



ISSN 0578-1752
CODEN CKNYAR

中国农业科学

SCIENTIA AGRICULTURA SINICA

第45卷 第15期

Vol. 45 No. 15

2012

中国农业科学院主办

Sponsored by the Chinese Academy of Agricultural Sciences

目次

作物遗传育种·种质资源·分子遗传学

- | | | | | | |
|------|--|-----|-----|-----|-----|
| 3007 | 提高植物农杆菌转化效率辅助策略研究进展 | 叶兴国 | 王新敏 | 王轲 | 杜丽璞 |
| | | | | 林志珊 | 徐惠君 |
| 3020 | 种胚特异性表达番茄 <i>SlABI3</i> 对水稻冈 46B 穗萌的抗性研究 | 肖英勇 | 高永峰 | 唐维 | 余进德 |
| | | 刘亮亮 | 张霞 | 孟蒙 | 刘永胜 |
| 3029 | 多环境条件下大豆倒伏性相关形态性状的 QTL 分析 | 范冬梅 | 杨振 | 马占洲 | 曾庆力 |
| | | 杜翔宇 | 蒋洪蔚 | 刘春燕 | 韩冬伟 |
| | | 栾怀海 | 裴宇峰 | 陈庆山 | 胡国华 |

耕作栽培·生理生化·农业信息技术

- | | | | | | |
|------|---------------------------------|-----|-----|-----|-----|
| 3040 | 施氮量对旱地小麦氮素吸收转运和土壤硝态氮含量的影响 | 段文学 | 于振文 | 张永丽 | 王东 |
| | | | | | 石玉 |
| 3049 | 基于 SPOT-5 影像的冬小麦拔节期生物量及氮积累量监测 | 王备战 | 冯晓 | 温暖 | 郑涛 |
| | | | | | 杨武德 |
| 3058 | 外源一氧化氮对冷胁迫下棉花幼苗生长、抗氧化系统和光合特性的影响 | 杨美森 | 王雅芳 | 干秀霞 | 罗宏海 |
| | | | | 张亚黎 | 张旺锋 |

植物保护

- | | | | | | |
|------|----------------------|-----|-----|-----|-----|
| 3068 | 外来入侵花生黑腐病菌在中国的风险性评估 | 潘汝谦 | 徐大高 | 邓铭光 | 纪春艳 |
| 3075 | 微孔板法检测番茄灰霉病菌对杀菌剂的敏感性 | 杨晓楠 | 王猛 | 申瑞平 | 刘峰 |

土壤肥料·节水灌溉·农业生态环境

- | | | | | | |
|------|---------------------------------------|-----|-----|-----|-----|
| 3083 | 不同磷效率小麦对磷的吸收及根际土壤磷组分特征差异 | 张锡洲 | 阳显斌 | 李廷轩 | 郑子成 |
| | | | | 林玲 | 杨顺平 |
| 3093 | 基于高丰度 ^{15}N 华北平原冬小麦肥料氮的去向研究 | 左红娟 | 白由路 | 卢艳丽 | 王磊 |
| | | | | 王贺 | 王志勇 |

园艺

- | | | | | | |
|------|---|-----|-----|-----|-----|
| 3100 | 黄瓜细胞质型谷氨酰胺合成酶基因(<i>GSI</i>)的克隆及其在低氮条件下的表达 | 冯卓 | 秦智伟 | 武涛 | 何红梅 |
| 3108 | 根皮苷对平邑甜茶根系 TCA 循环酶的影响 | 王青青 | 胡艳丽 | 周慧 | 展星 |
| | | | | 毛志泉 | 朱树华 |
| 3115 | ‘幸香’草莓白肉突变体与野生型的生物学特性和品质比较 | 梁焯 | 李贺 | 马跃 | 曹飞 |
| | | | | 豆玉娟 | 张志宏 |

