



中文核心期刊
中国科技核心期刊
中国科学引文数据库(CSCD)来源期刊
RCCSE中国核心学术期刊(A)
中国农业核心期刊

ISSN 2095-1191

CODEN NNXAAB

南方农业学报

Nanfang Nongye Xuebao

第50卷 第5期 2019年5月

Journal of Southern Agriculture

Vol.50 No.5 May 2019

5

2019

广西壮族自治区农业科学院 主办

Sponsored by Guangxi Academy of Agricultural Sciences



科学出版社 出版
Published by Science Press

南方农业学报

Nanfang Nongye Xuebao

第50卷 第5期 2019年5月

目 次

作物遗传育种·种质资源·分子生物学

- 913 江苏省多基因聚合对水稻稻瘟病抗性的效应分析及 *Pb1* 基因功能标记开发
..... 孙立亭, 林添资, 景德道, 余 波, 钱华飞, 曾生元, 李 闻, 姚维成, 杜灿灿, 胡庆峰, 周义文, 龚红兵
924 羽衣甘蓝小孢子胚胎细胞结构变化及其植株再生
..... 姚悦梅, 张振超, 山 溪, 肖 燕, 朱建飞, 戴忠良
932 重庆地区玉米地方品种农艺性状与品质性状综合评价
..... 董 昕, 官 玲, 杨 华, 张丕辉, 李淑君, 邱志云, 余雪源, 易红华, 付忠军
942 水稻亲本籼粳分化程度与杂种优势的相关性
..... 左生力, 彭玉林, 李齐向, 徐淑英, 郑云峰, 张添运, 马益虎, 林 芸

生理生化·土壤肥料·农业生态环境

- 950 低温胁迫对转 *SotUA* 基因甘蔗生理生化特性的影响
..... 唐丽华, 黄 婵, 陈教云, 杨丽涛, 邢永秀, 农友业, 李杨瑞
957 弱光胁迫对烟草幼苗抗氧化系统及相关基因表达的影响
..... 关晓溪, 隋常玲, 胡海军, 吴亚男, 吴 燕
964 一株耐盐类球红细菌的分离鉴定及其对不同作物的促生作用
..... 陈丽洁, 苏 品, 张 卓, 翟忠英, 孔小婷, 杜晓华, 程菊娥, 唐 雯, 张德咏, 刘 勇
974 不同复配壮秧剂对水稻机插秧根系形态及抗性生理的影响 齐德强, 冯乃杰, 郑殿峰, 梁晓艳
982 烤烟不同种植施肥模式对土壤养分、酶活性及细菌多样性的影响
..... 陈 浩, 魏立本, 王亚麒, 黄建国, 赵 建, 张长华
990 改性柚皮吸附剂的制备及其去除水中六价铬效果分析
..... 白玉琦, 安 燕, 胡鸣鸣, 汤钦元, 刘延静, 唐 冰

植物保护·农业气象

- 996 斜纹夜蛾蛋白二硫键异构酶基因的发育表达分析 申建梅, 汪 超, 钟宏新, 胡黎明
1001 玉米小斑病抗病鉴定接种体培养技术探讨 蒙 成, 梁庆平, 黄艳花, 吴 地, 蒋益敏, 吴 烈
1007 广东西番莲茎基腐病病原的分离及鉴定 宋晓兵, 崔一平, 彭埃天, 凌金锋, 程保平, 陈 霞
1013 我国典型外来入侵动物概况及防控对策 张春霞, 章家恩, 郭 靖, 赵本良, 王志邦
1021 扶桑绵粉蚧在广西的发生为害情况调查
..... 孟 醒, 李金峰, 黄立飞, 姜建军, 杨 朗, 周忠实, 桂富荣, 陈 斌, 陈红松

