. Publication number: CN201854616 U

## Grants and Awards

- Special Fund for Agro-scientific Research in the Public Interest: Transformation and utilization of crop straw. PI.
- Fundamental Research Funds for Central Universities: Environmental-friendly pest management and demonstration against Tephritids. PI.
- China-Thailand International Cooperative Projects: Biocontrol of China-Thai Tephritid Pests Towards Area-Wide Integrated Pest Management. PI.
- China-France International Cooperative Projects: Structure, strength and invisibility of aphid food webs (APHIWEB). PI.
- National Natural Science Foundation of China: The molecular regulation mechanism of 20-Hydroxyecdysone on pupal diapause termination of *Bactrocera minax*. PI.
- National Natural Science Foundation of China: HaHMG-CoA reductase gene regulates *Helicoverpa armigera* Cotton Bollworm reproductive trade-off after phototropic response. PI.
- International Cooperative Innovation Projects of Huazhong Agricultural University: Molecular regulation of pupal diapause of *Bactrocera minax*. PI.
- National Agricultural Technology Extension Service Center Funding of Ministry of Agriculture of China: The identification and risk analysis of quarantine pests. PI.
- Agricultural Pest Monitoring and Control Projects of Ministry of Agriculture of China: Monitoring and management of *Bactrocera minax* and *Bactrocera dorsalis*. PI.
- United Nations International Cooperative Projects: Behavior and integrated control strategies on *Bactrocera minax*. PI.