3124 白黄侧耳子实体颜色遗传规律

盛春鸽 黄晨阳 陈强
图力古尔 张金霞

畜牧·资源昆虫

3130 妊娠后期胎儿宫内生长受限对出生后羔羊内脏器官的影响

高峰 刘迎春

3137 作物秸秆剪切力与其饲料营养特性的关系

崔秀梅 杨在宾 杨维仁 张桂国
姜淑贞 刘丽 王兆凤

3147 胚胎移植方法和受体母猪因素对克隆猪生产效率的影响

卫恒习 李秋艳 高凤磊 李燕
张守全 李宁

3154 中国美利奴超细型与哈萨克羊毛囊兴盛期皮肤组织消减 cDNA 文库的构建

杨剑波 甘尚权 李晶 高磊
杨井泉 张科 杨永林 沈敏
石国庆

兽医

3165 鸡胸腺重和脾脏重性状的全基因组关联

张磊 郑麦青 刘冉冉 文杰
吴丹 胡耀东 孙艳发 李鹏
刘丽 赵桂革

3176 鹿慢性消耗性疾病免疫组织化学检测方法的建立与优化

张鑫鑫 刘焕奇 刘雨田 孙成友
迟田英 于小静 邓明义 王志亮

3182 促孕散对持久黄体 and 卵巢静止奶牛血清生殖激素的影响

梁光华 邓敏 刘贤侠, 谷新利
高树, 徐雷

农业经济与管理

3189 中国农业生产的技术效率衰退会终结吗? ——基于开放与收敛视角的考察

马述忠 冯晗

3197 农业产业集聚对产业增长贡献率的测度与分析

王艳荣 刘业政

研究简报

3203 具有优良农艺性状的小麦种质资源高分子量麦谷蛋白亚基组成分析

闫媛媛 郭晓敏 刘伟华 高爱农
李秀全 杨欣明 车永和 李立会

3213 密点曲姬蜂触角感觉器的扫描电镜观察

赵红盈 王志英 高宇

3222 条斑紫菜 R-藻红蛋白酶解物的制备及其抗氧化和肿瘤细胞增殖抑制活性

方勇 杨方美 赵殿峰 杨文建
赵立艳 辛志宏 马宁 施璞
胡秋辉

CONTENTS

CROP GENETICS & BREEDING • GERMPASM RESOURCES • MOLECULAR GENETICS

- 3007 A Review of Some Assisted Strategies for Improving the Efficiency of *Agrobacterium*-Mediated Plant Transformation YE Xing-guo, WANG Xin-min, WANG Ke, DU Li-pu, LIN Zhi-shan, XU Hui-jun
- 3020 Embryo-Specific Expression of Tomato *SlABI3* Results in Inhibition of Preharvest Sprouting in G46B of Rice XIAO Ying-yong, GAO Yong-feng, TANG Wei, YU Jin-de, LIU Liang-liang, ZHANG Xia, MENG Meng, LIU Yong-sheng
- 3029 QTL Analysis of Lodging-Resistance Related Traits in Soybean in Different Environments FAN Dong-mei, YANG Zhen, MA Zhan-zhou, ZENG Qing-li, DU Xiang-yu¹ JIANG Hong-wei, LIU Chun-yan, HAN Dong-wei, LUAN Huai-hai, PEI Yu-feng, CHEN Qing-shan, HU Guo-hua

TILLAGE & CULTIVATION • PHYSIOLOGY & BIOCHEMISTRY • AGRICULTURE INFORMATION TECHNOLOGY

- 3040 Effects of Nitrogen Fertilizer Application Rate on Nitrogen Absorption, Translocation and Nitrate Nitrogen Content in Soil of Dryland Wheat DUAN Wen-xue, YU Zhen-wen, ZHANG Yong-li, WANG Dong, SHI Yu
- 3049 Monitoring Biomass and N Accumulation at Jointing Stage in Winter Wheat Based on SPOT-5 Images WANG Bei-zhan, FENG Xiao, WEN Nuan, ZHENG Tao, YANG Wu-de
- 3058 Effects of Exogenous Nitric Oxide on Growth, Antioxidant System and Photosynthetic Characteristics in Seedling of Cotton Cultivar Under Chilling Injury Stress YANG Mei-sen, WANG Ya-fang, GAN Xiu-xia, LUO Hong-hai, ZHANG Ya-li, ZHANG Wang-feng

PLANT PROTECTION

- 3068 Risk Analysis of the Alien Invasive Phytopathogen *Cylindrocladium parasiticum* in China PAN Ru-qian, XU Da-gao, DENG Ming-guang, JI Chun-yan
- 3075 Microtiter Method to Test the Sensitivity of *Botrytis cinerea* to Fungicides YANG Xiao-nan, WANG Meng, SHEN Rui-ping, LIU Feng

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

- 3083 Characteristics of Phosphorus Uptake and Phosphorus Fractions in the Rhizosphere Among Different Phosphorus Efficiency Wheat Cultivars ZHANG Xi-zhou, YANG Xian-bin, LI Ting-xuan, ZHENG Zi-cheng, LIN Ling, YANG Shun-ping
- 3093 Fate of Fertilizer Nitrogen Applied to Winter Wheat in North China Plain Based on High Abundance of ¹⁵N ZUO Hong-juan, BAI You-lu, LU Yan-li, WANG Lei, WANG He, WANG Zhi-yong

