

目次

植物生态与地理

抗风桐 (*Pisonia grandis*) 的生态生物学特征 ..... 王馨慧, 刘楠, 任海, 徐贝贝, 简曙光 (1489)  
 汶川震区不同气候区受损植被土壤有机碳储量和碳密度分布特征 ..... 孙凡, 严思维, 林勇明, 陈爱民, 邓浩俊, 杜锐, 吴承祯, 洪伟 (1498)  
 高黎贡山中山湿性常绿阔叶林树种的分布格局及其地形影响因子 ..... 柴勇, 孟广涛, 和丽萍, 袁春明, 邵金平, 李品荣, 李贵祥 (1508)  
 三明格氏栲保护区种子植物区系特点及其地理意义 ..... 游章滢, 闫德民, 游水生, 林群星, 叶宝鉴 (1521)  
 槭叶小牵牛——中国大陆一新归化种 ..... 王樟华, 汪远, 严靖, 马金双 (1533)

植物生理与分子生物学

不同成花量金花茶花果期果枝叶内源激素的变化 ..... 孙红梅, 廖浩斌, 刘盼盼, 杨雪, 李吉涛, 漆小雪 (1537)  
 木薯己糖激酶 MeHXK5 的催化功能鉴定 ..... 姚远, 孙冲, 陆小花, 王运林, 耿梦婷, 吴晓慧, 尚璐, 李焜, 符少萍, 李瑞梅, 段瑞军, 刘姣, 胡新文, 郭建春 (1545)  
 濒危植物海南龙血树种子休眠机理及其生态学意义 ..... 郑道君, 杨立荣, 云勇, 陈加利, 陈宣, 姜殿强, 张治礼 (1551)  
 不同倍性小麦对盐胁迫的适应性差异 ..... 尚玥, 刘韬, 吴丽军, 张波, 刘宝龙, 陈文杰, 张连全, 张怀刚, 刘登才 (1560)

植物化学与化学生物学

不同叶色三叶海棠叶片成色色素分析 ..... 汤努尔·瓦力拜, 李厚华, 李果, 刘天庆, 李媛, 韩美玲 (1572)  
 L-阿拉伯糖对尿酸的调节作用 ..... 杨子明, 张利, 陈月圆, 刘金磊, 黄永林, 李典鹏 (1579)  
 丽江白雪茶化学成分的研究 ..... 汪琼, 程挚, 鄢波 (1586)  
 采用液质联用方法检测黄秋葵菜果黄酮类物质含量 ..... 谢进, 黄艳宁, 徐瑞, 曹亮, 范海珊, 朱校奇 (1592)  
 牛血清白蛋白与地肤提取物 N-反式阿魏酰酪胺相互作用研究 ..... 程萍, 张卫, 彭秀丽 (1598)

综述

植物花青素生物合成与调控的研究进展 ..... 侯泽豪, 王书平, 魏淑东, 刘志雄, 方正武 (1603)  
 附子化学成分和药理作用研究进展 ..... 唐梅, 赵立春, 徐敏, 冷静, 唐农, 扈芷怡, 张谦华 (1614)

责任编辑 何永艳 蒋巧媛 李莉 周翠鸣  
 责任校对 李莉 何永艳 蒋巧媛 周翠鸣  
 英文校对 李莉 何永艳 蒋巧媛 周翠鸣  
 封面/版式设计 蒋巧媛 何永艳 李莉 周翠鸣

期刊基本参数: CN 45-1134/Q \* 1981 \* m \* A4 \* 152 \* zh+en \* P \* ¥45.00 \* 1200 \* 16 \* 2017-12



海棠是中国传统名花, 具有三千多年的栽培历史, 因其花色娇艳、婀娜多姿而著称, 素有“花贵妃”、“花中神仙”的美称。其中, 西府海棠、垂丝海棠、贴梗海棠、木瓜海棠共享“海棠四品”的美誉, 在诗词、绘画、园林绿化中被广泛应用。三叶海棠 (*Malus sieboldii*) 分布于山东、陕西、甘肃、浙江、四川、广西等地区, 其秋季叶色有绿、黄、红等多种色彩, 季相变化丰富, 极具观赏价值。科研工作者经过不懈努力, 以国内外原生种为亲本培育出众多不同花型、花色、果型、果色的海棠栽培品种, 但目前观叶海棠品种相对较为稀少。本研究结果为彩色叶海棠新品种培育, 丰富园林景观中的色彩美提供了理论参考。

照片示: 部分代表性海棠栽培品种。1. ‘绚丽’海棠; 2. ‘路易莎’海棠; 3. ‘印第安夏天’海棠; 4. ‘雪球’海棠; 5. ‘科里’海棠; 6. ‘完美紫叶’海棠; 7. ‘白兰地’海棠; 8. ‘凯尔斯’海棠; 9. ‘红丽’海棠。(相关内容详见本期正文 1572~1578 页汤努尔·瓦力拜等的文章)

