



中国农业科学

ZHONGGUO NONGYE KEXUE 2011年第44卷第12期

目 次

作物遗传育种·种质资源·分子遗传学

- 2411 小麦蛋白磷酸酶 2A 结构亚基基因 *TaPP2Aa* 的功能标记作图 王智兰 毛新国 李 昂 昌小平
刘惠民 景蕊莲
- 2422 长果种黄麻 SRAP 标记遗传连锁图谱的构建及 3 个质量性状基因定位 陈 晖 陈美霞 陶爱芬 张广庆
徐建堂 郑建民 方平平
- 2431 胁迫条件下植物 DNA 甲基化的稳定性 彭 海 席 婷 张 静 吴先军

耕作栽培·生理生化·农业信息技术

- 2439 灌浆期表观直链淀粉含量相似品种稻米胶稠度和 RVA 谱的动态差异 蔡一霞 刘春香 王 维 张洪熙
张祖建 杨 静 唐汉忠
- 2446 ^{15}N 标记和土柱模拟的夏玉米氮肥利用特性研究 吴永成 王志敏 周顺利

植物保护

- 2454 茉莉酸和真菌病原诱导的水稻 *WRKY30* 转录因子基因的分离 彭喜旭 胡耀军 唐新科 周平兰
及表达特征 邓小波 王海华
- 2462 烟草成熟期根际硝化细菌种群的结构及其多样性 李小林 奉运富 张小平 涂仕华
伍仁军
- 2469 采用三角坐标图法快速筛选 5% 己唑醇悬浮剂配方 张大侠 刘 峰 张贵森 陈 波
杨晓楠

土壤肥料·节水灌溉·农业生态环境

- 2476 耕层水氮调控对土壤深层累积 NO_3^- -N 运移及后效的影响 董娟娟 刘辰琛 张丽娟 袁丽金
巨晓棠 刘新宇
- 2484 长期施肥对黄泥田碳和氮及氮素利用的影响 冀建华 刘秀梅 李祖章 刘益仁
侯红乾 刘光荣 罗奇祥

园艺

- 2495 24-表油菜素内酯对低氧胁迫下黄瓜幼苗碳水化合物代谢的影响 康云艳 杨 遵 郭世荣 张营营
- 2504 植物源有机肥配方设计及对梨幼树的营养效应 赵玲玲 张 杰 刘 艳 霍 颖
李振茹 姚允聪
- 2515 草莓 miR156 靶基因 SPL9 的克隆与表达分析 赵晓初 李 贺 代红艳 刘月学
马 跃 张志宏

贮藏·保鲜·加工

- | | |
|------------------------------------|-----------------------------|
| 2523 冷激处理对辣椒冷害及抗氧化防御体系的影响 | 谷会 弓德强 朱世江 谢江辉
张鲁斌 |
| 2531 冷却猪肉贮藏过程中主要腐败菌的聚类分析 | 李苗云 赵改名 张建威 张秋会
朱应举 |
| 2538 鸡肉钙激活酶与其它畜禽肉中钙激活酶对钙离子浓度敏感性的比较 | 黄明 薛梅 黄继超 徐宝才
郭琳 徐幸莲 周光宏 |

畜牧·资源昆虫

- | | |
|---|-----------------------------------|
| 2545 不同体细胞数牛乳中乳蛋白的比较蛋白质组学研究 | 杨永新 王加启 卜登攀 李珊珊
周凌云 |
| 2553 蓝塘猪和大白猪消减 cDNA 文库与差异基因分析 | 蔡更元 陈瑶生 李加琪 张豪
王翀 |
| 2561 转 KAP6.1-GFP-蜘蛛拖丝蛋白基因核心序列 4S 绵羊成纤维细胞株的筛选 | 王春生 原璐 宁方勇 吴治昊
朴善花 安铁洙 |
| 2567 GHRL 基因 5'侧翼区多态性对鸡生长和屠宰性状的影响 | 方梅霞 徐海平 谢亮 梁伟涛
赖泽颖 张德祥 聂庆华 张细权 |
| 2575 桑蚕肠道菌群分析及产酶菌的筛选与鉴定 | 邹昌瑞 魏国清 刘朝良 朱保建
王在贵 杨文静 |

