



作物学报

(ZUOWU XUEBAO)

第 36 卷 第 7 期 2010 年 7 月
目 次



作物遗传育种·种质资源·分子遗传学

- | | | | | | | | | | |
|------|--|-----|-----|-----|-----|-----|-----|--|--|
| 1061 | 大豆质核互作雄性不育系 NJCMS3A 双亲雄性育性基因的 SSR 标记 | 李曙光 | 赵团结 | 盖钧镒 | | | | | |
| 1067 | 甘蓝 KAPP 编码基因的克隆与序列分析 | 吴韦铷 | 朱利泉 | 李成琼 | 杨 昆 | 唐章林 | 任雪松 | | |
| | | 王小佳 | | | | | | | |
| 1075 | 玉米泛素延伸蛋白基因 <i>ZmERD16</i> 的克隆、序列特征和表达分析 | 陆月赏 | 刘颖慧 | 张登峰 | 石云素 | 宋燕春 | 王天宇 | | |
| | | 杨德光 | 黎 裕 | | | | | | |
| 1084 | 中国花生小核心种质与 ICRISAT 微核心种质的 SSR 遗传多样性比较 | 姜慧芳 | 任小平 | 张晓杰 | 黄家权 | 雷 永 | 晏立英 | | |
| | | 廖伯寿 | | | | | | | |
| 1092 | 开花后不同光周期条件下大豆农艺性状和品质性状的 QTL 分析 | 王 英 | 程立锐 | 冷建田 | 吴存祥 | 侯文胜 | 韩天富 | | |
| 1100 | 不同统计遗传模型 QTL 定位方法应用效果的模拟比较 | 苏成付 | 赵团结 | 盖钧镒 | | | | | |
| 1108 | 水稻中胚轴长度 QTL 分析 | 黄 成 | 姜树坤 | 冯玲玲 | 徐正进 | 陈温福 | | | |
| 1114 | 小麦区试品系 DUS 测试的分子标记 | 王立新 | 常利芳 | 李宏博 | 季 伟 | 刘丽华 | 赵昌平 | | |
| 1126 | 28 个小麦微核心种质抗叶锈性分析 | 丁艳红 | 刘 欢 | 师丽红 | 温晓蕾 | 张 娜 | 杨文香 | | |
| | | 刘大群 | | | | | | | |
| 1135 | 番茄果实成熟相关基因 <i>SIPEL</i> 和 <i>SIAPL</i> 的表达特性 | 肖 东 | 肖 阳 | 蔡应繁 | 邓小峰 | 吴锁伟 | 郑 旭 | | |
| | | 李晚忱 | 吴翠平 | 费章君 | 牛应泽 | 杨建平 | | | |
| 1144 | 栽培稻与疣粒野生稻杂种二倍体和四倍体的鉴定及比较 | 宋兆建 | 杜超群 | 胡亚平 | 唐志强 | 陈冬玲 | 何玉池 | | |
| | | 何光存 | 蔡得田 | | | | | | |

耕作栽培·生理生化

- | | | | | | | | | | |
|------|--------------------------------|-----|-----|-----|-----|-----|-----|--|--|
| 1153 | 密植对不同玉米品种产量性能的影响及其耐密性分析 | 陈传永 | 侯玉虹 | 孙 锐 | 朱 平 | 董志强 | 赵 明 | | |
| 1161 | 不同贮藏条件下棉花和大豆种子的水分变化规律及其预测模型 | 王 婧 | 姜 朋 | 李 栋 | 马 强 | 台述金 | 左振朋 | | |
| | | 董鲁浩 | 孙庆泉 | | | | | | |
| 1169 | 转小麦铁蛋白基因酵母的抗氧化活性 | 赵永亮 | 陈 静 | 王 丹 | 王卫国 | 李云辉 | | | |
| 1176 | 基于支持向量机非线性筛选水稻苗期抗旱性指标 | 袁哲明 | 谭显胜 | | | | | | |
| 1183 | 推迟拔节水及其灌水量对小麦耗水量和耗水来源及农田蒸散量的影响 | 王红光 | 于振文 | 张永丽 | 王 东 | | | | |
| 1192 | 旱地条件下冬小麦产量和农艺性状对养分投入的响应 | 周 玲 | 王朝辉 | 李生秀 | | | | | |
| 1198 | 粳稻颖果维管束结构粒间差异及其与品质性状的关系 | 于晓刚 | 张文忠 | 韩亚东 | 黄丽丽 | 徐 海 | 赵明辉 | | |
| | | 高东昌 | 徐正进 | 陈温福 | | | | | |

