

《中文核心期刊要目总览》核心期刊
中国科学引文数据库（CSCD）核心期刊
中国科技论文统计源核心期刊
《国家科技学术期刊开放平台》收录期刊

ISSN 1000-2561
CN 46-1019/S

热带作物学报

CHINESE JOURNAL OF TROPICAL CROPS



2020.9

第41卷 第9期 Vol. 41 No. 9

主办

中国热带作物学会
中国热带农业科学院

万方数据

科学出版社
Science Press

热带作物学报

2020年9月 第41卷 第9期 (月刊 1980年创刊)

目 次

组学与生物技术

巴西橡胶树 *HbGRF* 基因的克隆、物理定位及表达分析

..... 张宇航, 潘冉冉, 李 飞, 陶志强, 王 英, 高和琼, 庄南生 (1723)

橡胶树 *F3'H* 基因克隆及其功能分析 范月婷, 辛士超, NAYCHI Koko, 畅 娇, 黄天带, 黄华孙, 华玉伟 (1733)

芒果中性/碱性转化酶 *MiNI* 基因的克隆与表达分析

..... 郭利军, 邓会栋, 冯学杰, 罗志文, 陈 哲, 范鸿雁, 胡福初, 华 敏 (1741)

剑麻酵母双杂交 cDNA 表达文库的构建及与 *AhKNOX2* 相互作用蛋白的筛选

..... 杨子平, 孙艺桓, 杨 倩, 鹿志伟, 张燕梅, 李俊峰, 周文钊 (1748)

种质资源与遗传育种

木薯新品种‘华南 16 号’的选育 卢 诚, 陈 新, 周新成, 夏志强, 孙玉芳, 王海燕, 邹枚伶,

李开绵, 李兆贵, 肖子盈, 周 宾, 韩全辉, 张 鹏, 王文泉 (1756)

25 份素馨属种质资源的表型性状遗传多样性研究 荆玲侠, 卜朝阳, 李春牛, 狄清琳 (1762)

酢浆草属植物观赏性评价体系的建立与应用 董 钠, 李成儒, 陈 蕾, 赵亚梅, 庄秋荣, 翟俊文, 吴沙沙 (1770)

福建省 4 种兰科植物新记录 马 良, 陈新艳, 苏享修, 兰思仁, 陈世品 (1779)

作物栽培与生理生化

槟榔生物量预测模型建立与应用 陈才志, 周小霞, 王锋堂, 李培征, 陈 奇, 李 晗, 张 翰, 纪凤凤, 杨福孙 (1783)

种茎直接补种对甘蔗宿根性的影响——以 2017 年广西融水苗族自治县试验为例

..... 游建华, 梁 阖, 樊保宁, 吴凯朝, 谭宏伟, 黄日宏, 贾兆雄, 蔡拥明 (1790)

海藻渣与镁配施对红壤理化性质和烟草生长的影响 黄振瑞, 陈迪文, 李集勤, 李淑玲 (1797)

常用促根生长调节剂对闽楠高空压条生根的影响

..... 郑雨盼, 杨锦昌, 邹文涛, 王 旭, 余 纽, 刘晓东, 赖旭恩, 李荣生 (1803)

海南油茶不育株花器发育生物学特性及解剖学观察

..... 贾泽冲, 刘云豪, 陈 霞, 王 海, 邓雅洁, 胡新文, 周 扬, 庞真真, 赖杭桂 (1808)

外源甜菜碱调节西瓜细胞渗透胁迫研究 王世豪, 朱芳铭, 孙梦利, 徐子健, 江雪飞, 乔 飞 (1816)

27 种丛枝菌根真菌接种对盆栽云木香生理生化及主要萜类成分的影响

..... 阳文武, 郭冬琴, 曹纬国, 潘兴娇, 薛彦斌, 张 杰, 周 浓 (1822)

丛枝菌根真菌对黄花蒿生长和根系分泌物化学组成的影响 孙晨瑜, 曾燕红, 马俊卿, 刘 璐, 王文奇, 黄京华 (1831)

