

Fei Chen



Areas of Research

Genomics of horticultural plants, horticultural cloud

Contact Information

Office location: Room 102, North administration building, 1 Weigang Rd, NAU, Nanjing

Phone: 18061284509

Email address: feichen@njau.edu.cn

Research Interests

1, High-throughput approaches for horticultural plant studies

I am interested in using high-throughput techniques to decode the evolutionary mechanisms of major traits of horticultural plants. These include the genomics, transcriptomics, metabolomics, and epigenomics, phenomics, etc. Horticultural plants are special in many aspects and are ideal model plants for investigations.

2, Horticultural cloud

I have launched the first base of horticultural plants (<http://eplant.njau.edu.cn/hortdb>). It is intended to be the a cloud that harbour the most data and built-in tools for online computing.

Education Background

Bachelor: Nanjing Agricultural University

PhD: Nanjing Agricultural University

Work experience

Advanced research fellow, Fujian Agriculture and Forestry University, 2016.05-2019.04

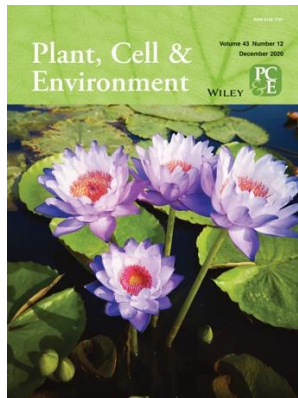
Lecturer, Nanjing Agricultural University, 2019.05-

Honors and Awards

Associate Editor of Horticulture Research

Selected Publication

- 1、 Zhang L.#*, **Chen F#**, Zhang X#, et al. [The water lily genome and the early evolution of flowering plants](#). *Nature* 577, 79-84(2020).
- 2、 Zhang L.#*, Wu S#, Chang X, Wang X, Zhao Y, Xia Y, Trigiano RN, Jiao Y*, **Chen F***. [The ancient wave of polyploidization events in flowering plants and their facilitated adaptation to environmental stress](#). *Plant, Cell & Environment* 2020.



- 3、 **Chen F**, Hu Y, Vannozzi A, Wu K, Cai H, Qin Y, Mullis A, Lin Z, Zhang L*. [The WRKY transcription factor family in model plants and crops](#). *Critical Reviews in Plant Sciences* 2018. DOI: 10.1080/07352689.2018.1441103.
- 4、 Liangsheng Zhang#, **Chen F#**, Guo-Qiang Zhang, Yong-Qiang Zhang, Shance Niu, Jin-Song Xiong, Zhenguo Lin, Zong-Ming (Max) Cheng, Zhong-Jian Liu. [Origin and mechanism of crassulacean acid metabolism in orchids as implied by comparative transcriptomics and genomics of the carbon fixation pathway](#). *The Plant Journal* 2016, 86: 175-185.
- 5、 **Chen F***, Song Y, Li X, Chen J, Mo L, Zhang X, Lin Z, Zhang L*. [Genome sequences of horticultural plants: past, present, and future](#). *Horticulture Research* 2019, 6:112.
- 6、 Yang X, Yue Y, Li H, Ding W, Chen G, Shi T, Chen J, Park MS*, **Chen F***, Wang L*. [The chromosome-level quality genome provides insights into the evolution of the biosynthesis genes for aroma compounds of *Osmanthus fragrans*](#). *Horticulture Research* 2018, 5:72
- 7、 Yu C, Qiao G, Qiu W, Yu D, Zhou S, Shen Y, Yu G, Jiang J, Han X, Liu M, Zhang L, **Chen F***, Chen Y*, Zhuo R*. [Molecular breeding of water lily:](#)

engineering cold stress tolerance into tropical water lily. *Horticulture Research* 2018, 5:73

- 8、 Xu M#, **Chen F#**, Qi S, Zhang L, Wu S. Loss or duplication of key regulatory genes coincides with environmental adaptation of stomatal complex in *Nymphaea colorata* and *Kalanchoe laxiflora*. *Horticulture Research* 2018, 5: 42.
 - 9、 **Chen F**, Liu X, Yu C, Chen Y, Tang H, Zhang L. Water lilies as emerging models for Darwin's abominable mystery. *Horticulture Research*. 4,17051(2017)
-

Reference

<http://eplant.njau.edu.cn/feichen>