HORTICULTURE

- 3100 Cloning and Expression of Cytosolic Glutamine Synthetase (*GSI*) in *Cucumis sativus* L. Under Low Nitrogen Conditions FENG Zhuo, QIN Zhi-wei, WU Tao, HE Hong-mei
- 3108 Effects of Phloridzin on the Tricarboxylic Acid Cycle Enzymes of Roots of *Malus hupehensis* Rehd. WANG Qing-qing, HU Yan-li, ZHOU Hui, ZHAN Xing, MAO Zhi-quan, ZHU Shu-hua

3115 Comparative Analysis of Biological Characteristics and Quality in a White-Flesh Strawberry Mutant 'Sachinoka' and Its Wild Type LIANG Ye, LI He, MA Yue, CAO Fei, DOU Yu-juan, ZHANG Zhi-hong

3124 Fruit-Body Color Inheritance of *Pleurotus cornucopiae* SHENG Chun-ge, HUANG Chen-yang, CHEN Qiang, BAU Tolgor, ZHANG Jin-xia

ANIMAL SCIENCE • RESOURCE INSECT

3130 Effect of Intrauterine Growth Restriction During Late Pregnancy on Visceral Organs of Postnatal Lambs GAO Feng, LIU Ying-chun

3137 Correlations of Shearing Force and Feed Nutritional Characteristics of Crop Straws CUI Xiu-mei, YANG Zai-bin, YANG Wei-ren, ZHANG Gui-guo, JIANG Shu-zhen, LIU Li, WANG Zhao-feng

3147 Effect of Recipient Status and Embryo Transfer Methods on Production of Cloned Pigs WEI Heng-xi, LI Qiu-yan, GAO Feng-lei, LI Yan, ZHANG Shou-quan, LI Ning

3154 Construction of Subtractive cDNA Library of Skin Tissue in Follicle Anagen Between Chinese Merino and Kazakh Sheep YANG Jian-bo, GAN Shang-quan, LI Jing, GAO Lei, YANG Jing-quan, ZHANG Ke, YANG Yong-lin, SHEN Min, SHI Guo-qing

VETERINARY SCIENCE

3165 Genome-Wide Association of Thymus and Spleen Mass in Chicken ZHANG Lei, ZHENG Mai-qing, LIU Ran-ran, WEN Jie, WU Dan, HU Yao-dong, SUN Yan-fa, LI Peng, LIU Li, ZHAO Gui-ping

3176 Establishment and Optimization of Immunohistochemistry Assay for Detection of Chronic Wasting Disease ZHANG Xin-xin, LIU Huan-qi, LIU Yu-tian, SUN Cheng-you, CHI Tian-ying, YU Xiao-jing, DENG Ming-yi, WANG Zhi-liang

3182 A Study on the Impact of Reproductive Hormones in Serum by Using Fertility-Promoting Powder for Treating Infertility Caused by Persistent Corpus Luteum and Ovary Sandstill of Dairy Cattle LIANG Guang-hua, DENG Min, LIU Xian-xia, GU Xin-li, GAO Shu, XU Lei

AGRICULTURAL ECONOMY & MANAGEMENT

3189 Will the Recession of Efficiency in China's Agriculture End? —An Investigation Based on the Angle of Openness and Convergence MA Shu-zhong, FENG Han

3197 Measurement and Analysis of the Contribution of Agriculture Agglomeration to the Industry Growth WANG Yan-rong, LIU Ye-zheng

RESEARCH NOTES

3203 High-Molecular-Weight Glutenin Subunit Composition of Chinese Wheat Germplasm with Desirable Agronomic Traits YAN Yuan-yuan, GUO Xiao-min, LIU Wei-hua, GAO Ai-nong, LI Xiu-quan, YANG Xin-ming, CHE Yong-he, LI Li-hui

3213 Antennal Morphology and Sensilla Distribution of *Scambus punctatus* (Hymenoptera: Ichneumonidae) with Scanning Electron Microscopy Observation ZHAO Hong-ying, WANG Zhi-ying, GAO Yu

3222 Preparation of Enzymatic Hydrolysate of R-phycoerythrin from *Porphyra yezoensis* and Its Antioxidant and Tumor Cell Proliferation Inhibiting Activities FANG Yong, YANG Fang-mei, ZHAO Dian-feng, YANG Wen-jian, ZHAO Li-yan, XIN Zhi-hong, MA Ning, SHI Ying, HU Qiu-hui