



全国中文核心期刊
中国科技核心期刊
中国科学引文数据库来源期刊

ISSN 2095-1191
CODEN NNXAAB

南方农业学报

NANFANG NONGYE XUEBAO

第43卷 第10期 2012年10月

JOURNAL OF SOUTHERN AGRICULTURE

Vol.43 No.10 Oct. 2012

10
2012

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 43 卷 第 10 期 2012 年 10 月

目 次

作物遗传育种·种质资源·分子生物学

- 1433 普通野生稻稻瘟病广谱抗性基因 $Pi-gx(t)$ 的遗传分析和定位
- 1438 基于同一度的云南甘蔗细茎野生种血缘 F_1 代创新种质材料分类
- 1443 益生菌制品中植物乳杆菌 ST-III 快速定性、定量检测方法的建立
- 1447 绿萝组织培养与快繁技术
- 1452 甘蔗抗虫转基因研究进展
- 1457 植物 $LHPI$ 同源基因研究进展

颜 群, 潘英华, 秦学毅, 高汉亮,
李道远, 冯 锐, 郭 辉, 朱汝财
经艳芬, 周清明, 董立华, 桃联安,
杨李和, 安汝东, 边 芯, 朱建荣,
孙有芳
陈 臣, 任 婧, 艾连中, 刘振民
林 茂, 王华新, 唐道冥, 陈宝玲,
杜 铃, 杨舒婷, 龚建英
邓智年, 魏源文, 潘有强, 郭文锋,
何海波, 曹辉庆, 罗海斌, 郭元元,
李杨瑞
刘 博, 蔡煌松, 赵逢哲, 关和新

耕作栽培·生理生化

- 1461 两个木薯品种需水特性研究
- 1466 pH 值对绿豆种子萌发和幼苗生长的影响
- 1470 打顶及外源 α -萘乙酸对烤烟钾素吸收与再分配的影响
- 1476 甘蔗马铃薯间套种不同覆盖栽培模式研究

王泽平, 刘海斌, 罗兴录
于秋良, 杨志贤, 李忠芳, 卢伟琳,
何子龙, 岑美婷, 覃娟清, 梁丽清,
李 稳
韦克苏, 涂永高, 李章海, 张常军
江泽晋, 廖 青, 邢 颖, 汪羽宁,
谭裕模, 韦广波, 刘 斌

植物保护·农业气象

- 1480 光密度法与计数法测定 3 种能源微藻细胞生长的相关性及其验证(英文)
- 1485 基于 Crosby 生长法则的蔗根土天牛幼虫龄期划分
- 1490 西甜瓜蔓枯病菌致病力测定与品种抗病性分析
- 1495 轻霜后的甘蔗品质变化与耐寒性评价
- 1501 海南苦瓜主要病虫害的发生及防治技术

蔡卓平, 段舜山, 朱红惠
于永浩, 岑冠军, 韦德卫, 曾宪儒,
曾 涛
胡风云, 莫贱友, 郭堂勋, 潘朝勃,
黄穗萍, 韦继光
杨荣仲, 梁 强, 周 会, 桂意云,
贤 武, 黄文晔, 何雪丹, 覃丽藩,
廖诗童
刘子记, 杨 衍

土壤肥料·节水灌溉·农业生态环境

- 1505 贵州省主要烟区土壤及烟草中重金属的污染状况分析

李玉美, 雷 硕, 严 猛, 班 睿,
谢 兵, 王 毅

- 1509 不同耕作方式与施氮水平下稻田 CH₄ 排放的动态变化
- 1514 海南植胶区部分胶园土壤有效铝含量及其影响因素分析

郑土英,杨彩玲,徐世宏,唐新莲,
张 玉,汪妮娜,江立庚
曹启民,赵春梅,章姜薇,蒋菊生,
刘志薇

园艺·园林·林业

- 1518 观赏南瓜自交后代果型特征及其遗传分离特点
- 1525 基于OpenModeller-GARP的椰子在中国的适生区预测
- 1530 利用流式细胞仪检测草莓倍性方法的优化
- 1534 七坡林场桉树萌芽林林下植被多样性分析
- 1539 集体林权制度改革中主要利益相关者的选择研究
- 1544 和田河流域胡杨林更新复壮技术
- 1549 多效唑与矮壮素对福建茶的矮化效果

彭 晨,韦金河,张 俊,孟力力,
闻 婧,李倩中
陈豪军,陈永森,林聪田,周全光,
王春田,甘卫堂
于红梅,王 静,赵密珍,孟宪凤
吕 诗,卢成阳,赖家业,蒋国秀,
牛 辉
刘凯辉,杨俊孝
朱玉伟,桑巴叶,陈启民,刘 康,
武卫疆,褚奋飞
黄旭光,罗恩波,陆 仟,黄晓红,
雷 雯,罗 宇