茶园土壤特性差异对武夷水仙生长及鲜叶品质形成的影响

..... 叶江华, 胡文文, 张 奇, 张 渤, 汪 鹏, 罗盛财, 王海斌, 贾小丽, 何海斌 (1838)

植物保护与生物安全

柑橘黄龙病对沙田柚树体特性和果实品质的影响 王飞燕, 张瑞敏, 吴 文, 朱从一, 黄永敬, 陈杰忠, 曾继吾 (1847)

国内橡胶树尖孢炭疽复合种间分子系统发育及生物学特性分析

..... 江 涛, 刘先宝, 李博勋, 郑肖兰, 蔡吉苗, 冯艳丽, 黄贵修 (1856)

朱砂叶螨为害前后抗、感木薯品种叶组织营养物质含量差异分析

..... 张 哲, 陈 青, 梁 晓, 伍春玲, 陈 谦, 张银东 (1865)

胡椒瘟病菌 (*Phytophthora capsici*) 孢子囊诱导及发育过程观察

..... 高圣风, 杨开虎, 陆大倩, 刘爱勤, 茹亚峰, 孙世伟, 王 政, 孟倩倩 (1870)

琯溪蜜柚炭疽病拮抗放线菌的筛选和鉴定 赖宝春, 吴振强, 戴瑞卿, 林明辉, 李 丰, 林德锋, 王家瑞 (1876)

桑小头木虱 *Paurocephala sauteri* Enderlein 生物学特性研究

..... 卢芙蓉, 耿 涛, 武华周, 王娜玉, 汪永松, 娄德钊, 王树昌 (1883)

采后处理与质量安全

山茶油微胶囊的复合凝聚制备工艺参数及其热氧稳定性研究 康彬彬, 张金梁, 王 祥, 张玲艳, 林河通, 陈团伟 (1889)

灌木与乔木晒青茶生化成分与抗氧化活性研究比较

..... 焦文文, 念 波, 陈立佼, 刘倩葶, 蒋 宾, 张正艳, 刘明丽, 马 燕, 赵 明 (1897)

介孔二氧化硅纳米肥料的制备及控制释放 孙德权, 陆新华, 陈海丽, 王 超, 胡会刚 (1905)

农业生态与环境保护

土壤交换性铝的三种测定方法比较 李朝英, 郑 路, 杨文娟 (1912)

不同沼液灌溉量下橡胶幼苗生长及土壤肥力特征

..... 孙凤霞, 王鑫瑶, 唐 鹏, 王 旭, 吴书华, 李 超, 程毅康, 任浩天 (1918)

根袋法获取木薯根际土壤及其细菌群落特征研究 韦云东, 罗燕春, 郑 华, 李 军, 盘 欢, 雷开文, 徐 钊 (1928)

海南岛甘什岭特有植物无翼坡垒种群结构与动态 胡 琰, 徐瑞晶, 舒 琪, 郭 雯, 张 建, 商泽安, 漆良华 (1939)

CHINESE JOURNAL OF TROPICAL CROPS

Sep. 2020 Vol. 41 No. 9 (Monthly, established in 1980)

CONTENTS

Omics & Biotechnology

- Cloning, Physical Location and Expression Analysis of *HbGRF* in *Hevea brasiliensis* ZHANG Yuhang, PAN Ranran, LI Fei, TAO Zhiqiang, WANG Ying, GAO Heqiong, ZHUANG Nansheng (1723)
Cloning and Functional Verification of Rubber Tree *F3'H* Gene FAN Yueting, XIN Shichao, NAYCHI Koko, CHANG Jiao, HUANG Tiandai, HUANG Huasun, HUA Yuwei (1733)
Cloning and Expression Analysis of Alkaline/Neutral Invertase Gene *MiNI* in *Mangifera indica* L. GUO Lijun, DENG Huidong, FENG Xuejie, LUO Zhiwen, CHEN Zhe, FAN Hongyan, HU Fuchu, HUA Min (1741)
Construction of Yeast Two-hybrid Library of *Agave hybrid* No.11648 and Screening of Proteins Interacting with AhKNOX2 YANG Ziping, SUN Yihuan, YANG Qian, LU Zhiwei, ZHANG Yanmei, LI Junfeng, ZHOU Wenzhao (1748)

