

目次

喀斯特植物研究 (专栏)

黔中石漠化区衰老退化与正常生长顶坛花椒根区土壤质量特征 喻阳华, 杨丹丽, 秦仕忆, 王璐 (143)

江西瑞昌石灰岩山地淡竹林植物元素分布与吸收特征 王光如, 冯火炬, 樊燕, 王龙凤, 施建敏 (152)

桂林岩溶石山櫟木群落不同恢复阶段地上生物量模型构建及分配格局 张雅君, 马姜明, 苏静, 秦佳双, 莫燕华 (161)

桂林岩溶石山櫟木群落不同恢复阶段凋落物层酶对凋落物分解的影响 苏静, 马姜明, 覃扬浚, 张雅君, 莫燕华, 秦佳双, 杨栋林 (170)

桂西北喀斯特地区不同退化程度植被群落物种组成及多样性特征 俞月凤, 何铁光, 杜虎, 韦彩会, 蒙炎成, 李忠义, 张野, 王瑾, 胡钧铭, 苏天明, 范适 (178)

桂林岩溶石山植物群落植物功能性状对不同坡向环境因子的响应 盘远方, 陈兴彬, 姜勇, 李月娟, 黄宇欣, 倪鸣源, 陆志任, 覃彩丽, 钟章浪 (189)

珍稀濒危植物金丝李种子脱水耐性和贮藏特性 张俊杰, 柴胜丰, 王满莲, 吕仕洪, 韦霄, 韦记青, 吴少华 (199)

植物生理与生态

水体铜污染对苦草生长及叶绿素荧光特性的影响 高桂青, 王香莲, 卢龙, 计勇, 李威, 肖丽英, 王岩, 夏楨妍 (209)

镉胁迫对紫花苜蓿幼苗生理特性和镉富集的影响 闫志强, 陈银萍, 蘧苗苗, 余沛东, 杨波, 柯昀琪 (218)

混合盐碱胁迫对地被菊寒露红生长的影响 党培培, 李明宇, 赵喆, 王若水, 程瑾, 肖辉杰 (228)

缓释砂硒对绿甘蓝富硒作用及生长的影响 张化雨, 徐广平, 庞哲, 张立荣, 马丽霞 (238)

乌蒙山峨眉栲、华木荷群落特征研究 周杰, 彭明春, 王崇云, 曹文馨, 杨光能, 彭晓昶, 刘鹏举, 宋紫玲, 朱守引, 冉秋月, 杨永霞 (248)

鼎湖山针阔叶混交林 CO₂ 浓度及通量变化特征 黄俊, 麦博儒, 邓雪娇, 肖薇, 王春林, 沈子琦 (261)

华中植物区系新资料 吴玉, 谢丹, 张梦华, 陈庸新, 赵玉城, 刘应迪, 张代贵 (275)

综述

3D 打印技术在植物繁殖生态学中的应用进展与评述 王力平, 王林林, 和兆荣, 杨永平, 段元文 (279)

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

期刊基本参数: CN 45-1134/Q * 1981 * m * A4 * 142 * zh+en * P * ¥45.00 * 1200 * 15 * 2019-02

封面说明: 一年有四季, 花亦然。虽然许多植物选择在春季开花, 但是开花并不是这一季的特权。如山柑科 (Capparaceae) 的蜡梅偏选在冬季开花, 其他季节的有毛茛科 (Ranunculaceae) 的打破碗花花在秋季盛开, 豆科 (Fabaceae) 的合欢、石蒜科 (Amaryllidaceae) 的韭莲在夏季开花, 蔷薇科 (Rosaceae) 的山樱花、山茶科 (Theaceae) 的西南山茶、豆科的紫荆、毛茛科的猫爪草都在春季开花。
 照片示: 在不同季节开花的部分代表性植物。1. 蜡梅; 2. 紫荆; 3. 打破碗花花; 4. 猫爪草; 5. 合欢; 6. 西南山茶; 7. 韭莲; 8. 山樱花。(相关内容详见本期正文 275~278 页吴玉等的文章)

1	4	
2	3	
5	6	7
	8	

CONTENTS

Karst plants research (Special Column)

