



蒋甲福 博士、教授、博士生导师

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1. 个人简介:

1995-1999	南京农业大学	学士学位
1999-2002	南京农业大学	硕士学位
2002-2006	中国科学院植物研究所	博士学位
2006-2007	新加坡国立大学	博士后
2007-2010	美国得州理工大学	博士后
2011.3-	南京农业大学园艺学院	教授, 博士生导师

2. 研究方向与承担项目:

研究领域为观赏植物遗传育种与分子生物学, 主要从事菊花新基因挖掘、分离与功能鉴定, 生物技术育种等研究工作。先后主持国家自然科学基金4项(No.31171987、31372100、31572159、31872146)、教育部新世纪优秀人才支持计划(NCET-12-0890)、江苏省自然科学基金面上项目(BK2012773)和南京农业大学高层次人才引进项目等。

3. 学术兼职:

担任 Plant Molecular Biology、Molecular Breeding、Plant Science、Plant Cell Report 等 SCI 杂志审稿人。中国园艺学会青年分会常务理事及副秘书长, 中国菊花研究会、江苏省园艺学会等会员。

4. 荣誉称号:

先后入选“教育部新世纪优秀人才”、江苏省“青蓝工程”中青年学术带头人、江苏省“双创计划”人才和江苏省“333 高层次人才培养工程”培养对象, 荣获“大北农青年学者奖”。

5. 科研成果:

在 Plant Cell、PloS Genetics、Journal of Pineal Research、Plant Journal、Plant, Cell and Environment、BMC Plant Biology、BMC Biology、BMC Genomics、Plant Science 和 Plant Cell Report 等国际知名刊物发表 SCI 论文 30 余篇。获授权国家发明专利 6 项, 3 个菊花品种获得农业部新品种权(第 1 完成人), 2 个菊花品种通过江苏省农作物新品种鉴定(第 1 完成人)。参与获得省部级奖项 5 项。

发表文章 (*通讯作者) :

- 1) Zixin Zhang, Qian Hu, Yanan Liu, Peilei Cheng, Hua Cheng, Weixin Liu, Xiaojuan Xing, Zhiyong Guan, Weimin Fang, Sumei Chen, **Jiafu Jiang***, Fadi Chen*. Strigolactone represses the synthesis of melatonin, thereby inducing floral transition in *Arabidopsis thaliana* in an FLC-dependent manner. **Journal of Pineal Research** 2019; 00: e12582. doi.org/10.1111/jpi.12582 (*Co-corresponding author, **IF 11.613**)
- 2) Zixin Zhang, Qian Hu, Hua Cheng, Peilei Cheng, Yanan Liu, Weixin Liu, Xiaojuan Xing, Sumei Chen, Fadi Chen, **Jiafu Jiang***. A single residue change in the product of the chrysanthemum gene TPL1-2 leads to a failure in its repression of flowering. **Plant Science** (2019) 285: 165–174
- 3) Lian Ding, Kunkun Zhao, Xue Zhang, Aiping Song, Jiangshuo Su, Yueheng Hu, Wenqian Zhao, **Jiafu Jiang**, Fadi Chen. Comprehensive characterization of a floral mutant reveals the mechanism of hooked petal morphogenesis in *Chrysanthemum morifolium*. **Plant Biotechnol J.** (2019) DOI: 10.1111/pbi.13143.
- 4) Yanan Liu, Hong Chen, Qi Ping, Zixin Zhang, Zhiyong Guan, Weimin Fang, Sumei Chen, Fadi Chen, **Jiafu Jiang***, Fei Zhang*. The heterologous expression of CmBBX22 delays leaf senescence and improves drought tolerance in *Arabidopsis*. **Plant Cell Reports** (2019) 38:15-24 (*Co-corresponding author)
- 5) Jing Sun, Peipei Cao, Lijun Wang, Sumei Chen, Fadi Chen, **Jiafu Jiang***. The loss of a single residue from CmFTL3 leads to the failure of florigen to flower. **Plant Science** 276 (2018) 99-104
- 6) Qi Yuyin, Liu Yanan, Zhang Zixin, Gao Jiaojiao, Guan Zhiyong, Fang Weimin, Chen Sumei, Chen Fadi, **Jiang Jiafu***. The over-expression of a chrysanthemum gene encoding an RNA polymerase II CTD phosphatase-like 1 enzyme enhances tolerance to heat stress. **Horticulture Research** (2018) 5:37.
- 7) Peilei Cheng, Bin Dong, Heng Wang, Peipei Cao, Tao Liu, Yanan Liu, Jiaojiao Gao, Yuan Liao, Weimin Fang, Sumei Chen, Fadi Chen, **Jiafu Jiang***. A Transcriptomic Analysis Targeting Genes Involved in the Floral Transition of Winter-Flowering Chrysanthemum. **J Plant Growth Regul.** (2018) 37:220-232
- 8) Peilei Cheng, Jiaojiao Gao, Yitong Feng, Zixin Zhang, Yanan Liu, Weimin Fang, Sumei Chen, Fadi Chen, **Jiafu Jiang***. The chrysanthemum leaf and root transcript profiling in response to salinity stress. **Gene.** (2018) 674:161-169