Germplasm Resources, Genetics & Breeding

- Breeding of a New Cassava Cultivar South 'China No. 16' LU Cheng, CHEN Xin, ZHOU Xincheng, XIA Zhiqiang, SUN Yufang, WANG Haiyan, ZOU Meiling, LI Kaimian, LI Zhaogui, XIAO Ziying, ZHOU Bin, HAN Quanhui, ZHANG Peng, WANG Wenquan (1756)
Genetic Diversity of Phenotypic Traits in 25 *Jasminum* Germplasm Resources JING Lingxia, BU Chaoyang, LI Chunniu, DI Qinglin (1762)
Establishment and Application of Ornamental Evaluation System for *Oxalis* DONG Na, LI Chengru, CHEN Lei, ZHAO Yamei, ZHUANG Qiurong, ZHAI Junwen, WU Shasha (1770)
Four New Records Species of Orchidaceae from Fujian Province MA Liang, CHEN Xinyan, SU Xiangxiu, LAN Siren, CHEN Shipin (1779)

Plant Cultivation, Physiology & Biochemistry

- Establishment and Application of a Betel Nut Biomass Prediction Model CHEN Caizhi, ZHOU Xiaoxia, WANG Fengtang, LI Peizheng, CHEN Qi, LI Han, ZHANG Han, JIU Fengfeng, YANG Fusun (1783)
Effects of Direct Replanting Seed Caneon Ratoon Sugarcane, a Case Study in Rongshui Miao Autonomous County, Guangxi in 2017 YOU Jianhua, LIANG Tian, FAN Baoning, WU Kaichao, TAN Hongwei, HUANG Rihong, JIA Zhaoxiong, CAI Yongming (1790)
Effects of Combined Application of Seaweed Residue and Magnesium on Physicochemical Properties of Red Soil and Tobacco Growth HUANG Zhenrui, CHEN Diwen, LI Jiqin, LI Shuling (1797)
Effects of Rooting Plant Growth Regulators on Rooting of Air-layers of *Phoebe bournei* ZHENG Yupan, YANG Jinchang, ZOU Wentao, WANG Xu, YU Niu, LIU Xiaodong, LAI Xuen, LI Rongsheng (1803)
Developmental Anatomy of Flower Apparatus of Male Sterile Plant of *Camellia vietnamensis* JIA Zechong, LIU Yunhao, CHEN Xia, WANG Hai, DENG Yajie, HU Xinwen, ZHOU Yang, PANG Zhenzhen, LAI Hanggui (1808)
Exogenous Betaine Modulating the Tolerance of Osmotic Stress in Watermelon Cells WANG Shihao, ZHU Fangming, SUN Mengli, XU Zijian, JIANG Xuefei, QIAO Fei (1816)
Effects of 27 Strains of Arbuscular Mycorrhizal Fungi Inoculation on Physiology and Biochemistry and Major Components of Terpenoids in Potted *Saussurea costus* YANG Wenwu, GUO Dongqin, CAO Weiguo, PAN Xingjiao, XUE Yanbin, ZHANG Jie, ZHOU Nong (1822)
Effects of Arbuscular Mycorrhizal Fungi on *Artemisia annua* L. Growth and Chemical Composition of Root Exudates

CHINESE JOURNAL OF TROPICAL CROPS

Sep. 2020 Vol. 41 No. 9 (Monthly, established in 1980)

- SUN Chenyu, ZENG Yanhong, MA Junqing, LIU Lu, WANG Wenqi, HUANG Jinghua (1831)
Correlation Between Soil Characteristics of Tea Plantations and the Growth and Fresh Leaf Quality of Wuyi Tea
(*Camellia sinensis* cv. Shuixian) YE Jianghua, HU Wenwen, ZHANG Qi, ZHANG Bo, WANG Peng,
LUO Shengcai, WANG Haibin, JIA Xiaoli, HE Haibin (1838)