兽医

- | | |
|---|-----------------------------|
| 2582 猪 C3d 分子佐剂 PRRSV GP5 基因核酸疫苗的构建及免疫效果的研究 | 夏庆祥 张德庆 吴家强 牛星
王小龙 牛钟相 |
| 2589 兔神经肽 S 及其受体基因的克隆、组织表达及热应激对其表达的影响 | 侯玉晶 雷治海 苏娟 姚远
李月勤 于晓磊 刘倩 |

简报

- | | |
|---|--------------------------|
| 2601 IWF 诱导小麦悬浮细胞产生 NO 及其与 Ca^{2+} 的关系 | 陈阳辉 刘静 陈琰 侯春燕
王冬梅 |
| 2608 玉米植株对降雨再分配过程的影响 | 林代杰 郑子成 张锡洲 李廷轩
王永东 |
| 2616 不同水盐条件下马蔺叶片的渗透调节效应 | 张彪 李品芳 白海峰 樊奋成 |
| 2625 大蒜根系分泌物对同属作物的抑制作用 | 刘素慧 刘世琦 张自坤 尉辉
黄治军 张宇 |

CONTENTS

CROP GENETICS & BREEDING • GERMPLASM RESOURCES • MOLECULAR GENETICS

- 2411 Functional Marker Mapping of Protein Phosphatase 2A Structural Subunit Gene *TaPP2Aa* in Common Wheat WANG Zhi-lan, MAO Xin-guo, LI Ang, CHANG Xiao-ping, LIU Hui-min, JING Rui-lian
- 2422 Construction of a Molecular Linkage Map Using SRAP and Mapping of Three Qualitative Traits in *Corchorus olitorius* L. CHEN Hui, CHEN Mei-xia, TAO Ai-fen, ZHANG Guang-qing, XU Jian-tang, QI Jian-min, FANG Ping-ping
- 2431 Stability of Stress-Induced DNA Methylation in Plant PENG Hai, XI Ting, ZHANG Jing, WU Xian-jun

TILLAGE & CULTIVATION • PHYSIOLOGY & BIOCHEMISTRY • AGRICULTURE INFORMATION TECHNOLOGY

- 2439 Dynamic Differences of the RVA Profile and Gel Consistency in Two Rice Varieties with Similar Apparent Amylose Content During Grain Filling CAI Yi-xia, LIU Chun-xiang, WANG Wei, ZHANG Hong-xi, ZHANG Zu-jian, YANG Jing, TANG Han-zhong
- 2446 Studies on the Characteristics of Nitrogen Fertilizer Utilization in Summer Maize Based on Techniques of Soil Column and ¹⁵N-label WU Yong-cheng, WANG Zhi-min, ZHOU Shun-li

PLANT PROTECTION

- 2454 Isolation and Expression Profiles of Rice *WRKY30* Induced by Jasmonic Acid Application and Fungal Pathogen Infection PENG Xi-xu, HU Yao-jun, TANG Xin-ke, ZHOU Ping-lan, DENG Xiao-bo, WANG Hai-hua
- 2462 Nitrobacteria Community and Diversity in the Rhizosphere Soil of Mature Tobacco LI Xiao-lin, GU Yun-fu, ZHANG Xiao-ping, TU Shi-hua, WU Ren-jun
- 2469 Rapid Screen Formulation for 5% Hexaconazole Suspension Concentrate Using Triangle-coordinate Figure ZHANG Da-xia, LIU Feng, ZHANG Gui-sen, CHEN-Bo, YANG Xiao-nan

SOIL & FERTILIZER • WATER-SAVING IRRIGATION • AGROECOLOGY & ENVIRONMENT

- 2476 Effects of Topsoil Water and Nitrogen Control on the Movement and Residual Effect of Nitrate Accumulated in Deep Soil Profile DONG Xian-xian, LIU Chen-chen, ZHANG Li-juan, YUAN Li-jin, JU Xiao-tang, LIU Xin-yu
- 2484 Effects of Long-term Fertilization on Carbon and Nitrogen in Yellow Clayey Soil and Its Nitrogen Utilization JI Jian-hua, LIU Xiu-mei, LI Zu-zhang, LIU Yi-ren, HOU Hong-qian, LIU Guang-rong, LUO Qi-xiang

