

Curriculum Vitae

Personal Information

Shouhui Wei

PhD, Professor in Weed Science
Institute of Plant Protection
Chinese Academy of Agricultural Sciences
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Education

1992-1995	Yangtze University	Plant Protection
1998-2001	Nanjing Agricultural University	Weed Science/MS
2001-2004	Nanjing Agricultural University	Weed Science/PhD

Professional Experience

2022-present	Institute of Plant Protection, Chinese Academy of Agricultural Sciences	Professor
2010-2021	Institute of Plant Protection, Chinese Academy of Agricultural Sciences	Associate Professor
2013-2014	Seed Biotechnology Center, UC Davis	Visiting Scientist
2004-2009	Institute of Plant Protection, Chinese Academy of Agricultural Sciences	Assistant Professor
1995-1998	Institute of Plant Protection, Hubei Academy of Agricultural Sciences	Technician

Research Interests

Risk analysis, identification and management of invasive plants; invasion biology of exotic weeds; weed DNA barcoding; morphology, ecology, biochemistry and genetics of weed seed dormancy and germination; weed-crop interaction and modeling; weed population dynamics and monitoring; herbicide resistant weeds and molecular biology; Integrated weed management.

Publications and Papers

1. Long Yang, Hongjuan Huang, Muhammad Saeed, Zhaofeng Huang, Cuilan Jiang, Chaoxian Zhang, Muhammad Ishfaq Khan, Imtiaz Khan, **Shouhui Wei***. Anatomical study of seed and fruit morphology of an invasive weed buffalobur (*Solanum rostratum* Dunal). Pakistan Journal of Botany,

2019, 51(1): 241-246.

2. Dandan Zhao, Xu Wang, Jingchao Chen, Zhaofeng Huang, Heqiang Huo, Cuilan Jiang, Hongjuan Huang, Chaoxian Zhang, **Shouhui Wei***. Selection of reference genes for qPCR normalization in buffalobur (*Solanum rostratum* Dunal). Scientific Reports, 2019, 9: 6948.
3. Hong-juan Huang, Tie-jun Ling, Hui-min Wang, Ao-cheng Cao, Chao-xian Zhang & **Shou-hui Wei***. One new flavonoid from *Solanum rostratum*. Natural Product Research, 2017, 31(15): 1831-1835.
4. Jietian Su, Cuilan Jiang, Zhaofeng Huang, Yuting Ma, Shuaishuai Meng, Bin Song, **Shouhui Wei***, Hongjuan Huang*. Identification of *Alopecurus myosuroides* and *A. japonicus* by DNA barcode. Plant Protection, 2021, 47(3): 170-176.
5. Yixiao Zhang, **Shouhui Wei**, Cuilan Jiang, Zhaofeng Huang, Jietian Su, Shuaishuai Meng, Xiaopeng Yun, Quanjiang Bai, Wenlong Wu, Hongjuan Huang. Genetic diversity of *Orobancha cernua* Loeffling populations in sunflower fields based on DNA barcoding. Plant Protection, 2022, 48(2): 24-32.
6. **Shouhui Wei**, Chaoxian Zhang, Yan Liu, Hongjuan Huang, Qinghui Meng, Hailan Cui, Xiangju Li. Invasive weed species buffalobur (*Solanum rostratum*) and its risk assessment. Chinese Agricultural Science Bulletin, 2007, 23(3): 347-351 (In Chinese).
7. Dandan Zhao, Long Yang, Zhaofeng Huang, Hongjuan Huang, Cuilan Jiang, **Shouhui Wei***. Determination of endo-beta-mannanase activity in seeds of *Solanum rostratum* by gel diffusion assay. Plant Protection, 2020, 46(2): 153-157.
8. Xinguo Wang, Dandan Zhao, Hongjuan Huang, Zhaofeng Huang, Jingchao Chen, Huimin Wang, Chaoxian Zhang, **Shouhui Wei***. Detection of DOG1 gene expression in *Solanum rostratum* by double standard curve method. Plant Protection, 2018, 44(1): 121-126.
9. Xu Wang, Xinguo Wang, Chaoxian Zhang, Hongjuan Huang, **Shouhui Wei***. VIGS vector construction of PDS gene in *Solanum rostratum*. Plant Protection, 2016, 42(4): 137-141.
10. **Shouhui Wei**, Chaoxian Zhang, Xuezheng Chen, Xiangju Li, Biaofeng Sui, Hongjuan Huang, Hailan Cui, Yan Liu, Meng Zhang, and Feng Guo. Rapid and effective methods for breaking seed dormancy in buffalobur (*Solanum rostratum*). Weed Science, 2010, 58(2): 141-146.
11. **Shouhui Wei**, Chaoxian Zhang, Xiangju Li, Hailan Cui, Hongjuan Huang, Biaofeng Sui, Qinghui Meng, and Hongjun Zhang. Factors affecting buffalobur (*Solanum rostratum*) seed germination and seedling emergence. Weed Science, 2009, 57(5): 521-525.
12. Shaoyi Zhang, Chaoxian Zhang, Lianxi Yang, Zhiguo Shi, Hongjuan Huang, Xiangju Li, **Shouhui Wei***. Efficacy evaluation of foliar-applied herbicides on *Solanum rostratum*. Plant Protection, 2012, 38(5): 170-173.
13. Shaoyi Zhang, Chaoxian Zhang, Jinxin Wang, Hongjuan Huang, Jianhua Zhang, Aocheng Cao, **Shouhui Wei***. Study on the biological activity of 5 soil-applied herbicides against *Solanum rostratum*. Acta Agriculturae Boreali-Sinica, 2012, 27: 382-385.
14. Shaoyi Zhang, **Shouhui Wei**, Xiangju Li, Zhiguo Shi, Hongjuan Huang, Xinming Cao, Jinxin Wang, Chaoxian Zhang. A Study on the biological activity of 21 foliar-applied herbicides against *Solanum rostratum*. Acta Agriculturae Universitatis Jiangxiensis, 2011, 33(6): 1077-1081.
15. **Shouhui Wei**. Genetic regulation of seed dormancy and germination in *Solanum rostratum*. The 27th Asia-Pacific Weed Science Society Conference. Sep 3-6, 2019, Kuching, Malaysia.
16. Zhaofeng Huang, Hailan Cui, Chunyu Wang, Tong Wu, Chaoxian Zhang, Hongjuan Huang, **Shouhui Wei***. Investigation of resistance mechanism to fomesafen in *Amaranthus retroflexus* L.