- 9) Li F, Zhang H, Zhao H, Gao T, Song A, **Jiang J**, Chen F, Chen S. Chrysanthemum CmHSFA4 gene positively regulates salt stress tolerance in transgenic chrysanthemum. **Plant Biotechnol J**. 2018, 16(7):1311-1321
- 10) Jing Sun, Heng Wang, Liping Ren, Sumei Chen, Fadi Chen and **Jiafu Jiang***. CmFTL2 is involved in the photoperiod- and sucrose-mediated control of flowering time in chrysanthemum. **Horticulture Research** (2017) 4, 17001
- 11) Dong B, Wang H, Liu T, Cheng P, Chen Y, Chen S, Guan Z, Fang W, **Jiafu Jiang***, Chen F*. Whole genome duplication enhances the photosynthetic capacity of Chrysanthemum nankingense. **Mol Genet Genomics**. 2017 Dec; 292(6):1247-1256. (*Co-corresponding author)
- 12) Dong B, Deng Y, Wang H, Gao R, Stephen GK, Chen S, **Jiafu Jiang***, Chen F*. Gibberellic Acid Signaling Is Required to Induce Flowering of Chrysanthemums Grown under Both Short and Long Days. **Int J Mol Sci**. 2017 Jun 12;18(6): E1259(*Co-corresponding author)
- 13) Mao Yachao, Sun Jing, Cao Peipei , Zhang Rong , Fu Qike, Chen Sumei, Chen Fadi, **Jiang Jiafu***. Functional analysis of alternative splicing of the FLOWERING LOCUS T orthologous gene in Chrysanthemum morifolium. **Horticulture Research**. 2016, 3: 16058.
- 14) Liping Ren, Tao Liu, Yue Cheng, Jing Sun, Jiaojiao Gao, Bin Dong, Sumei Chen, Fadi Chen and **Jiafu Jiang***. Transcriptomic analysis of differentially expressed genes in the floral transition of the summer flowering chrysanthemum. **BMC Genomics** (2016) 17:673 (**IF, 4.40**)
- 15) Jiaojiao Gao, Jing Sun, Peipei Cao, Liping Ren, Chen Liu, Sumei Chen, Fadi Chen, and **Jiang Jiafu***. Variation in tissue Na⁺ content and the activity of SOS1 genes among two species and two related genera of Chrysanthemum. **BMC Plant Biol**. 2016; 16: 98 (**IF, 3.94**)
- 16) Bin Dong, Haibin Wang, Aiping Song, Tao Liu, Yun Chen, Weimin Fang, Sumei Chen, Fadi Chen, Zhiyong Guan* and **Jiafu Jiang***. miRNAs Are Involved in Determining the Improved Vigor of Autotetraploid Chrysanthemum nankingense. **Frontiers in Plant Science**, 2016, 7: 1412. (*Co-corresponding author; IF, 3.948)
- 17) Wang Haibin, Qi Xiangyu, Chen Sumei, Fang Weimin, Guan Zhiyong, Teng Nianjun, Liao Yuan, **Jiang Jiafu***& Chen Fadi*. Limited DNA methylation variation and the transcription of MET1 and DDM1 in the genus Chrysanthemum (Asteraceae): following the track of polyploidy. **Frontiers in Plant Science**, 2015, 6: 668. (*Co-corresponding author; IF, 3.948)