HORTICULTURE

- 2495 Effects of 24-Epibrassinolide on Carbohydrate Metabolism and Enhancement of Tolerance to Root-Zone Hypoxia in Cucumber (*Cucumis sativus* L.) KANG Yun-yan, YANG Xian, GUO Shi-rong, ZHANG Ying-ying
- 2504 Development of Plant-Derived Organic Fertilizers and Their Effect on the Young Pear Trees ZHAO Ling-ling, ZHANG Jie, LIU Yan, HUO Ying, LI Zhen-ru, YAO Yun-cong
- 2515 Cloning and Expression Analysis of miR156-Targeted SPL9 Gene from Strawberry ZHAO Xiao-chu, LI He, DAI Hong-yan, LIU Yue-xue, MA Yue, ZHANG Zhi-hong

STORAGE • FRESH-KEEPING • PROCESSING

- 2523 Effects of Cold Shock Treatments on Chilling Injury and Antioxidative Defense System of Pepper GU Hui, GONG De-qiang, ZHU Shi-jiang, XIE Jiang-hui, ZHANG Lu-bin
- 2531 Cluster Analysis of the Main Spoilage Bacteria During Storage in Chilled Pork LI Miao-yun, ZHAO Gai-ming, ZHANG Jian-wei, ZHANG Qiu-hui, ZHU Ying-ju
- 2538 Calpains in Chicken Muscle and Comparison of Calcium Sensitivity with Other Animals HUANG Ming, XUE Mei, HUANG Ji-chao, XU Bao-cai, GUO Lin, XU Xing-lian, ZHOU Guang-hong

ANIMAL SCIENCE • RESOURCE INSECT

- 2545 Comparative Proteomic Analysis of the Changes of Milk Protein Associated with Somatic Cell Counts YANG Yong-xin, WANG Jia-qi, BU Deng-pan, LI Shan-shan, ZHOU Ling-yun
- 2553 Isolation of Differentially Expressed Genes between Lantang Pig and Large White Pig by SSH and Q-PCR CAI Geng-yuan, CHEN Yao-sheng, LI Jia-qi, ZHANG Hao, WANG Chong
- 2561 Filtration of Transgenic Sheep Skin Fibroblasts with KAP6.1-GFP-polymerized Spider Dragline Silk Protein Gene(4S) WANG Chun-sheng, YUAN Lu, NING Fang-yong, WU Zhi-hao, PIAO Shan-hua, AN Tie-zhu
- 2567 The Genetic Effects of 5' Flanking Region of GHRL Gene on Chicken Growth and Carcass Traits FANG Mei-xia, XU Hai-ping, XIE Liang, LIANG Wei-tao, LAI Zhe-ying, ZHANG De-xiang, NIE Qing-hua, ZHANG Xi-quan
- 2575 Analysis of Bacterial Community and Screening and Identification of Enzyme-Producing Bacteria in Intestine of *Antheraea pernyi* ZOU Chang-nui, WEI Guo-qing, LIU Chao-liang, ZHU Bao-jian, WANG Zai-gui, YANG Wen-jing

VETERINARY SCIENCE

- 2582 Construction and Immunogenicity of DNA Vaccines Containing GP5 Gene Against PRRSV with Porcine C3d as Molecular Adjuvant XIA Qing-xiang, ZHANG De-qing, WU Jia-jiang, NIU Xing, WANG Xiao-long, NIU Zhong-xiang
- 2589 Study on the Cloning and Tissue Expression of Neuropeptide S and Its Receptor and Effect of Heat Stress on Their Expression in the Rabbit HOU Yu-jing, LEI Zhi-hai, SU Juan, YAO Yuan, LI Yue-qin, YU Xiao-lei, LIU Qian

RESEARCH NOTES

- 2601 Induction of NO and the Relationship Between NO And Ca²⁺ in Wheat Suspension Cells Induced by IWF CHEN Yang-hui, LIU Jing, CHEN Yan, HOU Chun-yan, WANG Dong-mei
- 2608 Study on the Effect of Maize Plants on Rainfall Redistribution Processes LIN Dai-jie, ZHENG Zi-cheng, ZHANG Xi-zhou, LI Ting-xuan, WANG Yong-dong
- 2616 Osmotic Adjustment of *I. lactea* var.*chinensis* Leaves Under Interactions of Soil Moisture and Salinity ZHANG Biao, LI Pin-fang, BAI Hai-feng, FAN Fen-cheng
- 2625 Inhibition Effect of Garlic Root Exudates on the Genus *Allium* LIU Su-hui, LIU Shi-qi, ZHANG Zi-kun, WEI Hui, HUANG Zhi-jun, ZHANG Yu