

ISSN 2095-1191
CODEN NNXAAB



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

南方农业学报

NANFANG NONGYE XUEBAO

第43卷 第6期 2012年6月

JOURNAL OF SOUTHERN AGRICULTURE

Vol.43 No.6 Jun. 2012

6

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 6 期 2012 年 6 月

目 次

作物遗传育种·种质资源·分子生物学

723 甘蔗蔗糖磷酸合成酶 SPSⅢ 基因表达的初步研究

杨翠芳,黄诚梅,潘有强,魏源文,
邓智年,秦新民,李杨瑞
李 粲,滕 峥,刘开雨,桑洪玉,
卢双楠,方位宽,梁朝旭,刘晓静,
何珊珊,刘 芳,邱永福,李 鸣,
李容柏

727 甘蔗 MAP 激酶基因 SoMAPK4 克隆与生物信息学分析

733 干旱胁迫下甘蔗苗期根系全长 cDNA 文库构建及 EST 序列分析

罗海斌,曹辉庆,魏源文,邓智年,
潘有强,郭元元,何海波,李杨瑞
洪 林,闫晓红,刘正富,魏文辉
陈超君,韦汉文,吴建明,黄 敏,
李杨瑞,何 红

738 *Ac/Ds* 系统及其在油菜突变体库构建中的应用策略

744 引进甘蔗品种抗寒性评价

耕作栽培·生理生化

749 种间互作的生态效应 I. 间作对蚕豆结瘤的影响

秀洪学,董玉梅,毛忠顺,王 勇,
施红珍,杨进成,汤东生
陈仁天,唐茂艳,王 强,陈 雷,
李 炜,陈 畅,Farooq Shah,
梁天锋

753 水稻花期高温胁迫影响颖花育性生理机理研究进展

759 不同密度与种植方式对玉米迪卡 008 主要农艺性状和产量的影响

范继征,闫飞燕,石达金,钟昌松,
吕巨智
韦本辉,甘秀芹,刘 斌,申章佑,
胡 泊,陆柳英,李艳英,吴延勇,
宁秀呈,何彰杰

764 淮山药新品种“桂淮 7 号”的选育及栽培要点

植物保护·农业气象

767 5 个水稻材料对褐飞虱及白叶枯病的抗性评价

何文强,裘俊丽,刘开雨,刘 芳,
邱永福,李容柏

771 广西稻瘟病菌生理分化及对 4 个水稻品种的毒性测定

霍秀娟,李朝生,陆荣生,韩美丽
梁育喆,何宁祖,谭辉华,唐文伟
郭堂勋,莫贱友,黄穗萍,李焜华,
李其利

776 广西不同地区小菜蛾田间种群对 3 种新型杀虫剂的抗性测定

780 广西桑树赤锈病生理小种及品种资源抗性鉴定

潘雪红,黄诚华,商显坤,魏吉利,
王伯辉

784 桂中、桂南蔗区甘蔗条螟卵寄生蜂调查

土壤肥料·节水灌溉·农业生态环境

788 不同施氮量对百优 838 生理特性及生长发育的影响

何永祥,陈勤平,叶万余,黄世旅,
赵金卫,林志豪,余永国,韦汉文,
唐茂艳

792 低温条件下户用沼气发酵技术研究进展

魏素珍,黄青松

797 基于氮磷释放的水稻灌区塘堰湿地底泥净化能力分析
802 油茶幼林营养元素吸收及其分配特征

万玉文
曹继钊,王会利,唐 健,覃其云,
农必昌,潘 波

园艺·园林·林业

806 3个葡萄品种花芽分化过程中内源激素含量变化初报
810 香菇菌株出菇性状与产量的相关分析
814 酸铝对不同速生桉优良无性系叶片内源激素的影响
819 8种园林彩叶植物叶片显色部位分析
825 浙江天台黄润岩植被群落结构多样性初步分析
830 毛白杨抗坏血酸过氧化物酶启动子克隆与分析
835 上海辰山植物园海棠园现状分析及建议

林 玲,黄 羽,谢太理,张 璞,
周咏梅,文仁德
董 辉,尚晓冬,曹 晖,张甸甸,
刘瑞娜
杨 梅,陈旭阳,戴 勤,谭 玲,
黄晓露,方升佐
邱东萍,赵 云
陈晓玲,应求是,章丹峰
苏万凯,管李萍,李印军,陆 海
刘 洋,黄卫昌,彭贵平

加工·贮藏·农业工程

839 超声波辅助提取芦笋老茎中芦丁工艺的优化
843 真菌 α -淀粉酶和葡萄糖氧化酶对全麦面粉品质的改良
847 不同加工工艺对桂热2号白茶品质的影响

廉 琪,郑学芳,彭友舜,宋士涛
谢 洁,陈宁春,张 斌
罗莲凤,马仙花,梁光志,蓝庆江,
冯红钰,刘汉焱,周 宁,莫小燕,
覃杰凤,唐君海

畜牧·兽医·水产·蚕桑

851 不同投饲频率对合浦鹅的养分利用和生长性能的影响(英文)
855 长牡蛎钙调蛋白基因克隆及多态性分析
861 母猪分娩率影响因素分析
865 苦木生物碱提取及其复方注射液的安全性研究
869 鱼用口服疫苗免疫佐剂研究进展
873 广西黄喉水龟养殖现状及产业发展对策