Aging and degradation of rocky desertification in Qianzhong area and soil quality features of root zone of normal *Zanthoxylum planispinum* var. *dintanensis* YU Yanghua, YANG Danli, QIN Shiyi, WANG Lu (143)

Element distribution pattern in *Phyllostachys glauca* forest and plant absorption traits in a limestone mountain of Ruichang, Jiangxi Province WANG Guangru, FENG Huoju, FAN Yan, WANG Longfeng, SHI Jianmin (152)

Model construction and its above-ground biomass allocation at different restoration stages of *Loropetalum chinense* communities in karst hills of Guilin ZHANG Yajun, MA Jiangming, SU Jing, QIN Jiashuang, MO Yanhua (161)

Effects of litter layer enzyme on litter decomposition of *Loropetalum chinense* communities at different restoration stages in karst hills of Guilin SU Jing, MA Jiangming, QIN Yanghui, ZHANG Yajun, MO Yanhua, QIN Jiashuang, YANG Donglin (170)

Changes in species composition and diversity of vegetation communities along degradation in karst area of Northwest Guangxi YU Yuefeng, HE Tieguang, DU Hu, WEI Caihui, MENG Yancheng, LI Zhongyi, ZHANG Ye, WANG Jin, HU Junming, SU Tianming, FAN Shi (178)

Response of plant functional traits on the soil environmental factors along with slope aspects in karst hills of Guilin, South China PAN Yuanfang, CHEN Xingbin, JIANG Yong, LI Yuejuan, HUANG Yuxin, NI Mingyuan, LU Zhiren, QIN Caili, ZHONG Zhanglang (189)

Dehydration tolerance and storage characteristics of seeds of rare and endangered plant *Garcinia paucinervis* ZHANG Junjie, CHAI Shengfeng, WANG Manlian, LÜ Shihong, WEI Xiao, WEI Jiqing, WU Shaohua (199)

Plant Physiology and Ecology

Effects of water Cu pollution on growth and chlorophyll fluorescence characteristics of *Vallisneria natans* GAO Guiqing, WANG Xianglian, LU Long, JI Yong, LI Wei, XIAO Liying, WANG Yan, XIA Zhenyan (209)

Effects of Cd stress on physiological characteristics of alfalfa and its Cd enrichment YAN Zhiqiang, CHEN Yinping, QU Miaomiao, YU Peidong, YANG Bo, KE Yunqi (218)

Effects of saline-alkali stress on growth of *Chrysanthemum morifolium* ‘Hanluhong’ DANG Peipei, LI Mingyu, ZHAO Zhe, WANG Ruoshui, CHENG Jin, XIAO Huijie (228)

Effects of slow-released sand selenium on selenium enrichment and growth of green cabbage ZHANG Huayu, XU Guangping, PANG Zhe, ZHANG Lirong, MA Lixia (238)

Community characteristics of *Castanopsis platyacantha*, *Schima scinensis* forest in Wumeng Mountain ZHOU Jie, PENG Mingchun, WANG Chongyun, CAO Wenxin, YANG Guangneng, PENG Xiaochang, LIU Pengju, SONG Ziling, ZHU Shouyin, RAN Qiuyue, YANG Yongxia (248)

Characteristics of CO₂ flux and concentration in coniferous and broad-leaved mixed forest in Dinghu Mountain HUANG Jun, MAI Boru, DENG Xuejiao, XIAO Wei, WANG Chunlin, SHEN Ziqi (261)

New discovery of floristic region of Central China WU Yu, XIE Dan, ZHANG Menghua, CHEN Yongxin, ZHAO Yucheng, LIU Yingdi, ZHANG Daigui (275)

Review

Application of 3D printing technology in plant reproductive ecology WANG Liping, WANG Linlin, HE Zhaorong, YANG Yongping, DUAN Yuanwen (279)

Cover images: Representative plants that bloom in different seasons. 1. *Chimonanthus praecox*; 2. *Cercis chinensis*; 3. *Anemone hupehensis*; 4. *Ranunculus ternatus*; 5. *Albizia julibrissin*; 6. *Camellia pitaridii*; 7. *Zephyranthes carinata*; 8. *Cerasus serrulata*. (For detail, please see the text by WU Yu et al. on page 275–278)

1	4	
2	3	
5	6	7
	8	