Cover images: Selective representation of *Malus sieboldii* cultivars. 1. *Malus* ‘Radiant’; 2. *Malus* ‘Louisa’; 3. *Malus* ‘Indian summer’; 4. *Malus* ‘Snow drift’; 5. *Malus ioensis* ‘Klehms’; 6. *Malus* ‘Perfect purple’; 7. *Malus* ‘Brandywine’; 8. *Malus* ‘Kelsey’; 9. *Malus* ‘Red splendor’. (For details, please see the text by WALIBAI Tangner et al on page 1572–1578)

1	2	4
	3	5
6	8	9
7		

## CONTENTS

**Plant Ecology and Geography**

- Ecological and biological characteristics of *Pisonia grandis* .....  
 ..... WANG Xin-Hui, LIU Nan, REN Hai, XU Bei-Bei, JIAN Shu-Guang (1489)
- Distribution characteristics of soil organic carbon storage and carbon density from damaged vegetation under different climate types in Wenchuan earthquake region .....  
 SUN Fan, YAN Si-Wei, LIN Yong-Ming, CHEN Ai-Min, DENG Hao-Jun, DU Kun, WU Chen-Zhen, HONG Wei (1498)
- Distribution patterns of tree species and its influencing factors of topography in a mid-montane humid ever-green broad-leaved forest in Gaoligong Mountains .....  
 CHAI Yong, MENG Guang-Tao, HE Li-Ping, YUAN Chun-Ming, SHAO Jin-Ping, LI Pin-Rong, LI Gui-Xiang (1508)
- Spermatophyte flora and its geography implication of Sanming *Castanopsis kawakamii* Nature Reserve .....  
 ..... YOU Zhang-Tian, YAN De-Min, YOU Shui-Sheng, LIN Qun-Xing, YE Bao-Jian (1521)
- Ipomoea wrightii* A. Gray—a newly naturalized species in mainland of China .....  
 ..... WANG Zhang-Hua, WANG Yuan, YAN Jing, MA Jin-Shuang (1533)

**Plant Physiology and Molecular Biology**

- Dynamic changes of endogenous hormones in fruit branch leaves of *Camellia nitidissima* with different flower numbers during blossom and fruit periods .....  
 ..... SUN Hong-Mei, LIAO Hao-Bin, LIU Pan-Pan, YANG Xue, LI Ji-Tao, QI Xiao-Xue (1537)
- Catalytic functional identification of cassava hexokinase MeHXX5 .....  
 ..... YAO Yuan, SUN Chong, LU Xiao-Hua, WANG Yun-Lin, GENG Meng-Ting, WU Xiao-Hui, SHANG Lu, LI Zhan, FU Shao-Ping, LI Rui-Mei, DUAN Rui-Jun, LIU Jiao, HU Xin-Wen, GUO Jian-Chun (1545)
- Seed dormancy mechanism and its ecological significance of endangered species *Dracaena cambodiana* .....  
 ZHENG Dao-Jun, YANG Li-Rong, YUN Yong, CHEN Jia-Li, CHEN Xuan, JIANG Dian-Qiang, ZHANG Zhi-Li (1551)
- Different adaptations to salt stress in different ploidy levels of wheat ..... SHANG Yue, LIU Tao, WU Li-Jun, ZHANG Bo, LIU Bao-Long, CHEN Wen-Jie, ZHANG Lian-Quan, ZHANG Huai-Gang, LIU Deng-Cai (1560)

**Plant Chemistry and Chemical Biology**

- Pigment analysis on different colors of leaves from *Malus sieboldii* .....  
 ..... WALIBAI Tangner, LI Hou-Hua, LI Guo, LIU Tian-Qing, LI Ai, HAN Mei-Ling (1572)
- Effects of L-arabinose on modulating levels of uric acid in mouse .....  
 ..... YANG Zi-Ming, ZHANG Li, CHEN Yue-Yuan, LIU Jin-Lei, HUANG Yong-Lin, LI Dian-Peng (1579)
- Chemical constituents from *Thamnia vermicularis* in Lijiang ..... WANG Qiong, CHENG Zhi, YAN Bo (1586)
- Content determination of flavonoids from the fruit seed of *Abelmoschus esculentus* by UPLC-QqQ-MS .....  
 ..... XIE Jin, HUANG Yan-Ning, XU Rui, CAO Liang, FAN Hai-Shan, ZHU Xiao-Qi (1592)
- Interaction between bovine serum albumin and N-trans-feruloyltyramine from *Kochia scoparia* .....  
 ..... CHENG Ping, ZHANG Wei, PENG Xiu-Li (1598)

**Review**

- Anthocyanin biosynthesis and regulation in plants .....  
 ..... HOU Ze-Hao, WANG Shu-Ping, WEI Shu-Dong, LIU Zhi-Xiong, FANG Zheng-Wu (1603)
- Chemical constituents and pharmacological activities of *Aconiti lateralis* Radix Praeparata .....  
 ..... TANG Mei, ZHAO Li-Chun, XU Min, LENG Jing, TANG Nong, HU Zhi-Yi, ZHANG Qian-Hua (1614)