杨家晃,黄丽霞,何仁春,罗鲜青,
杨 翠,梁琪妹,卢桂猷
于旭蓉,仇雪梅,常亚青,王秀利,
刘 洋
韦明宇,邓志欢,李林东,温建梅,
张胜斌,陈 琼
赵 武,陈忠伟,孙建华,何 颖,
刘 伟,胡 帅,关忠谊,陈凤莲
黄 钧,施金谷,陈 明,黄艳华,
温华成,彭民毅,王 瑞,梁万文
赵忠添,钟 强,吕 敏,卢智发,
司徒玲,黄富存,张益峰

专论·农业信息技术·农业经济

877 新农村背景下农业传播主要模式探讨
881 海洋生态补偿中的博弈分析
886 基于二元 Logistic 模型的农民现代远程教育培训意愿研究
——以珠三角地区农村为例
891 我国八角出口东盟国家市场现状与产业发展对策

周堇言,吴东醒,付志文,李建军
黎鹤仙,谭春兰
田兴国,陈敏慧,崔建勋,何淑群,
吕建秋
刘永华

JOURNAL OF SOUTHERN AGRICULTURE

Vo1. 43 No.6, 2012

CONTENTS

Crop genetics & breeding · germplasm resources · biotechnology

- 723 Preliminary studies on expression of sucrose-phosphate synthase III gene in sugarcane YANG Cui-fang, HUANG Cheng-mei, PAN You-qiang, WEI Yuan-wen, DENG Zhi-nian, QIN Xin-min, LI Yang-rui
- 727 Cloning and bioinformatic analysis of Mitogen-activated protein kinase gene *SoMAPK4* in sugarcane LI Can, TENG Zheng, LIU Kai-yu, SANG Hong-yu, LU Shuang-nan, FANG Wei-kuan, LIANG Zhao-xu, LIU Xiao-jing, HE Shan-shan, LIU Fang, QIU Yong-fu, LI Ming, LI Rong-bai
- 733 Construction of full-length cDNA library and its EST sequence analysis in sugarcane root at seedling stage under drought stress LUO Hai-bin, CAO Hui-qing, WEI Yuan-wen, DENG Zhi-nian, PAN You-qiang, GUO Yuan-yuan, HE Hai-bo, LI Yang-rui
- 738 *Ac/Ds* transposon system and its application strategy on construction of rape mutants pool HONG Lin, YAN Xiao-hong, LIU Zheng-fu, WEI Wen-hui
- 744 Evaluation on cold resistance of sugarcane cultivars newly introduced to Guangxi CHEN Chao-jun, WEI Han-wen, WU Jian-ming, HUANG Min, LI Yang-rui, HE Hong

Farming · physiology & biochemistry

- 749 Ecological effects of interspecific interaction I. Effects of intercropping on nodulation in faba beans XIU Hong-xue, DONG Yu-mei, MAO Zhong-shun, WANG Yong, SHI Hong-zhen, YANG Jing-cheng, TANG Dong-sheng
- 753 Advances in physiological mechanisms of spikelet fertility in rice at flowering stage under high temperature stress CHEN Ren-tian, TANG Mao-yan, WANG Qiang, CHEN Lei, LI Wei, CHEN Chang, FAROOQ SHAH, LIANG Tian-feng
- 759 Effects of different planting densities and cultivation methods on major agronomic characters and yield of maize FAN Ji-zheng, YAN Fei-yan, SHI Da-jin, ZHONG Chang-song, LÜ Ju-zhi
- 764 Breeding and cultivation techniques for a new yam variety "Guihuai 7" WEI Ben-hui, GAN Xiu-qin, LIU Bin, SHEN Zhang-you, HU Po, LU Liu-ying, LI Yan-ying, WU Yan-yong, NING Xiu-cheng, HE Zhang-jie

Plant protection · agrometeorology

- 767 Resistance evaluation of five rice varieties to brown planthopper (BPH) and bacterial leaf blight (BLB) HE Wen-qiang, QIU Jun-li, LIU Kai-yu, LIU Fang, QIU Yong-fu, LI Rong-bai
- 771 Physiological differentiation of rice blast fungus and their toxicity to four rice cultivars HUO Xiu-juan, LI Chao-sheng, LU Rong-sheng, HAN Mei-li
- 776 Resistance of *Plutella xylostella* (L.) to three new insecticides in field of different areas in Guangxi LIANG Yu-zhe, HE Ning-zu, TAN Hui-hua, TANG Wen-wei
- 780 Identification of physiological races of mulberry red rust and mulberry varieties resistance to red rust in Guangxi GUO Tang-xun, MO Jian-you, HUANG Sui-ping, LI Kun-hua, LI Qi-li
- 784 Investigation on egg parasitoids of *Chilo sacchariphagus* Bjojer in sugarcane planting areas of central and south Guangxi PAN Xue-hong, HUANG Cheng-hua, SHANG Xian-kun, WEI Ji-li, WANG Bo-hui

