

目 次

药用植物与大健康产品(专栏)

- 辣木叶乙醇提取物对非酒精性脂肪肝小鼠模型血脂和氧化应激影响的研究 戴丽芬, 陆艳华, 张曼, 田福璐 (855)
30种滇西植物 β -羟高铁血红素形成抑制活性 肖朝江, 沈怡, 徐伟, 刘子琦, 彭俊霖, 张小东, 董相, 姜北 (863)
秸秆生物炭对尼泊金乙酯的吸附特性研究 张娱, 陈琦, 唐志书, 李渊, 刘世军 (873)
红毛五加多糖对大鼠肝细胞免疫损伤的保护作用及其机制 李青青, 吴疆, 郑碧荣, 李儒月, 王书贤, 朱耀强 (880)
羊肚菌多糖提取及其抗氧化活性研究 周益帆, 杨滢, 卢会敏, 王静, 刘松青, 王芳 (887)
罂粟体内蒂巴因变化规律及水氮耦合对蒂巴因的影响 常瑛, 李彦荣, 陈芳, 张兆萍, 魏玉杰, 王军强 (896)
藏药多刺绿绒蒿种子萌发特性研究 袁芳, 宋凯杰, 蔡熙彤, 兰小中 (902)
圆叶牵牛化学成分研究 李阳, 肖朝江, 刘健, 沈怡, 董相, 姜北 (910)
三种山茶属金花茶组植物花朵类黄酮成分研究 李辛雷, 王佳童, 孙振元, 王洁, 殷恒福, 范正琪, 李纪元 (917)
遮阴对浙江三叶青生理生化及总黄酮的影响 胡晓甜, 刘守赞, 白岩, 徐琳煜, 丁恒, 吴学谦, 许海顺, 郑炳松 (925)

植物生理与生态

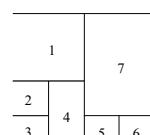
- UV-B 辐射对神农香菊萜类物质合成及其相关基因表达的影响 何森, 王霖佳, 高文杰, 刘洋, 周蕴薇 (933)
基于 cDNA-AFLP 分析桂花开花进程中差异表达基因 曾祥玲, 章晓琴, 邹晶晶, 王彩云 (940)
铜胁迫对甘蔗生长及抗氧化酶活性的影响 曾巧英, 凌秋平, 杨湛端, 刘睿, 吴嘉云, 齐永文 (951)
光质及种子大小对普洱地区 14 种植物种子萌发的影响 罗娅婷, 邱其伟, 崔现亮 (959)
樟叶越桔组培苗生根和移栽技术研究 赵展平, 何芳, 唐军荣, 罗旭璐, 赵平, 黄荐, 丁勇 (967)
土壤水分含量和接种摩西斗管囊霉 (*Funneliformis mosseae*) 对伯乐树幼苗生长的影响 王丹丹, 魏蓉, 张薇, 林明琛, 陈红锋 (976)
罗霄山脉中段地区银木荷群落研究 罗连, 宋含章, 刘忠成, 王浩威, 廖文波, 汤历 (986)

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

期刊基本参数: CN 45-1134/Q * 1981 * m * A4 * 142 * zh+en * P * ¥45.00 * 1200 * 17 * 2019-07

封面说明: 绿绒蒿是高山花卉中的佼佼者, 花大、姿美、色彩艳丽, 大多数全株被刺毛、硬毛或柔毛, 仿佛穿上了御寒的毛衣, 因而获得了“绿绒蒿”这个雅称。每当积雪融化、百草吐芳的春夏季节, 绿绒蒿就在雪原高山上开放了, 铺展四周的绿叶似起舞少女的衣裙, 优雅漫长的花萼犹如少女的身姿, 半俯微垂的花朵恰似少女温情的面庞, 婀娜有情。绿绒蒿看似娇柔, 弱不禁风, 实则刚强, 它耐干旱、耐贫瘠、耐严寒, 在海拔 5 000 m 以上的流石滩上, 亦能昂首挺立, 迎风绽放。凡是领略过她芳姿的人, 无不为之倾倒。

照片示: 部分代表性高原药用植物。**1.** 锥花绿绒蒿; **2.** 单叶绿绒蒿; **3.** 藏南绿绒蒿; **4.** 总状绿绒蒿; **5.** 蕊香叶绿绒蒿; **6.** **7.** 多刺绿绒蒿。(照片**1**、**2**、**3**、**5**由兰小中教授提供, 照片**4**、**6**、**7**由袁芳提供, 相关内容详见本期正文 902~909 页袁芳等的文章)