研究简报

- | | | | | | | | | | |
|------|------------------------------|-----|-----|-----|-----|-----|-----|--|--|
| 1209 | 基因型和环境条件对小麦花药培养效果的影响 | 韩晓峰 | 陶丽莉 | 殷桂香 | 刘晓蕾 | 杜丽璞 | 魏亦勤 | | |
| | | 晏月明 | 叶兴国 | | | | | | |
| 1216 | 利用荧光原位杂交技术分析新合成异源四倍体拟南芥 | 位 芳 | 张改生 | | | | | | |
| 1221 | 条锈菌诱导的小麦 bZIP 转录因子基因的克隆及表达分析 | 张 毅 | 夏 宁 | 张 岗 | 郭 军 | 黄丽丽 | 康振生 | | |
| 1226 | 种植密度和行距配置对超高产夏玉米群体光合特性的影响 | 杨吉顺 | 高辉远 | 刘 鹏 | 李 耕 | 董树亭 | 张吉旺 | | |
| | | 王敬锋 | | | | | | | |

ACTA AGRONOMICA SINICA

Vol. 36 No. 7 July 2010

CONTENTS

CROP GENETICS & BREEDING · GERMPLASM RESOURCES · MOLECULAR GENETICS

- 1061 Mapping Male Fertility Gene with SSR Markers in Parents of Cytoplasmic-Nuclear Male-Sterile Line NJCMS3A in Soybean
LI Shu-Guang, ZHAO Tuan-Jie, and GAI Jun-Yi
- 1067 Cloning and Sequence Analysis of *KAPP* Gene in *Brassica oleracea*
WU Wei-Ru, ZHU Li-Quan, LI Cheng-Qiong, YANG Kun, TANG Zhang-Lin, REN Xue-Song, and WANG Xiao-Jia
- 1075 Identification and Expression Analysis of *ZmERD16*: a Ubiquitin Extension Protein Gene in Maize (*Zea mays* L.)
LU Yue-Shang, LIU Ying-Hui, ZHANG Deng-Feng, SHI Yun-Su, SONG Yan-Chun, WANG Tian-Yu, YANG De-Guang, and LI Yu
- 1084 Comparison of Genetic Diversity between Peanut Mini Core Collections from China and ICRISAT by SSR Markers
JIANG Hui-Fang, REN Xiao-Ping, ZHANG Xiao-Jie, HUANG Jia-Quan, LEI Yong, YAN Li-Ying, LIAO Bo-Shou, Hari D UPADHYAYA, and Corley C HOLBROOK
- 1092 QTL Mapping of Agronomic and Quality Traits in Soybean under Different Post-Flowering Photoperiods
WANG Ying, CHENG Li-Rui, LENG Jian-Tian, WU Cun-Xiang, HOU Wen-Sheng, and HAN Tian-Fu
- 1100 Simulation Comparisons of Effectiveness among QTL Mapping Procedures of Different Statistical Genetic Models
SU Cheng-Fu, ZHAO Tuan-Jie, and GAI Jun-Yi
- 1108 QTL Analysis for Mesocotyl Length in Rice (*Oryza sativa* L.)
HUANG Cheng, JIANG Shu-Kun, FENG Ling-Ling, XU Zheng-Jin, and CHEN Wen-Fu
- 1114 Molecular Markers for Estimating Distinctness, Uniformity, and Stability of Wheat Lines in Regional Trials
WANG Li-Xin, CHANG Li-Fang, LI Hong-Bo, JI Wei, LIU Li-Hua, and ZHAO Chang-Ping
- 1126 Wheat Leaf Rust Resistance in 28 Chinese Wheat Mini-Core Collections
DING Yan-Hong, LIU Huan, SHI Li-Hong, WEN Xiao-Lei, ZHANG Na, YANG Wen-Xiang, and LIU Da-Qun
- 1135 Isolation and Expression of Two Fruit Ripening Related Genes SIPEL and SIAPL in Tomato (*Solanum lycopersicum*)
XIAO Dong, XIAO Yang, CAI Ying-Fan, DENG Xiao-Feng, WU Suo-Wei, ZHENG Xu, LI Wan-Chen, WU Cui-Ping, FEI Zhang-Jun, NIU Ying-Ze, and YANG Jian-Ping
- 1144 Identification and Comparison of Diploid and Tetraploid Hybrids of *Oryza sativa* × *O. meyeriana*
SONG Zhao-Jian, DU Chao-Qun, HU Ya-Ping, TANG Zhi-Qiang, CHEN Dong-Ling, HE Yu-Chi, HE Guang-Cun, and CAI De-Tian

TILLAGE & CULTIVATION · PHYSIOLOGY & BIOCHEMISTRY

- 1153 Effects of Planting Density on Yield Performance and Density-Tolerance Analysis for Maize Hybrids
CHEN Chuan-Yong, HOU Yu-Hong, SUN Rui, ZHU Ping, DONG Zhi-Qiang, and ZHAO Ming
- 1161 Moisture Variation and Modeling of Cotton and Soybean Seeds under Different Storage Conditions
WANG Jing, JIANG Peng, LI Dong, MA Qiang, TAI Shu-Jin, ZUO Zhen-Peng, DONG Lu-Hao, and SUN Qing-Quan
- 1169 Antioxidative Activities of Transgenic Yeast with Ferritin Gene from Wheat
ZHAO Yong-Liang, CHEN Jing, WANG Dan, WANG Wei-Guo, and LI Yun-Hui
- 1176 Nonlinear Screening Indexes of Drought Resistance at Rice Seedling Stage Based on Support Vector Machine
YUAN Zhe-Ming and TAN Xian-Sheng

