Resume of Zhihong Gao

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Qualifications

Ph.D. Horticulture, China Agricultural University, Beijing, China 2003

Master Degree, Horticulture, Nanjing Agricultural University, Nanjing, China 1997

Professional Experience

Professor, College of Horticulture, Nanjing Agricultural University, January 2013 – present.

Associate Professor, College of Horticulture, Nanjing Agricultural University, April 2004 – December 2012.

Lecturer, College of Horticulture, Nanjing Agricultural University, December 1999 – March 2004.

Scholar, University of Sydney in Australia, February 2004 – June 2004.

Scholar, Chiba University in Japan, April 2006 – March 2007.

Assistant Lecturer, College of Horticulture, Nanjing Agricultural University, August 1997 – November 1999.

Research interests:

I am interested in germplasm collection and evaluation, the molecular mechanism of pistil abortion and the seasonal dormancy release of Japanese apricot (*Prunus mume* Sieb. et Zucc). We have established the National field GenBank for Japanese apricot.

Selected Publication (2012-present)

1. Jie Gao, Xiaopeng Ni, Hantao Li, Faisal Hayat1, Ting Shi, **Zhihong Gao***. miR169 and PmRGL2 synergistically regulate the NF-Y complex to activate dormancy release in Japanese apricot (Prunus mume Sieb. et Zucc.). Plant Molecular Biology,2020,https://doi.org/10.1007/s11103-020-01070-3

2. Ting Shi, Shahid Iqbal , Aliya Ayaz, Yang Bai, Zhenpeng Pan, Xiaopeng Ni, Faisal Hayat, Muhammad Saqib Bilal, Muhammad Khuram Razzaq and **Zhihong Gao***. Analyzing Di_erentially Expressed Genes and Pathways Associated with Pistil Abortion in Japanese Apricot via RNA-Seq，Genes，2020，11, 1079

3. Shahid Iqbal， Zhenpeng Pan， XinxinWu，Ting Shi，Xiaopeng Ni，Yang Bai， Jie Gao，Muhammad Khalil-ur-Rehman，**Zhihong Gao***. Genome-wide analysis of PmTCP4 transcription factor binding sites by ChIP-Seq during pistil abortion in Japanese apricot. The Plant Genome,2020;e20052.https://doi.org/10.1002/tpg2.20052

4. Shahid Iqbal, Xiaopeng Ni, Muhammad Saqib Bilal, Ting Shi, Muhammad Khalil-ur-Rehman, Pan Zhenpeng, Gao Jie, Muhammad Usman, **Zhihong Gao*** Identification and expression profiling of sugar transporter genes during sugar accumulation at different stages of fruit development in apricot. Gene, 2020, 742,144584(IF:2.623)

5. Xinxin Wu, Yong Zhou, Dan Yao, Shahid Iqbal, **Zhihong Gao***, Zhen Zhang. DNA methylation of LDOX gene contributes to the floral colour variegation in peach. Journal of Plant Physiology 2020, 246-247: 153116.（IF：2.825）

6. Ting Shi, Wen Jieluo, Han Taoli, Xuexi Huang, Zhaojun Ni, Haidong Gao, Shahid Iqbal, **Zhihong.Gao*** Association between blooming time and climatic adaptation in *Prunus mume*. *Ecol Evol*. 2020，10:292-306.

7. Song Xue, Ting Shi, Wenjie Luo, Xiaopeng Ni, Shahid Iqbal, Zhaojun Ni, Xiao Huang, Dan Yao,Zhijun Shen and **Zhihong Gao***. Comparative analysis of the complete chloroplast genome among Prunus mume, P. armeniaca, and P. salicina. Horticulture Research (2019) 6:89

8. Xinxin Wu, Ting Shi, Shahid Iqbal, Yong Zhang, Lin Liu and **Zhihong Gao***. Genome-wide discovery and characterization of flower development related long non-coding RNAs in Prunus mume. BMC Plant Biology, 2019, 19:64 https://doi.org/10.1186/s12870-019-1672-7

9. TingShi, JieSuna, XinxinWu, JinyangWeng, PengkaiWang, HongliQie, YinghongHuang, HuakunWangb, **ZhihongGao***. Transcriptome analysis of Chinese bayberry (MyricarubraSieb.etZucc.) fruit treated with heat and 1-MCP. Plant Physiology and Biochemistry, 2018, 133, 40-49