Plant Protection & Bio-safety

- Effects of Citrus Huanglongbing on Tree Traits and Fruit Quality of *Citrus maxima* (Burm.) Merr. cv. Shatian Yu
..... WANG Feiyan, ZHANG Ruimin, WU Wen, ZHU Congyi, HUANG Yongjing, CHEN Jiezhong, ZENG Jiwu (1847)
Interspecific Molecular Phylogeny and Biological Characteristics of *Colletotrichum acutatum* Complex Species Causing
Colletotrichum Leaf Disease on Rubber Trees in China
..... JIANG Tao, LIU Xianbao, LI Boxun, ZHENG Xiaolan, CAI Jimiao, FENG Yanli, HUANG Guixiu (1856)
Analysis on Difference of Nutrient Content in Leaf Tissue of Resistant and Sensitive Cassava Varieties Before and After
Damage to *Tetranychus cinnabarinus*
..... ZHANG Zhe, CHEN Qing, LIANG Xiao, WU Chunling, CHEN Qian, Zhang Yindong (1865)
Sporangium Induction and Development Process Microscopy of Black Pepper Phytophthora Foot Rot Pathogen, *Phy-
tophthora capsici*
..... GAO Shengfeng, YANG Kaihu, LU Daqian, LIU Aiqin, GOU Yafeng, SUN Shiwei, WANG Zheng, MENG Qianqian (1870)
Screening and Identification of Antagonistic Actinomycete Against Anthracnose Disease of Guanxi Honey Pomelo Cultivar
..... LAI Baochun, WU Zhenqiang, DAI Ruiqing, LIN Minghui, LI Feng, LIN Defeng, WANG Jiarui (1876)
Biological Characteristics of *Paurocephala sauteri* Enderlein (Hemiptera: Psylloidea: Psyllidae)
..... LU Fuping, GENG Tao, WU Huazhou, WANG Nayu, WANG Yongsong, LOU Dezhao, WANG Shuchang (1883)

Post-harvest Treatment & Quality Safety

- Preparation and Thermal-oxidative Stability of Camellia Oil Microcapsules by Complex Coacervation
..... KANG Binbin, ZHANG Jinliang, WANG Xiang, ZHANG Lingyan, LIN Hetong, CHEN Tuanwei (1889)
Comparison of Biochemical Components and Antioxidant Activities among Sun-dried Green Tea Produced by Fresh
Leaves of Bush and Arbor Tree JIAO Wenwen, NIAN Bo, CHEN Lijiao, LIU Qianting, JIANG Bin,
ZHANG Zhengyan, LIU Mingli, Ma Yan, ZHAO Ming (1897)
Preparation and Controlled Release of Nanofertilizer Mediated by Mesoporous Silica Nanoparticles
..... SUN Dequan, LU Xinhua, CHEN Haili, WANG Chao, HU Huigang (1905)

Agricultural Ecology & Environmental Protection

- Comparison of Three Methods for Determination of Soil Exchangeable Aluminium
..... LI Zhaoying, ZHENG Lu, YANG Wenjuan (1912)
Growth and Soil Fertility Characteristics of Rubber Seedlings in Different Biogas Slurry Irrigation
..... SUN Fengxia, WANG Xinyao, TANG Peng, WANG Xu, WU Shuhua, LI Chao, CHENG Yikang, REN Haotian (1918)
Cassava Rhizosphere Soil Collected by “Root Bag” Method and Its Bacteria Diversity
..... WEI Yundong, LUO Yanchun, ZHENG Hua, LI Jun, PAN Huan, LEI Kaiwen, XU Chuan (1928)
Population Structure and Dynamics of *Hopea reticulata*, a Plant Endemic to Ganshiling, Hainan Island
..... HU Xuan, XU Ruijing, SHU Qi, GUO Wen, ZHANG Jian, SHANG Zean, QI Lianghua (1939)