加工·贮藏·农业工程

- 1553 利用双酶法制备猴头菇氨基酸营养液
- 1558 烟丝整丝率影响因素分析
- 1561 荔枝、龙眼采后酶促褐变反应化学机理研究进展

赵广河
崔 升,韦小玲,钟军宁
孙 健,李 丽,游向荣,李昌宝,
李志春,何雪梅

畜牧·兽医·水产·蚕桑

- 1569 红鳍东方鲀组织蛋白酶 L 基因的电子克隆及序列分析
- 1575 广西流行狂犬病毒糖蛋白基因的遗传性分析
- 1580 广西家养反刍动物蓝舌病血清学监测分析
- 1584 牛分枝杆菌 SYBR Green I 实时荧光定量 PCR 检测方法的建立
- 1590 凡纳滨对虾与全雄性罗非鱼混养试验

梁静真,饶颖竹,陈 蓉,邓富琳
杨 健,张红普,章 民,李晓宁,
何晓霞,谢琳娟,陆专灵,韦显凯,
唐海波,罗廷荣
林 俊,白安斌,华 俊,闭丙芬,
覃绍敏,吴健敏
谢志勤,谢芝勋,刘加波,庞耀珊,
邓显文,谢丽基,彭 宜,范 晴,
牟 群,莫文胜
谢达祥,张 彬,陈田聪,陈晓汉

专论·农业信息技术·农业经济

- 1595 农业多功能协调性研究——以陕西省为例
- 1600 广西农业现代化测评与路径探析
- 1606 基于推拉理论的柳州市乡村旅游动机实证分析
- 1611 贵港市大宗农产品生产成本调查与分析
- 1616 我国区域农业产业竞争力评估

谌飞龙,王礼力
滕明兰
郑文俊
陈升民,陈 莉,张 敏,朱丹青
杨 琨,平 璞

JOURNAL OF SOUTHERN AGRICULTURE

Vol. 43 No.10, 2012

CONTENTS

Crop genetics & breeding · germplasm resources · biotechnology

- 1433 Genetic analysis and molecular mapping of a rice blast resistance gene *Pi-gx(t)* derived from common wild rice YAN Qun, PAN Ying-hua, QIN Xue-yi, GAO Han-liang, LI Dao-yuan, FENG Rui, GUO Hui, ZHU Ru-cai
- 1438 Classification of innovation germplasm materials of Yunnan *Saccharum spontaneum* L. blood F_1 generation based on degree of identity JING Yan-fen, ZHOU Qing-ming, DONG Li-hua, TAO Lian-an, YANG Li-he, AN Ru-dong, BIAN Xin, ZHU Jian-rong, SUN You-fang
- 1443 Development on rapid qualitative and quantitative detection methods for *Lactobacillus plantarum* ST-III in probiotics products CHEN Chen, REN Jing, AI Lian-zhong, LIU Zhen-min
- 1447 Tissue culture and rapid propagation technologies for *Scindapsus aureus* LIN Mao, WANG Hua-xin, TANG Qiu-ming, CHEN Bao-ling, DU Ling, YANG Shu-ting, GONG Jian-ying
- 1452 Research progress on insect resistant transgenic sugarcane DENG Zhi-nian, WEI Yuan-wen, PAN You-qiang, GUO Wen-feng, HE Hai-bo, CAO Hui-qing, LUO Hai-bin, GUO Yuan-yuan, LI Yang-rui
- 1457 The *LHP1* gene research progress LIU Bo, QI Huang-song, ZHAO Feng-zhe, GUAN He-xin

Farming · physiology & biochemistry

- 1461 Water-requirement characteristics of two cassava varieties WANG Ze-ping, LIU Hai-bin, LUO Xing-lu
- 1466 Effects of applying different pH values on mung bean seed germination and seedlings growth YU Qiu-liang, YANG Zhi-xian, LI Zhong-fang, LU Wei-lin, HE Zi-long, CEN Mei-ting, QIN Jun-qing, LIANG Li-qing, LI Wen
- 1470 Effects of topping and NAA application on potassium accumulation and redistribution in flue-cured tobacco WEI Ke-su, TU Yong-gao, LI Zhang-hai, ZHANG Chang-jun
- 1476 Different cover cultivation models of sugarcane-potato interplanting JIANG Ze-pu, LIAO Qing, XING Ying, WANG Yu-ning, TAN Yu-mo, WEI Guang-po, LIU Bin

Plant protection · agrometeorology

- 1480 Optical density method and cell count method for determining the growth of three energy microalgae and their correlation and verification CAI Zhuo-ping, DUAN Shun-shan, ZHU Hong-hui
- 1485 Division of larval instars of *Dorystenes granulatus* based on Crosby growth rule YU Yong-hao, CEN Guang-jun, WEI De-wei, ZENG Xian-ru, ZENG Tao
- 1490 Determination on virulence of stem blight (*Didymella bryoniae*) strains to watermelon and melon and their resistance analysis HU Feng-yun, MO Jian-you, GUO Tang-xun, PAN Chao-bo, HUANG Sui-ping, WEI Ji-guang
- 1495 Changes in stalk quality and evaluation on cold tolerance of sugarcane under light frost YANG Rong-zhong, LIANG Qiang, ZHOU Hui, GUI Yi-yun, XIAN Wu, HUANG Wen-ye, HE Xue-dan, QIN Li-fan, LIAO Shi-tong
- 1501 Occurrence and control techniques of major diseases and insect pests of bitter melon in Hainan Province LIU Zi-ji, YANG Yan