10. Shaolei Guo, Shahid Iqbal, Ruijuan Ma, Juan Song, **Mingliang Yu***, **Zhihong Gao***. High-density genetic map construction and quantitative trait loci analysis of the stony hard phenotype in peach based on restriction-site associated DNA sequencing. BMC Genomics, 2018, 19:612
11. Xiaoming Lou, Huakun Wang, Xiaopeng Ni, **Zhihong Gao***, Shahid Iqbala Integrating proteomic and transcriptomic analyses of loquat (Eriobotrya japonica Lindl.) in response to cold stress. Gene, 2018(677:57-65
12. Xiaopeng Ni, Song Xue, Wanxu W ang, Zhaojun Ni, Muhammad Khalil-ur-Rehman and **Zhihong Gao*.** Candidate genes associated with red colour formation revealed by comparative genomic variant analysis of red- and green-skinned fruits of Japanese apricot (Prunus mume) PeerJ 2018, 6: e4625; DOI 10.7717/peerj.4625
13. Lin Lv, Ximei Huo, Luhua Wen, **Zhihong Gao***, Khalil-ur-Rehman M. Isolation and Role of PmRGL2 in GA-mediated Floral Bud Dormancy Release in Japanese Apricot (Prunus mume Siebold et Zucc.). Front. Plant Sci. 2018, 9:27. doi: 10.3389/fpls.2018.00027
14. Wanxu Wang, Ting Shi, Xiaopeng Ni, Yanshuai Xu, Shenchun Qu, **Zhihong Gao *.** The role of miR319a and its target gene TCP4 in the regulation of pistil development in Prunus mume. Genome, 2018, 61: 43–48 dx.doi.org/10.1139/gen-2017-0118
15. Xianbin Gu, **Zhihong Gao***, Yichao Yan, Xiuyun Wang, Yushan Qiao,Yahua Chen* RdreB1BI enhances drought tolerance by activating AQP-related genes in transgenic strawberry. Plant Physiology and Biochemistry, 2017,119:33-42
16. Xinxin Wu, Qinghua Gong, Xiaopeng Wu, **Zhihong Gao*.** UFGT: The Key Enzyme Associated with the Petals Variegation in Japanese Apricot. Front. Plant Sci. 8:108.doi: 10.3389/fpls.2017.0010
17. Huang Zhigang, Shi Ting, Zheng Binglian, Yumul Rae Eden, Liu Xigang, You Chenjiang, **Gao Zhihong**, Xiao Langtao, Chen Xuemei. *APETALA2* antagonizes the transcriptional activity of *AGAMOUS* in regulating floral stem cells in *Arabidopsis thaliana* [J]. New Phytol, 2016:
18. Zhuang W B, Cai B H, **Gao ZH***, Zhang Z. Determination of chilling and heat requirements of 69 Japanese apricot cultivars. European Journal of Agronomy, 2016,74: 68-74
19. Zhuang W, **Gao Z H***, Wen L H, Huo X M, Cai B H, Zhang Z. Metabolic changes upon flower bud break in Japanese apricot are enhanced by exogenous GA4. Citation: Horticulture Research, 2015, 2, 15046, doi:10.1038/hortres.
20. Song J, **Gao Z H***, Huo X M, Sun H L, Xu Y S, Shi T, Ni Z J. Genome-wide identification of the auxin response factor (ARF) gene family and expression analysis of its role associated with pistil development in Japanese apricot (Prunus mume Sieb.et Zucc). Acta Physiol Plant, 2015, 37:145
21. Song S, Shao J, **Gao ZH***, Sun HL. Evaluation of the antifungal activity of the acetone extract of Japanese apricot fruit. Journal of Chemical and Pharmaceutical Research, 2014, 6(11):156-160
22. Wang PP, **Gao ZH***, Ni ZJ, Zhang Z, Cai BH. Self-compatibility in 'Zaohong' Japanese apricot is associated with the loss of function of pollen S genes. Mol Biol Rep (2013) 40:6485–6493
23. Zhuang WB, **Gao ZH***, Wang LJ, Zhong WJ, Ni ZJ, Zhang Z. Comparative proteomic and transcriptomic approaches to address the active role of GA4 in Japanese apricot flower bud dormancy release. Journal of Experimental Botany, 2013 doi:10.1093/jxb/ert284
24. Zhong WJ, **Gao ZH***, Zhuang WB, Shi T, Zhang Z, Ni ZJ. Genome-wide expression profiles of seasonal bud dormancy at four critical stages in Japanese apricot. Plant Mol Biol, 2013: 83:247-264
25. **Gao ZH***, Wang PP, Zhuang WB, Zhang Z. Sequences Analysis of New S-RNase and SFB alleles in Japanese Apricot (Prunus mume). Plant Molecular Biology Reporter, 2013, 31: 751-762
26. Wang PP, **Gao ZH***, Ni ZJ, Zhuang WB, Zhang Z. Isolation and identification of new pollen-specific SFB genes in Japanese apricot (Prunus mume). Genet. Mol. Res. 2013, 12 (3): 3286-3295
27. Zhuang WB, Shi T, **Gao ZH***, Zhang Z, Zhang Z. Differential expression of proteins associated with

seasonal bud dormancy at four critical stages in Japanese apricot. Plant Biology, 120(1), 2012 pp 123-130

28. **Gao ZH***, Shi T, Luo XY, Zhang Z, Zhuang WB, Wang LJ. High-Throughput Sequencing of small RNAs and Analysis of Differentially Expressed microRNAs Associated with Pistil Development in Japanese apricot, BMC Genomics, (13), 2012, p 371
29. Shi T, **Gao ZH***, Wang LJ, Zhang Z, Zhuang WB, Sun HL, Zhong WJ. Identification of differentially-expressed genes associated with pistil abortion in Japanese apricot by genome-wide transcriptional analysis. Plos ONE, 2012, 2012, 7(10): 47810 (SCI, IF=4.09(2011))
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31. Gao ZH*, Luo XY, Shi T, Cai B, Zhang Z, Cheng ZM, Zhuang WB. Identification and Validation of Potential Conserved microRNAs and Their Targets in Peach (Prunus persica), Molecules and Cells, 2012, 34(3):239-49
32. Gao ZH*, Zhuang WB, Wang LJ, Shao J, Luo XY, Cai BH, Zhang Z*. 2012. Evaluation of Chilling and Heat Requirements in Japanese Apricot with Three Models HORTSCIENCE, 2012, 47(12):1–6.
33. Wang PP, Shi T, Zhuang WB, Zhang Z, **Gao ZH***. Determination of S-RNase genotypes and isolation of four novel S-RNase genes in Japanese apricot (Prunus mume Sieb. et Zucc.) native to China. Journal of Horticultural Science & Biotechnology, 2012 87 (3):266-270