- Pesticide Biochemistry and Physiology, 2020, 165: 104560.
17. Zhaofeng Huang, Biaofeng Sui, Chaoxian Zhang, Hongjuan Huang, **Shouhui Wei***. The basis of resistance mechanism to mesosulfuron-methyl in Tausch's goatgrass (*Aegilops tauschii* Coss.). Pesticide Biochemistry and Physiology, 2019, 155: 126-131.
 18. Heqiang Huo, **Shouhui Wei**, Kent J. Bradford. *DELAY OF GERMINATION1 (DOG1)* regulates both seed dormancy and flowering time through microRNA pathways. PNAS, 2016, 113(15): E2199-E2206.
 19. **Shouhui Wei**, Chaoxian Zhang, Chunhua Li, Yan Liu, Hongjuan Huang, Qinghui Meng, Xiangju Li. 2008. Seed germination behavior of a worst exotic weed species of Johnsongrass (*Sorghum halepense*). Scientia Agricultura Sinica 41: 116-121.
 20. **Shouhui Wei**, Zhe Qu, Chaoxian Zhang, Yongjun Li, Xiangju Li. Invasive alien species giant ragweed (*Ambrosia trifida* L.) and its risk assessment. Plant Protection, 2006, 32(4): 14-19.

Awards

1. 2nd award. High effective prevention and control technologies of disastrous weeds in oilseed rape fields. Science and Technology Award of Hubei Province. 2009.
2. 2nd award. Rate reducing and efficiency enhancing control technologies for disastrous weeds in different rice planting patterns. Science and Technology Award of Hubei Province. 2017.
3. 1st award. Development and extension of safe and high efficient herbicide application technology in wheat-maize cropping system. Science and Technology Award of Hebei Province. 2010.

Patents

1. Zhaofeng Huang, **Shouhui Wei**, Hongjuan Huang, Chaoxian Zhang, *et al.* A detection method and kit for *Amaranthus retroflexus* resistant to PPO-inhibiting herbicides. China National Invention Patent. ZL 201910116380.8. 2021-2-2.
2. Sheng Qiang, Zheng Zhang, **Shouhui Wei**, Ruhai Li, *et al.* A ecological-based weed control method. China National Invention Patent. ZL 201310476335.6. 2015-5-27.

Standards

1. Wenda Zhu, **Shouhui Wei**, Hongjun Zhang, *et al.* Technical regulation for integrated control of main diseases, insects and weeds on pollution-free oilseed rape. Hubei Province Standard. DB42/T 518-2008.
2. Wenda Zhu, **Shouhui Wei**, Aocheng Cao, *et al.* Technical regulation for integrated control of main diseases, insects and weeds on paddy rice. Hubei Province Standard. DB42/T 710-2011.
3. Hailan Cui, Xiangju Li, Huilin Yu, **Shouhui Wei**, Zhaofeng Huang, Dan Li. Guideline for the detection of *Descurainia sophia* (L.) Webb ex Prantl target-site resistance to acetolactate synthase inhibiting herbicides. Chinese Agricultural Standard. NY/T 3285-2018.
4. Hailan Cui, Xiangju Li, Huilin Yu, **Shouhui Wei**, Zhaofeng Huang, Dan Li. Guideline for the detection of *Capsella bursa-pastoris* (L.) Medik. target-site resistance to acetolactate synthase inhibiting herbicides. Chinese Agricultural Standard. NY/T 3286-2018.
5. Hailan Cui, Xiangju Li, Zhaofeng Huang, Jingjing Wang, Huilin Yu, **Shouhui Wei**. Guideline for the detection of *Alopecurus japonicus* Steud. target-site resistance to ACCase inhibiting herbicides.

Chinese Agricultural Standard. NY/T 3287-2018.

6. Hailan Cui, Xiangju Li, Zhaofeng Huang, Jingjing Wang, **Shouhui Wei**, Huilin Yu. Guideline for the detection of *Beckmannia syzigachne* (Steud.) Fernald target-site resistance to ACCase inhibiting herbicides. Chinese Agricultural Standard. NY/T 3288-2018.

Other Information

Have a good command of both spoken and written English;

Proficient in use of Office (Including Word, Excel, PowerPoint, Access), SPSS, SigmaPlot, Origin, and Fireworks;

Flexibility and willingness to support others or work as part of an expert group;

Have good working knowledge of weed and seed identification;

Ten more years of practical experiences in weed survey.