园艺·园林·林业

- 1028 外源2,4-表油菜素内酯(EBR)对弱光胁迫下黄心菜生长和碳水化合物代谢的影响
..... 李 蒙, 范高领, 张 燕, 刘松虎, 张 琰

- 1035 9个园林树种叶片表面吸附颗粒物特点及其滞留重金属能力 高海波
- 1042 湛江地区澳洲坚果种质开花生物学特性观测分析
..... 杨为海,曾利珍,曾 辉,万继锋,张汉周,陈 倪,邹明宏,罗炼芳,陆超忠
- 1049 氨基酸水溶肥对辣椒果实氨基酸含量及品质的影响
..... 李 磊,尹显慧,龙友华,杨 森,张竹竹,吴小毛
- 1057 不同酸碱腐蚀处理方式及温度和光照强度对构树种子萌发的影响
..... 闫东方,周 玮,王 鑫,任 颖,杨恩点,骈瑞琪
- 1064 白芨试管球茎膨大培养基配方的筛选 黄颖融,黄孝风,侯利涵,陈慧晶,周树军,邹 娜
- ### 加工·贮藏·质量安全
- 1072 GC-MS分析不同品种油棕果肉中的脂肪酸组分 周丽霞,雷新涛,曹红星
- 1078 黑曲霉和乳酸芽孢杆菌两段青贮对甘蔗尾叶营养价值的影响
..... 周俊华,王启芝,周志扬,穆胜龙,黄 香,罗鲜青,黄丽霞,梁琪妹,孙俊丽,唐承明,何仁春
- 1085 可口革囊星虫多糖酶法—碱梯次提取工艺优化及其抗氧化和抑菌性能分析
..... 付 满,黄 海,杨泞清,覃 媚,石展娴
- ### 畜牧·兽医·水产·蚕桑
- 1093 中华绒螯蟹羧酸酯酶基因克隆及其在农药胁迫下的表达变化
..... 臧亚南,张 晓,黄鹏丹,Kassimu Hashim Ame,沈怀舜
- 1104 恩诺沙星对马氏珠母贝肠道微生物群落的影响
..... 洪嘉炜,陈明强,邓正华,李有宁,马振华,顾志峰,王 雨
- 1111 广西荔浦河鱼类群落结构时空格局及优势种特征
..... 王 倩,黄亮亮,邓明星,莫苑敏,黄 欣,宋晓红,黄腾浩,邹 琦
- 1120 麻鸭磷脂氢谷胱甘肽过氧化物酶高效可溶性表达及其部分酶学性质
..... 王晶晶,张新笑,卞 欢,耿志明,李鹏鹏,王道营,徐为民
- 1127 IHNV PCR检测方法改进及广西流行株基因型分析
..... 杨慧赞,童桂香,郑晓聪,谭红连,黄国秋,廖永志,韦信贤,胡庭俊
- 1133 端粒酶与体细胞重编程的最新研究进展 贺小英,荆乾鸽,姜欣颖,吴 宪,兰宗宝,马利兵
- ### 农业信息技术·农业经济
- 1141 基于光流法与图像纹理特征的鱼群摄食行为检测 陈志鹏,陈 明
- 1149 山地农业研究文献综述与展望 王秀峰,程 康