CONTENTS

Medicinal Plants and Production for Massive Health (Special Column)

- Effects of ethanol extract of *Moringa oleifera* leaves on oxidative stress and lipid in nonalcoholic fatty liver disease mice model DAI Lifen, LU Yanhua, ZHANG Man, TIAN Fulu (855)
 β -hematin formation inhibition activity of thirty plants from West Yunnan XIAO Chaojiang, SHEN Yi, XU Wei, LIU Ziqi, PENG Junlin, ZHANG Xiaodong, DONG Xiang, JIANG Bei (863)
 Adsorption characteristics of ethyl paraben from aqueous solution using straw biochar ZHANG Yu, CHEN Qi, TANG Zhishu, LI Yuan, LIU Shijun (873)
 Protective effects of polysaccharide AHP-II on hepatocyte injury in rats and its mechanism LI Qingqing, WU Jiang, ZHENG Birong, LI Ruyue, WANG Shuxian, ZHU Yaoqiang (880)
 Polysaccharide extraction from *Morchella* and its antioxidant activity ZHOU Yifan, YANG Ying, LU Huimin, WANG Jing, LIU Songqing, WANG Fang (887)
 Changes of thebaine in poppy (*Papaver somniferum*) and water-nitrogen coupling patterns effects CHANG Ying, LI Yanrong, CHEN Fang, ZHANG Zhaoping, WEI Yujie, WANG Junqiang (896)
 Seed germination characteristics of Tibetan medicine *Meconopsis horridula* YUAN Fang, SONG Kaijie, CAI Xitong, LAN Xiaozhong (902)
 Chemical constituents of *Pharbitis purpurea* LI Yang, XIAO Chaojiang, LIU Jian, SHEN Yi, DONG Xiang, JIANG Bei (910)
 Flavonoid components in flowers from three species of section *Chrysantha* Chang in *Camellia* (917)
 Effects of different shading treatments on physiology, biochemistry and total flavonoids of *Tetragastigma hemsleyanum* in Zhejiang Province HU Xiaotian, LIU Shouzan, BAI Yan, XU Linyu, DING Heng, WU Xueqian, XU Haishun, ZHENG Bingsong (925)

Plant Physiology and Ecology

- Effects of UV-B radiation on biosynthesis of terpenoids and expression of related genes in *Chrysanthemum indicum* var. *aromaticum* HE Miao, WANG Jijia, GAO Wenjie, LIU Yang, ZHOU Yunwei (933)
 cDNA-AFLP analysis of differentially expressed genes during flowering in *Osmanthus fragrans* ZENG Xiangling, ZHANG Xiaoqin, ZOU Jingjing, WANG Caiyun (940)
 Effects of copper stress on growth and antioxidant enzymes in sugarcane ZENG Qiaoying, LING Qiuping, YANG Zhanduan, LIU Rui, WU Jiayun, QI Yongwen (951)
 Effects of light quality and seed size on fourteen species of plants in Puer region LUO Yating, QIU Qiwei, CUI Xianliang (959)
 Rooting and transplanting techniques of tissue culture plantlets of *Vaccinium dunalianum* ZHAO Zhanping, HE Fang, TANG Junrong, LUO Xulu, ZHAO Ping, HUANG Jian, DING Yong (967)
 Effect of soil water content and inoculation with *Funneliformis mosseae* on growth of *Bretschneidera sinensis* seedlings WANG Dandan, WEI Rong, ZHANG Wei, LIN Mingchen, Chen Hongfeng (976)
Schima argentea communities in the middle Luoxiao Mountains LUO Lian, SONG Hanzhang, LIU Zhongcheng, WANG Haowei, LIAO Wenbo, TANG Li (986)

Cover images: Selective presentation of alpine medicinal plants. **1.** *Meconopsis paniculata*; **2.** *M. simplicifolia*; **3.** *M. zangnanensis*; **4.** *M. racemosa*; **5.** *M. betonicifolia*; **6,** **7.** *M. horridula*. (Cover images **1**, **2**, **3**, **5** are provided by Professor LAN Xiaozhong, and **4**, **6**, **7** by YUAN Fang; For detail, please see the text by YUAN Fang et al. on page 902–909)

1		7
2	4	
3		5 6