



ISSN 1001-7216  
CODEN ZSKHBX

2013年1月 第27卷 第1期 Vol. 27 No. 1

# 中国水稻科学

CHINESE JOURNAL OF RICE SCIENCE

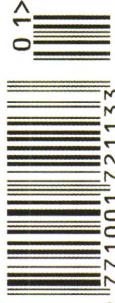


中国水稻研究所 主办

水稻生物学国家重点实验室 协办

Sponsored by the China National Rice Research Institute  
in cooperation with the State Key Laboratory of Rice Biology

ISSN 1001-7216



万方数据

## 目 次

### 研究报告

籼稻矮化多分蘖突变体 <i>gsor23</i> 的基因克隆与表达分析 王涛 袁守江 尹亮 赵金凤 万建民 李学勇	1
利用 RNA 干涉研究水稻锌指蛋白基因 <i>OsZRL</i> 的功能 王晓红 晏丽 陈昌冬 刘永胜 牛向丽	9
基于生物信息学分析的水稻无机焦磷酸化酶基因 <i>OsIP1</i> 的克隆及其遗传转化 张亚芳 余永旗 左示敏 娄丽娟 陈宗祥 潘学彪	17
利用染色体片段置换系群体检测水稻叶片形态 QTL 周丽慧 赵春芳 赵凌 张亚东 朱镇 陈涛 赵庆勇 姚姝 于新 王才林	26
水稻矮秆突变体 <i>Zj88d</i> 的鉴定与基因定位 纪现军 叶胜海 周涯 修芬连 邓晓梅 尚海瀛 刘继云 陈萍萍 李小华 金庆生 张小明	35
基于 SSR 标记的云南地方稻种群体内遗传多样性分析 孙建昌 余腾琼 汤翠凤 曹桂兰 徐福荣 韩龙植	41
生态环境对籼粳交后代株型特性和产量构成的影响 金峰 徐海 江奕君 赵明珠 周平 杨莉 李茂柏 徐正进 陈温福 郑家奎	49
利用重测序的水稻染色体片段代换系定位控制稻米淀粉黏滞性谱 QTL 张昌泉 胡冰 朱孔志 张华 冷亚麟 汤述翥 顾铭洪 刘巧泉	56
缺磷条件下蔗糖对水稻磷素吸收利用起重要作用 赵建琦 吴学能 曹越 印洁 徐国华 孙淑斌	65
水稻灌浆期高温对天冬氨酸代谢酶活性及其家族氨基酸含量的影响 梁成刚 张青 李敬 熊丹 许光利 汪燕 刘泉 黄鹏 李天	71
抽穗期干旱复水对不同产量早稻品种结实及一些生理指标的影响 陈小荣 刘灵燕 严崇虎 钟蕾 朱昌兰 彭小松 贺晚鹏 傅军如 欧阳林娟 贺浩华	77
东北水稻生长发育和产量对夜间升温的响应 陈金 田云录 董文军 侯立刚 马巍 徐志宇 张卫建	84
蛋白质影响水稻米饭食味品质的机理 谢黎虹 罗炬 唐绍清 陈能 焦桂爱 邵高能 魏祥进 胡培松	91
添加秸秆和黑炭对水稻土碳氮转化及土壤微生物代谢图谱的影响 王娟 张丽君 姚槐应	97
褐飞虱近似种伪褐飞虱和拟褐飞虱的寄主植物 崔亚丽 何佳春 罗举 赖凤香 傅强	105