本期执行编辑:陈 燕

期刊基本参数:CN 45-1381/S*1940*m*A4*244*zh*P* ¥ 30.00*1000*32*2019-05

Journal of Southern Agriculture

Vol.50 No.5, 2019

Contents

Crop genetics & breeding · germplasm resources · biotechnology

- 913 Effects of multiple genes polymerization on rice blast resistance in Jiangsu Province and the development of functional markers of *Pb1* gene SUN Li-ting, LIN Tian-zi, JING De-dao, YU Bo, QIAN Hua-fei, ZENG Sheng-yuan, LI Chuang, YAO Wei-cheng, DU Can-can, HU Qing-feng, ZHOU Yi-wen, GONG Hong-bing
- 924 Microspore embryogenesis cytological structures variation and plant regeneration of kale YAO Yue-mei, ZHANG Zhen-chao, SHAN Xi, XIAO Yan, ZHU Jian-fei, DAI Zhong-liang
- 932 Comprehensive evaluation of agronomic and quality traits of maize landraces collected from Chongqing DONG Xin, GUAN Ling, YANG Hua, ZHANG Pi-hui, LI Shu-jun, QI Zhi-yun, YU Xue-yuan, YI Hong-hua, FU Zhong-jun
- 942 Correlation between the indica-japonica differentiation of rice parents and heterosis ZUO Sheng-li, PENG Yu-lin, LI Qi-xiang, XU Shu-ying, ZHENG Yun-feng, ZHANG Tian-yun, MA Yi-hu, LIN Yun

Physiology & biochemistry · soil & fertilizer · agroecology environment

- 950 Effects of low temperature stress on physiological and biochemical characteristics of *SoTUA* transgenic sugarcane TANG Li-hua, HUANG Chan, CHEN Jiao-yun, YANG Li-tao, XING Yong-xiu, NONG You-ye, LI Yang-rui
- 957 Effects of low light intensity stress on tobacco seedlings antioxidant system and expression of involved genes GUAN Xiao-xi, SUI Chang-ling, HU Hai-jun, WU Ya-nan, WU Yan
- 964 Isolation and identification of one salt-tolerant strain of *Rhodobacter sphaeroides* and its growth promoting effect on different crops CHEN Li-jie, SU Pin, ZHANG Zhuo, ZHAI Zhong-ying, KONG Xiao-ting, DU Xiao-hua, CHENG Ju-e, TANG Wen, ZHANG De-yong, LIU Yong
- 974 Effects of different compound seedling-strengthening agents on root morphology and resistance physiology of machine transplanted rice seedlings QI De-qiang, FENG Nai-jie, ZHENG Dian-feng, LIANG Xiao-yan
- 982 Effects of different planting and fertilizing modes on soil nutrient, enzyme activity and bacterial diversity of tobacco CHEN Hao, WEI Li-ben, WANG Ya-qi, HUANG Jian-guo, ZHAO Jian, ZHANG Chang-hua
- 990 Preparation of modified pomelo peel absorbent and adsorption of hexavalent chromium in water BAI Yu-qi, AN Yan, HU Ming-ming, TANG Qin-yuan, LIU Yan-jing, TANG Bing

Plant protection · agrometeorology

- 996 Developmental expression pattern analysis of *Spodoptera litura* protein disulfide isomerase gene SHEN Jian-mei, WANG Chao, ZHONG Hong-xin, HU Li-ming
- 1001 Inoculation culture technique for identification of resistance to southern corn leaf blight MENG Cheng, LIANG Qing-ping, HUANG Yan-hua, WU Di, JIANG Yi-min, WU Lie
- 1007 Isolation and identification of the pathogen causing stem rot disease of *Passiflora* Linn. in Guangdong SONG Xiao-bing, CUI Yi-ping, PENG Ai-tian, LING Jin-feng, CHENG Bao-ping, CHEN Xia
- 1013 Basic situation and control strategy of typical invasive alien animals in China ZHANG Chun-xia, ZHANG Jia-en, GUO Jing, ZHAO Ben-liang, WANG Zhi-bang
- 1021 Occurrence and damage of cotton mealybug *Phenacoccus solenopsis* Tinsley (Hemiptera: Pseudococcidae) in Guangxi MENG Xing, LI Jin-feng, HUANG Li-fei, JIANG Jian-jun, YANG Lang, ZHOU Zhong-shi, GUI Fu-rong, CHEN Bin, CHEN Hong-song

