## 植物科学学报

(Zhiwu Kexue Xuebao) 第 42 卷 第 3 期 2024 年 6 月

## 目 次

## 系统与进化 中国两种紫堇属植物新记录——中尼黄堇和厚叶紫堇………杨舜铨,陈俊通,邓涛,李志敏(275) 横断山区异极藻属硅藻中国新记录 ………… 雍园圆, 尤庆敏, 范思哲, 曹玥, 王全喜, 罗粉 (282) ·······························李薇,邱利文,王毅敏,彭刚志,高晗,李争艳,刘磊 (296) 生态与生物地理 ······李月华,黄文,何勇登,叶忠铭,杨春锋 (314) ························黄丽改,姜雪,叶露萍,郭辉,周显辉,郑勇,王鹏,左娟(328) 遗传与育种 ··················侯晨,辛海平,李凌飞,廖一颖,何波祥,方正文,苏应娟,万涛(339) 基于流式细胞术对观赏海棠品种的基因组大小测定…… 张艳艳, 彭治, 林峰, 杨立梅, 张往祥(359) 生理与发育 王纪辉,耿阳阳,胡伯凯,刘亚娜,张时馨,黄珊,卢中科,曾钦朦,陈胜群,刘佳慧(366) 水淹-盐胁迫对两耐淹树种生理生态及 Na+、K+和 Cl-离子积累的影响 ······ 陈 柏 桑 , 苗 灵 凤 , 杨 帆 (377) 专题综述 ······王梦龙, 翁灵灵, 吴淑英, 许泽芬, 戴天佑, 彭小群 (387) 氧化石墨烯应用于农林种植业中的研究进展 ………… 葛 赛 ,韩 亚 梅 , 孙 曼 銮 , 赵 建 国 , 张 晓 (395) 氮素调控植物病害发生机制的研究进展 ……………… 张靖童,张申申,郑丽文,郭得平(404)

[期刊基本参数] CN42-1817/Q \* 1983 \* b \* 16 \* 140 \* zh \* P \* ¥ 50.00 \* 1200 \* 14 \* 2024-06

**封面图片说明**: 刺梨(*Rosa roxburghii* Tratt.)为蔷薇科蔷薇属小叶组多年生落叶灌木,是我国特有的野生植物,主要分布在贵州、湖南、江西、云南、湖北、重庆、陕西、四川等地,常生长于海拔500~2 500 m的向阳山坡、沟谷、路旁以及灌木丛中。刺梨常匍匐而生,每年4-6月开花,果实多为扁圆球形,密生小肉刺。刺梨果实富含丰富的维生素C,具有较高的食用价值和保健功能。全面了解我国野生刺梨的遗传多样性,掌握其遗传背景,对刺梨资源收集保存、重要基因挖掘及遗传改良具有重要意义。相关研究详见本期 350~358 页刘粉粉等的文章。

## PLANT SCIENCE JOURNAL Vol. 42 No. 3 Jun. 2024 CONTENTS

Systems and Evolution	
Two new records of <i>Corydalis</i> from China, <i>C. filicina</i> Prain and <i>C. crassifolia</i> Royle ······	
······ Yang Shunquan, Chen Juntong, Deng Tao, Li Zhimin	(275)
Newly recorded species of <i>Gomphonema</i> from the Hengduan Mountains in China	
······ Yong Yuanyuan, You Qingmin, Fan Sizhe, Cao Yue, Wang Quanxi, Luo Fen	(282)
Flowering characteristics and breeding system of a remnant <i>Myricaria laxiflora</i> (Franch.) P. Y. Zhang et Y. J. Zhang population ······ Li Wei, Qiu Liwen, Wang Yimin, Peng Gangzhi, Gao Han, Li Zhengyan, Liu Lei	(296)
Ecology and Biogeography	
Temporal and spatial variation of sexual reproduction in a remnant population of the endangered species <i>Myricaria laxiflora</i> (Franch.) P. Y. Zhang et Y. J. Zhang	
Sun Xiaoyu, Chen Fangqing, Lü Kun, Liu Jinrong, Huang Yongwen, Liu Yangyun	(304)
Differential responses of bumblebee diversity to plant community floral resources and surrounding landscape variables ······ Li Yuehua, Huang Wen, He Yongdeng, Ye Zhongming, Yang Chunfeng	(314)
Above-ground removal of plant functional groups on soil nematode communities in alpine meadows on the Qinghai-Tibet Plateau ····································	
······ Huang Ligai, Jiang Xue, Ye Luping, Guo Hui, Zhou Xianhui, Zheng Yong, Wang Peng, Zuo Juan	(328)
Genetics and Breeding	
Disentangling the roles of <i>TM8</i> -like genes in reproductive organ development in <i>Gnetum montanum</i> Markgr Hou Chen, Xin Haiping, Li Lingfei, Liao Yiying, He Boxiang, Fang Zhengwen, Su Yingjuan, Wan Tao	(339)
Genetic diversity and genetic structure analysis of wild Chinese Rosa roxburghii Tratt. germplasm resources $\cdots$ Liu Fenfen, Mo Liangtuan, Ou Guoteng, Nie Yimei, Niu Tao, Huang Qinjun	(350)
Genome size determination of ornamental crabapple cultivars based on flow cytometry ······· Zhang Yanyan, Peng Ye, Lin Feng, Yang Limei, Zhang Wangxiang	(359)
Physiology and Development	
Changes in texture and color during chestnut ( <i>Castanea mollissima</i> Blu.) water loss based on LF-NMR ········  Wang Jihui, Geng Yangyang,	
Hu Bokai, Liu Yana, Zhang Shixin, Huang Shan, Lu Zhongke, Zeng Qinmeng, Chen Shengqun, Liu Jiahui	(366)
Effects of waterlogging and salinity stresses on eco-physiology and accumulation of Na <sup>+</sup> , K <sup>+</sup> , and Cl <sup>-</sup> in two waterlogging-tolerant arbor species ······ Chen Boshen, Miao Lingfeng, Yang Fan	(377)
Review	
Research progress on the involvement of ABCG transporters in the regulation of plant male fertility	(387)
Research progress of graphene oxide in agriculture and forestry farming · · · · · · · · · · · · Ge Sai, Han Yamei, Sun Manluan, Zhao Jianguo, Zhang Xiao	(395)

Nitrogen modulates plant diseases: recent progress ·······

...... Zhang Jingtong, Zhang Shenshen, Zheng Liwen, Guo Deping (404)