- 18) Ren Liping, Sun Jing, Chen Sumei, Gao Jiaojiao, Dong Bin, Liu Yanan, Xia Xiaolong, Wang Yinjie, Liao Yuan, Teng Nianjun, Fang Weimin, Guan Zhiyong, Chen Fadi*, **Jiang Jiafu***. A transcriptomic analysis of *Chrysanthemum nankingense* provides insights into the basis of low temperature tolerance. *BMC Genomics*, 15:844, **2014** (*Co-corresponding author; IF, 4.40)
- 19) Sun Jing, Ren Liping, Cheng Yue, Gao Jiaojiao, Dong Bin, Chen Sumei, Chen Fadi*, **Jiang Jiafu***. Identification of differentially expressed genes in *Chrysanthemum nankingense* (Asteraceae) under heat stress by RNA Seq. *Gene*, 552: 59-66, **2014** (*Co-corresponding author; IF, 2.08)
- 20) Zhao Min, Song Aiping, Li Peiling, Chen Sumei, **Jiang Jiafu***, Fadi Chen*. A bHLH transcription factor regulates iron intake under Fe deficiency in chrysanthemum. *Scientific Reports*, 4, 6694, **2014** (*Co-corresponding author; IF, 5.08)
- 21) Huiyun Li, Sumei Chen, Aiping Song, Haibin Wang, Weimin Fang, Zhiyong Guan, **Jiafu Jiang***, Fadi Chen*. RNA-Seq derived identification of differential transcription in the chrysanthemum leaf following inoculation with *Alternaria tenuissima*. *BMC Genomics*. 15:9, **2014** (*Co-corresponding author; IF, 4.40).
- 22) Wang Haibin, **Jiang Jiafu***, Chen Sumei, Fang Weimin, Guan Zhiyong, Liao Yuan, Chen Fadi*. Rapid genomic and transcriptomic alterations induced by wide hybridization: *Chrysanthemum nankingense* x *Tanacetum vulgare* and *C. crassum* x *Crossostephium chinense* (Asteraceae). *BMC Genomics*. 14: 902, **2013** (*Co-corresponding author; IF, 4.40).
- 23) Liu Peng, Chen Sumei, Song Aiping, Zhao Shuang, Fang Weimin, Guan Zhiyong, Liao Yuan, **Jiang Jiafu***, Fadi Chen*. A putative high affinity phosphate transporter CmPT1, enhances tolerance to Pi deficiency of chrysanthemum. *BMC Plant Biology*. 14:18, **2014** (*Co-corresponding author; IF, 3.94)
- 24) **Jiafu Jiang**, Bangshing Wang, Yun Shen, Hui Wang, Qing Feng, Huazhong Shi. The Arabidopsis RNA binding protein with K homology motifs, SHINY1, interacts with the C-terminal domain phosphatase-like 1 (CPL1) to repress stress-inducible gene expression. *PLoS Genetics*. 9(7): e1003625, **2013** (IF, 9.44).
- 25) Chen Yu[§], **Jiang Jiafu**[§], Song Aiping, Chen Sumei, Shan Hong, Luo Huolin, Gu Chunsun, Sun Jing, Zhu Lu, Fang Weimin, Chen Fadi. Ambient temperature enhanced freezing tolerance of *Chrysanthemum dichrum* CdICE1 Arabidopsis via miR398. *BMC Biology*. 11:121, **2013** (§Co-first author; IF, 6.53).