Soil & fertilizer · water saving irrigation · agroecology environment

- 1505 Analysis on heavy metal contamination in soil and tobacco of tobacco plant areas in Guizhou Province LI Yu-mei, LEI Shuo, YAN Meng, BAN Rui, XIE Bing, WANG Yi
- 1509 Dynamic changes of CH_4 emission from rice fields under different tillage patterns and nitrogen application levels ZHENG Tu-ying, YANG Cai-ling, XU Shi-hong, TANG Xin-lian, ZHANG Yu, WANG Ni-na, JIANG Li-geng
- 1514 Analysis on content of soil-available molybdenum and its influencing factors in some plantations in Hainan rubber planting areas CAO Qi-min, ZHAO Chun-mei, QIN Jiang-wei, JIANG Ju-sheng, LIU Zhi-wei

Horticulture · landscape architecture · forestry

- 1518 Fruit features and genetic segregation characteristics of ornamental pumpkin inbred lines PENG Chen, WEI Jin-he, ZHANG Jun, MENG Li-li, WEN Jing, LI Qian-zhong
- 1525 Potential geographic distributions of *Cocos nucifera* (L.) in China predicted by OpenModeller-GARP CHEN Hao-jun, CHEN Yong-sen, LIN Cong-tian, ZHOU Quan-guang, WANG Chun-tian, GAN Wei-tang
- 1530 Optimization of strawberry ploidy identification method using flow cytometry YU Hong-mei, WANG Jing, ZHAO Mi-zhen, MENG Xian-feng
- 1534 Analysis on understory vegetation diversity of *Eucalyptus* sprout forest in Qibo Forestry of Guangxi Lü Shi, LU Cheng-yang, LAI Jia-ye, JIANG Guo-xiu, NIU Hui
- 1539 Main stakeholders' choices and rights in reformation of collective forest rights system LIU Kai-hui, YANG Jun-xiao
- 1544 Rejuvenation techniques of *P. euphratica* forest in Hetian river basin ZHU Yu-wei, SANG Ba-ye, CHEN Qi-min, LIU Kang, WU Wei-jiang, CHU Fen-fei
- 1549 Dwarfing effects of paclobutrazol and CCC on hedge plant *Carmona microphylla* HUANG Xu-guang, LUO En-bo, LU Qian, HUANG Xiao-hong, LEI Wen, LUO Yu

Processing · storage · agricultural engineering

- 1553 Double enzymatic preparation method for amino acid nutrition liquid of *Hericium erinaceus* ZHAO Guang-he
- 1558 Analysis on the whole cut rate of tobacco CUI Sheng, WEI Xiao-ling, ZHONG Jun-ning
- 1561 Chemical mechanism advances of enzymatic browning reaction in postharvest lychee and longan fruits SUN Jian, LI Li, YOU Xiang-rong, LI Chang-bao, LI Zhi-chun, HE Xue-mei

Animal science · veterinary science · aquiculture · sericulture

- 1569 In silico cloning and sequence analysis of cathepsin L gene in *Takifugu rubripes* LIANG Jing-zhen, RAO Ying-zhu, CHEN Rong, DENG Fu-lin
- 1575 Genetic analysis of glycoprotein genes derived from the rabies virus epidemic in Guangxi YANG Jian, ZHANG Hong-pu, ZHANG Min, LI Xiao-ning, HE Xiao-xia, XIE Lin-juan, LIU Zhuan-ling, WEI Xian-kai, TANG Hai-bo, LUO Ting-rong
- 1580 Serology survey and analysis of bluetongue virus (BTV) in ruminants of Guangxi Province LIN Jun, BAI An-bin, HUA Jun, BI Bing-fen, QIN Shao-min, WU Jian-min
- 1584 Development of SYBR GREEN I real-time PCR method for detecting *Mycobacterium bovis* XIE Zhi-qin, XIE Zhi-xun, LIU Jia-bo, PANG Yao-shan, DENG Xian-wen, XIE Li-ji, PENG Yi, FAN Qing, MOU Qun, MO Wen-sheng
- 1590 Pacific white shrimp (*Litopenaeus vannamei*) and all-male tilapia (*Oreochromis niloticus*) polyculture XIE Da-xiang, ZHANG Bin, CHEN Tian-cong, CHEN Xiao-han

Monographs · agricultural information technology · agriculture economics

- 1595 Harmony of agricultural multi-functionality——A case study of Shaanxi Province CHEN Fei-long, WANG Li-li
- 1600 Evaluation of agricultural modernization in Guangxi and its developmental paths TENG Ming-lan
- 1606 Empirical study on rural tourism motivation based on the “push-pull” theory ZHENG Wen-jun
- 1611 Investigation and analysis on the production cost of primary agricultural products in Guigang City CHEN Sheng-min, CHEN Li, ZHANG Min, ZHU Dan-qing
- 1616 Evaluation on the regional agricultural industries' competitiveness in China YANG Kun, PING Ying