- 1183 **Effects of Delayed Irrigation at Jointing Stage and Irrigation Level on Consumption Amount and Resources of Water in Wheat and Farmland Evapotranspiration** WANG Hong-Guang, YU Zhen-Wen, ZHANG Yong-Li, and WANG Dong
- 1192 **Grain Yield and Agronomic Traits of Winter Wheat Varieties in Response to Fertilization in Dryland** ZHOU Ling, WANG Zhao-Hui, and LI Sheng-Xiu
- 1198 **Vascular Anatomical Traits of Caryopsis in Different Positions and Its Relationship with Quality Traits of *Japonica* Rice** YU Xiao-Gang, ZHANG Wen-Zhong, HAN Ya-Dong, HUANG Li-Li, XU Hai, ZHAO Ming-Hui, GAO Dong-Chang, XU Zheng-Jin, and CHEN Wen-Fu
- RESEARCH NOTES**
- 1209 **Effect of Genotype and Growing Environment on Anther Culture in Wheat** HAN Xiao-Fen, TAO Li-Li, YIN Gui-Xiang, LIU Xiao-Lei, DU Li-Pu, WEI Yi-Qin, YAN Yue-Ming, and YE Xing-Guo
- 1216 **FISH Analysis of Resynthesized Allotetraploid *Arabidopsis*** WEI Fang and ZHANG Gai-Sheng
- 1221 **Cloning and Expression Analysis of a bZIP Transcription Factor Gene in Wheat Induced by Stripe Rust Pathogen** ZHANG Yi, XIA Ning, ZHANG Gang, GUO Jun, HUANG Li-Li, and KANG Zhen-Sheng
- 1226 **Effects of Planting Density and Row Spacing on Canopy Apparent Photosynthesis of High-Yield Summer Corn** YANG Ji-Shun, GAO Hui-Yuan, LIU Peng, LI Geng, DONG Shu-Ting, ZHANG Ji-Wang, and WANG Jing-Feng

A BRIEF INTRODUCTION OF *ACTA AGRONOMICA SINICA*

Acta Agronomica Sinica (AAS, ISSN 0496-3490) is a monthly academic journal co-sponsored by Crop Science Society of China and the Institute of Crop Sciences, Chinese Academy of Agricultural Sciences, under the leadership of China Association for Science and Technology and published by Science Press, Chinese Academy of Sciences. AAS was firstly published in 1962. The predecessors were *Proceedings of China Association of Agricultural Science Societies* started in 1919, *Chinese Journal of Agricultural Research* started in 1950, and *Acta Agriculturae Sinica* started in 1952. As one of the key scientific journals in China, AAS has been financially supported by China Association for Science and Technology since 1997 and the National Natural Science Foundation of China since 2000.

The major aims of AAS are to report the progresses in the disciplines of crop breeding, crop genetics, crop cultivation, crop physiology, ecology, biochemistry, germplasm resources, grain chemistry, grain storage and processing, biotechnology and biomathematics etc. mainly in China and abroad. AAS provides regular columns for Original papers, Reviews, and Research notes. The strict peer-review procedure guarantees the academic level and raises the reputation of the journal. The readership of AAS is for crop science researchers, students of agricultural colleges and universities, and persons with similar academic level.

AAS is the leading journal of crop sciences and reflects the latest achievement in all aspects of crop sciences in China. AAS occupies the first position on the list of Chinese core journals in "Agronomy and Crops" field. The editorial board consists of 92 specialists in the field of crop sciences. Among them, 21 are academicians of Chinese Academy of Sciences or Chinese Academy of Engineering, 14 are from the outside of China, and 3 are from Hong Kong and Taiwan, China.

AAS is a fully Open Access Journal through the independent website (<http://www.chinacrops.org/zwx/b/>) since 2004. Free full texts are published online 2 months earlier than printing version, and all articles of the journal from 1962 are available freely. Manuscript submission, tracking, and peer review process are completed online. The functions of eTOCs (Table of Contents Alerting), advanced paper search, and paper recommendation are available.

AAS are listed in some international index systems, such as AGRIS (FAO), Biological Abstract, CAB Abstracts, Chemical Abstracts, Cambridge Scientific Abstract, Index of Copernicus, JST's Bibliographic Databases, and VINITI Abstracts Journal (Russia). AAS is also referenced by many domestic databases and abstract periodicals.

The purposes of AAS are to enhance the development of crop science and technology in China, to promote nationwide and worldwide academic exchanges, and to accelerate the modernization of Chinese agriculture. AAS is distributed in China and abroad. The editorial office appreciates to establish publication exchange relationship with related institutions, agricultural colleges and universities, and international organizations in China and abroad. Submissions in English from overseas are welcome.