- 26) Li J[§], **Jiang JF**[§], Qian Q[§], Xu Y, Zhang C, Xiao J, Du C, Luo W, Zou G, Chen M, Huang Y, Feng Y, Cheng Z, Yuan M, Chong K. Mutation of rice BC12/GDD1, which encodes a Kinesin-like protein that binds to a GA biosynthesis gene promoter, leads to dwarfism with impaired cell elongation. *The Plant Cell*. 23: 628–640, **2011** (§Co-first author; IF, 9.396).
- 27) Baek Daek[§], **Jiang Jiafu**[§], Chung Jung-Sung[§], Wang Bangshing, Chen Junping, Xin Zhanguo, Shi Huazhong. *AtHKT1* Gene expression regulated by a distal enhancer element and DNA methylation in promoter plays an important role in salt tolerance. *Plant Cell and Physiology*. 52(1): 149~61. **2011**(§Co-first author co-first author)
- 28) Yang Wannian, Jiang Danhua, **Jiang Jiafu**, He Yuehui. A novel and plant-specific histone H3 lysine-4 demethylase required for floral repression. *Plant Journal*. 62: 663~73. **2010**
- 29) **Jiang JF**[§], Li J[§], Xu Y, Han Y, Bai Y, Zhou G, Lou Y, Xu Z, Chong K. RNAi knockdown of *OsRMC* led to altered root development and coiling which were mediated by jasmonic acid signaling in rice. *Plant, Cell and Environment*. 30(6): 690~699, **2007**(IF, 5.081) (§Co-first author)
- 30) **Jiang J**, Xu Y, Chong K. Overexpression of *OsJAC1*, a lectin gene, suppresses the coleoptile and stem elongation in rice. *Journal of Integrative Plant Biology*. 49 (2): 230~237, **2007**. (IF 3.448)
- 31) Zhuang X[§], **Jiang JF**[§], Li J, Ma Q, Xu Y, Xue Y, Xu Z, Chong K. Over-expression of OsAGAP, an ARF-GAP, interferes with auxin influx, vesicle trafficking and root development. *The Plant Journal*. 48(4): 581~591, **2006**. (§Co-first author; IF, 6.946)
- 32) **Jiang JF**, Han Y, Xing L, Xu Y, Xu Z, Chong K. Cloning and expression of a novel cDNA encoding a mannose-specific jacalin-related lectin from *Oryza sativa*. *Toxicon*. 47(1): 133~139, **2006**. (IF, 2.128).
- 33) Xu M[§], **Jiang JF**[§], Ge L, Xu Y, Chen H, Zhao Y, Bi Y, Wen J, Chong K. *FPF1* transgene leads to altered flowering time and root development in rice. *Plant Cell Reports*. 24: 79~85, **2005**. (§Co-first author).
- 34) 邓叶, 阳淑金, 杜新平, 董彬, 任丽萍, 房伟民, 陈发棣, **蒋甲福***. 菊花高效瞬时转化体系建立及稳定遗传植株再生. 南京农业大学学报. 2017, 40 (1):48-53.
- 35) 曹沛沛, 毛雅超, 刘涛, 陈发棣, 房伟民, 陈素梅, **蒋甲福***. 菊花 Cm14-3-3v 基因的克隆及表达分析. 南京农业大学学报.2017, 40(5):820-826.
- 36) 展妍丽, 王萃铂, 亓钰莹, 陈发棣, **蒋甲福***. 菊花开花抑制基因 CmFLC-like1 的克隆及表达特性分析. 园艺学报, 2015, 42 (7): 1347–1355
- 37) 亓钰莹, 展妍丽, 王萃铂, 陈发棣, **蒋甲福***. AtCPL1 调控拟南芥开花的机制. 植物学报, 2016, 51(1): 9-15

- 38) 刘涛, 任莉萍, 曹沛沛, 陈发棣, 房伟民, 陈素梅, 管志勇, 腾年军, 张飞, 赵爽, 王海滨, 宋爱萍, **蒋甲福***.菊花不同时期各组织器官石蜡切片制作条件的优化. 南京农业大学学报, 2016, 39(5): 739-746.
- 39) 王萃铂, 张瓚, 张晓雪, 展妍丽, 亓钰莹, **蒋甲福***. 菊花转录因子 CmMYB59 的克隆与表达特性分析. 南京农业大学学报, 2016, 39(1): 63-69
- 40) 程越, 韩笑, 杨煊, 陈发棣, 房伟民, **蒋甲福***. 菊花脑花器官的离体培养. 南京农业大学学报, 2015, 38(1): 57-62
- 41) 阳淑金, 宋爱萍, 何深颖, 朱晓晨, 孙静, 高姣姣, 王银杰, 陈发棣, **蒋甲福***. CaMV 35S 启动子在菊花中驱动 GUS 外源基因的表达分析.南京农业大学学报. 南京农业大学学报, 2015, 38(4): 554-559
- 42) 陈发棣, **蒋甲福**, 郭维明, 房伟民, 赵宏波.小菊悬浮细胞培养与植株再生研究. 园艺学报. 2006. 1021-1026
- 43) **蒋甲福**, **陈发棣**, 管志勇, 房伟民. 小菊自交种子辐射生物学效应的研究. 核农学报 2004, 18(6),431-434.
- 44) 陈发棣, **蒋甲福**, 郭维明. 小菊若干花器官性状在 F1 代的表现. 园艺学报, 2003, 30, 175-182.
- 45) **蒋甲福**, **陈发棣**, 郭维明. 小菊杂种一代部分性状的遗传与变异研究. 南京农业大学学报, 2003, 26(2):11-15.
- 46) 陈发棣, **蒋甲福**, 郭维明. 小菊悬浮细胞辐射育种初步研究 I.基因型、外植体和诱导愈伤组织培养基的选择. 南京农业大学学报, 2003, 26(4):26-29
- 47) 陈发棣, **蒋甲福**, 房伟民. 秋水仙素诱导菊花脑多倍体的研究. 上海农业学报, 2002, 18(1),46-50.