Soil & fertilizer · water saving irrigation · agroecology environment

- 788 Influence of different rates of nitrogen fertilizer on growth and physiological characteristics of rice variety Baiyou 838 HE Yong-xiang, CHEN Qin-ping, YE Wan-yu, HUANG Shi-lü, ZHAO Jing-wei, LIN Zhi-hao, YU Yong-guo, WEI Han-wen, TANG Mao-yan
- 792 Advances in fermentation techniques for household biogas under low temperature WEI Su-zhen, HUANG Qing-song
- 797 Analysis of purification capacity of sediment in pond wetland based on the release of nitrogen and phosphorus in rice irrigation area WAN Yu-wen

802 Accumulation and distribution of nutrient elements in young *Camellia oleifera* CAO Ji-zhao, WANG Hui-li, TANG Jian, QIN Qi-yun, NONG Bi-chang, PAN Bo

Horticulture·landscape architecture·forestry

806 Changes of endogenous hormone content during flower bud differentiation in three grape varieties LIN Ling, HUANG Yu, XIE Tai-li, ZHANG Ying, ZHOU Yong-mei, WEN Ren-de

810 Correlation analysis between fruiting traits and yield of *Lentinus edods* strains DONG Hui, SHANG Xiao-dong, CAO Hui, ZHANG Xun-xun, LIU Rui-na

814 Effects of acidic aluminum on endogenous hormone in leaves of *Eucalyptus* clone seedlings YANG Mei, CHEN Xu -yang, DAI Qin, TAN Ling, HUANG Xiao-lu, FANG Sheng-zuo

819 Coloration tissue analysis of leaf color in eight garden colored-leaf plants QIU Dong-ping, ZHAO Yun

825 Analysis of structure diversity of species community in rock vegetation of Tiantai Huangrun of Zhejiang CHEN Xiao-ling, YING Qiu-shi, ZHANG Dan-feng

830 Cloning and analysis of APX gene promoter from *Populus tomentosa* SU Wan-kai, GUAN Li-ping, LI Yin-jun, LU Hai

835 Current status of crabapple garden in Chenshan Botanical Garden and its development suggestions LIU Yang, HUANG Wei-chang, PENG Gui-ping

Processing·storage·agricultural engineering

839 Optimization of ultrasonic-assisted extraction of rutin from old stems of asparagus LIAN Qi, ZHENG Xue-fang, PENG You-shun, SONG Shi-tao

843 Quality improvement of whole wheat flour with fungal α -amylase and glucose oxidase XIE Jie, CHEN Ning-chun, ZHANG Bin

847 Impacts of different processing techniques on quality of Guire 2 white tea LUO Lian-feng, MA Xian-hua, LIANG Guang-zhi, LAN Qing-jiang, FENG Hong-yu, LIU Han-yan, ZHOU Ning, MO Xiao-yan, QIN Jie-feng, TANG Jun-hai

Animal science·veterinary science·aquiculture·sericulture

851 Effect of feeding frequency on dietary nutrient utilization and growth of Hepu geese YANG Jia-huang, HUANG Li-xia, HE Ren-chun, LUO Xian-qing, YANG Cui, LIANG Qi-mei, LU Gui-you

855 Cloning and polymorphism analysis of calmodulin (CaM) gene obtained from *Crassostrea gigas* YU Xu-rong, QIU Xue-mei, CHANG Ya-qing, WANG Xiu-li, LIU Yang

861 Analysis on influence factors of sow parturition rate WEI Ming-yu, DENG Zhi-huan, LI Lin-dong, WEN Jian-mei, ZHANG Sheng-bin, CHEN Qiong

865 Alkaloid extraction from *Picrasnia quassioides* (D. Don) Benn. and safety of its compound injection ZHAO WU, CHEN Zhong-wei, SUN Jian-hua, HE Ying, LIU Wei, HU Shuai, GUAN Zong-yi, CHEN Feng-lian

869 Advance in oral vaccine immune adjuvant for fish HUANG Jun, SHI Jin -gu, CHEN Ming, HUANG Yan-hua, WEN Hua-cheng, PENG Min-yi, WANG Rui, LIANG Wan-wen

873 Breeding status of *Mauremys mutica* and strategies for its industrialization development in Guangxi ZHAO Zhong-tian, ZHONG Qiang, Lü Min, LU Zhi-fa, SI Tu-ling, HUANG Fu-cun, ZHANG Yi-feng

Monographs·agricultural information technology·agriculture economics

877 Probe into the chief modes of agricultural communication in new countryside ZHOU Jin-yan, WU Dong-xing, FU Zhi-wen, LI Jian-jun

881 Dynamic game analysis in marine ecological compensation LI He-xian, TAN Chun-lan

886 Survey on farmers' willingness for training on modern distance education based on the binary logistic regression model——Taking countrysides of Pearl River Delta as an example TIAN Xing-guo, CHEN Min-hui, CUI Jian-xun, HE Shu-qun, Lü Jian-qiu

891 Market status of Chinese *Illicium verum* export to ASEAN countries and corresponding strategies for industry development LIU Yong-hua