# CHINESE JOURNAL OF RICE SCIENCE (Bimonthly)

Volume 27, Number 1, January 2013

<http://www.ricesci.cn>; E-mail: cjsr@263.net

## CONTENTS

### Research Papers

Positional Cloning and Expression Analysis of the Gene Responsible for the High-tillering Dwarf Phenotype in the indica Rice Mutant <i>gsor23</i>	1
WANG Tao, YUAN Shou-jiang, YIN Liang, ZHAO Jin-feng, WAN Jian-min, LI Xue-yong	
Function Analysis of a Rice Zinc Finger Protein Gene <i>OsZRL</i> by RNA Interference	9
YU Xiao-hong, CHAO Li, CHEN Chang-dong, LIU Yong-sheng, NIU Xiang-li	
Cloning of an Inorganic Pyrophosphatase Gene <i>OsIP1</i> in Rice Based on Bioinformatics Analysis and its Genetic Transformation	17
ZHANG Ya-fang, YU Yong-qi, ZUO Shi-min, LOU Li-juan, CHEN Zong-xiang, PAN Xue-biao	
QTL Detection for Leaf Morphology of Rice Using Chromosome Segment Substitution Lines	26
ZHOU Li-hui, ZHAO Chun-fang, ZHAO Ling, ZHANG Ya-dong, ZHU Zhen, CHEN Tao, ZHAO Qing-yong, YAO Shu, YU Xin, WANG Cai-lin	
Characterization and Gene Mapping of a Dwarf Mutant <i>Zj88d</i> in Rice	35
JI Xian-jun, YE Sheng-hai, ZHOU Ya, XIU Fen-lian, DENG Xiao-mei, SHANG Hai-xuan, LIU Ji-yun, CHEN Ping-ping, LI Xiao-hua, JIN Qing-sheng, ZHANG Xiao-ming	
Analysis of Genetic Diversity within Populations of Rice Landraces from Yunnan Using Microsatellite Markers	41
SUN Jian-chang, YU Teng-qiong, TANG Cui-feng, CAO Gui-lan, XU Fu-rong, HAN Long-zhi	
Effect of Ecological Environments on Plant Type Traits and Yield Traits in F <sub>2</sub> of Cross Between indica and japonica	49
JIN Feng, XU Hai, JIANG Yi-jun, ZHAO Ming-zhu, ZHOU Ping, YANG Li, LI Mao-bai, XU Zheng-jin, CHEN Wen-fu, ZHENG Jia-kui	
Mapping of QTLs for Rice RVA Properties Using High-throughput Re-sequenced Chromosome Segment Substitution Lines	56
ZHANG Chang-quan, HU Bing, ZHU Kong-zhi, ZHANG Hua, LENG Ya-lin, TANG Shu-zhu, GU Ming-hong, LIU Qiao-quan	
Sucrose Plays an Important Role in the Uptake and Use of Phosphate in Rice under P-deficiency Conditions	65
ZHAO Jian-qi, WU Xue-neng, CAO Yue, YIN Jie, SUN Shu-bin, XU Guo-hua	
Effect of High Temperature on Aspartate Metabolism Enzyme Activities and Aspartate-family Amino Acids Contents at Rice Grain-filling Stage	71
LIANG Cheng-gang, ZHANG Qing, LI Jing, XIONG Dan, XU Guang-li, WANG Yan, LIU Quan, HUANG Peng, LI Tian	
Effects of Rewatering after Drought at Heading Date on Seed Setting and Some Physiological Indexes in Early Rice Varieties with Different Yields	77
CHEN Xiao-rong, LIU Ling-yan, YAN Chong-hu, ZHONG Lei, ZHU Chang-lan, PENG Xiao-song, HE Xiao-peng, FU Jun-ru, OUYANG Lin-juan, HE Hao-hua	
Responses of Rice Growth and Grain Yield to Nighttime Warming in Northeast China	84
CHEN Jin, TIAN Yun-lu, DONG Wen-jun, HOU Li-gang, MA Wei, XU Zhi-yu, ZHANG Wei-jian	
Proteins Affect Rice Eating Quality Properties and Its Mechanism	91
XIE Li-hong, LUO Ju, TANG Shao-qing, CHEN Neng, JIAO Gui-ai, SHAO Gao-neng, WEI Xiang-jin, HU Pei-song	
Effects of Straw and Black Carbon Addition on C-N Transformation and Microbial Metabolism Profile in Paddy Soil	97
WANG Juan, ZHANG Li-jun, YAO Huai-ying	
Host Plants of <i>Nilaparvata muiri</i> China and <i>N. bakeri</i> (Muir), Two Sibling Species of <i>N. lugens</i> (Stål)	105
CUI Ya-li, HE Jia-chun, LUO Ju, LAI Feng-xiang, FU Qiang	