Horticulture · landscape architecture · forestry

- 1028 Effects of exogenous 2,4-epibrassinolide(EBR) on growth and carbohydrate metabolism of *Brassica pekinensis* Lour.
Rupr. under weak light stress LI Meng, FAN Gao-ling, ZHANG Yan, LIU Song-hu, ZHANG Yan
- 1035 The ability of retaining particulate matters and heavy metal on the leaf surface of nine garden tree species GAO Hai-bo
- 1042 Investigation on flowering biology characteristics of *Macadamia* spp. germplasm resources in Zhanjiang YANG Wei-hai, ZENG Li-zhen, ZENG Hui, WAN Ji-feng, ZHANG Han-zhou, CHEN Ni, ZOU Ming-hong, LUO Lian-fang, LU Chao-zhong
- 1049 Effects of amino acid water soluble fertilizer on amino acid content and quality of pepper LI Lei, YIN Xian-hui, LONG You-hua, YANG Sen, ZHANG Zhu-zhu, WU Xiao-mao
- 1057 Effects of different acid and alkali corrosion , temperature and light intensity on seed germination of *Broussonetia papyrifera* YAN Dong-fang, ZHOU Wei, WANG Xin, REN Ying, YANG En-dian, PIAN Rui-qi
- 1064 Screening the medium formulation for the bulbous enlargement of *Bletilla striata* HUANG Ying-rong, HUANG Xiao-feng, HOU Li-han, CHEN Hui-jing, ZHOU Shu-jun, ZOU Na

Processing · storage · quality safety

- 1072 Analysis of fatty acid components in different species of oil palm fruit by GC-MS ZHOU Li-xia, LEI Xin-tao, CAO Hong-xing
- 1078 Effects of two-stage silage adding *Aspergillus niger* and lactic acid bacillus inoculants on nutrient values of sugarcane tops ZHOU Jun-hua, WANG Qi-zhi, ZHOU Zhi-yang, MU Sheng-long, HUANG Xiang, LUO Xian-qing, HANG Li-xia, LIANG Qi-me, SUN Jun-li, TANG Cheng-ming, HE Ren-chun
- 1085 Study on optimization of enzymolysis-alkali echelon extraction of polysaccharides from *Phscolosoma esculenta*, its antioxidant and antimicrobial activity FU Man, HUANG Hai, YANG Ning-qing, QIN Mei, SHI Zhan-xian

Animal science · veterinary science · aquiculture · sericulture

- 1093 Cloning of carboxylesterase gene in *Eriocheir sinensis* and its expression variation under pesticide stress ZANG Ya-nan, ZHANG Xiao, HUANG Peng-dan, Kassimu Hashim Ame, SHEN Huai-shun
- 1104 Effects of enrofloxacin on intestinal microbial community of *Pinctada fucata martensi* HONG Jia-wei, CHEN Ming-qiang, DENG Zheng-hua, LI You-ning, MA Zhen-hua, GU Zhi-feng, WANG Yu
- 1111 Spatial and temporal variation of fish assemblages and characteristic of dominant species in Lipu River, Guangxi WANG Qian, HUANG Liang-liang, DENG Ming-xing, MO Yuan-min, HUANG Xin, SONG Xiao-hong, HUANG Teng-hao, ZOU Qi
- 1120 Highly efficient soluble expression and partial enzymatic properties of shelduck phospholipid hydroperoxide glutathione peroxidase WANG Jing-jing, ZHANG Xin-xiao, BIAN Huan, GENG Zhi-ming, LI Peng-peng, WANG Dao-ying, XU Wei-min

- 1127 Improvement of PCR detection method for IHHNV and genotypes analysis of epidemic strains in Guangxi YANG Hui-zan, TONG Gui-xiang, ZHENG Xiao-cong, TAN Hong-lian, HUANG Guo-qiu, LIAO Yong-zhi, WEI Xin-xian, HU Ting-jun

- 1133 Research progress of telomerase and somatic cell reprogramming HE Xiao-ying, JING Qian-ge, JIANG Xin-ying, WU Xian, LAN Zong-bao, MA Li-bing

Agricultural information technology · agriculture economics

- 1141 Detection of shoal feeding behavior based on optical flow methods and image texture CHEN Zhi-peng, CHEN Ming
- 1149 Mountain agriculture research: A review WANG Xiu-feng, CHENG Kang