



ISSN 0578-1752  
CODEN CKNYAR

# 中国农业科学

SCIENTIA AGRICULTURA SINICA

第45卷 第9期

Vol. 45 No. 9

## 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

- |      |   |     |     |     |     |
|------|---|-----|-----|-----|-----|
| 1667 | 小麦转录因子基因 <i>W16</i> 的功能标记作图和关联分析                | 雷梦林 | 李 昂 | 吕小平 | 徐兆师 |
|      |   |     | 马有志 | 刘惠民 | 景蕊莲 |
| 1676 | 一个玉米细胞质雄性不育系的鉴定及遗传分析                            | 祝丽英 | 陈景堂 | 黄亚群 | 赵永锋 |
|      |   |     |     |     | 宋占权 |
| 1685 | 花生2-甲基-6-植基-1,4-苯醌甲基转移酶基因 <i>VTE3</i> 的克隆及多态性分析 |     | 郭安强 | 万勇善 | 刘凤珍 |
| 1696 | 烟草叶片全长 cDNA 文库构建及 EST 序列分析                      |     | 龚达平 | 解敏敏 | 孙玉合 |

#### 耕作栽培·生理生化·农业信息技术

- |      |                        |     |     |     |     |
|------|------------------------|-----|-----|-----|-----|
| 1703 | 不同棉花基因型幼苗耐寒性分析及其鉴定指标筛选 | 武 辉 | 侯丽丽 | 周艳飞 | 范志超 |
|      |                        |     | 石俊毅 | 阿丽艳 | 肉孜  |
| 1714 | 高粱品种萌发期耐盐性筛选与鉴定        | 孙 璐 | 周宇飞 | 汪 激 | 肖木辑 |
|      |                        |     | 陶 冶 | 许文娟 | 黄瑞冬 |

#### 植物保护

- |      |                   |     |     |     |     |
|------|-------------------|-----|-----|-----|-----|
| 1723 | 大草蛉预蛹耐寒性的季节性变化    | 于令媛 | 时爱菊 | 郑方强 | 卢 虹 |
|      |                   |     |     | 张 帆 | 许永玉 |
| 1731 | 常用农药在水稻叶片上的润湿能力分析 | 徐广春 | 顾中言 | 徐德进 | 许小龙 |
|      |                   |     |     |     | 董玉轩 |

#### 土壤肥料·节水灌溉·农业生态环境

- |      |                          |     |     |     |     |
|------|--------------------------|-----|-----|-----|-----|
| 1741 | 连续秸秆覆盖对土壤无机氮供应特征和作物产量的影响 | 武 际 | 郭熙盛 | 鲁剑巍 | 王允青 |
|      |                          |     |     | 张晓玲 | 许征宇 |
| 1750 | 氮肥及其与秸秆配施在不同肥力土壤的固持及供应   | 梁 斌 | 赵 伟 | 杨学云 | 周建斌 |

#### 园艺

- |      |                                    |     |     |     |     |
|------|------------------------------------|-----|-----|-----|-----|
| 1758 | ‘湖景蜜露’桃果实酰基辅酶 A 氧化酶编码基因的克隆及表达分析    | 齐玉洁 | 张 鑫 | 杨 夏 | 高中山 |
|      |                                    |     |     |     | 贾惠娟 |
| 1766 | 不同砧木嫁接对薄皮甜瓜成熟期品质、香气合成相关酶活性及基因表达的影响 | 田晓彬 | 齐红岩 | 李 岩 | 靳亚忠 |
|      |                                    |     |     | 刘文玮 | 徐晓飞 |
| 1775 | 龙眼体细胞胚发生早期的蛋白质组学                   | 赖呈纯 | 赖钟雄 | 方智振 | 何 园 |
|      |                                    |     |     |     | 姜顺日 |
| 1791 | 玫瑰花柱提取液对玫瑰及月季花粉管离体生长的影响            | 丁一鸣 | 赵兰勇 | 张 玲 | 孙华彩 |
|      |                                    |     |     |     | 王新刚 |

## 贮藏·保鲜·加工

1798 改性甘薯果胶对癌细胞增殖的影响

张燕燕 木泰华 张苗

## 畜牧·资源昆虫

1807 运输前后奶牛血清蛋白质组的变化

袁廷杰 王加启 杨永新 卜登攀  
杨晋辉 周凌云

1814 绵羊 Myostatin 基因 5'调控区的生物信息学分析及孕激素对调控区活性的影响

秦健 杜娟 杨亚群 杜荣

1826 鸡 miR-181a 组织的表达谱及其转录调控区域

孙桂荣 李明 康相涛 李国喜  
田亚东 韩瑞丽 白义春

1833 家蚕幼虫期和蛹期马氏管差异蛋白质组学分析

邹勇 钟晓武 张利平 赵萍  
夏庆友

## 兽医

1840 猪干扰素  $\alpha$ 、 $\beta$  和  $\gamma$  的融合表达及活性

郑鸣 边传周 王老七 王永芬

1848 Arkadia 和 UCH37 表达载体的构建及其对 TGF- $\beta$ 1/Smads 信号通路的影响

廖芳芳 苑嗣纯 张中文 吴国娟

## 研究简报

1857 橡胶树 *HbSUT3* 的分子进化分析

林飞鹏 范玉洁 龙翔宇 胡彦师  
唐朝荣

1864 外源 NO 对 NaCl 胁迫下棉苗主要形态和相关生理性状的影响

李翠芳 刘连涛 孙红春 张永江  
朱秀金 李存东

1873 食品中 4 种肉类成分多重 PCR 的快速鉴别方法

何玮玲 张驰 杨静 黄明  
杨军

1881 乳酸菌对 Caco-2 细胞分泌 APRIL 和 IL-10 的影响

黄怡 黄琴 李雅丽 崔志文  
李卫芬 余东游

## CONTENTS

**CROP GENETICS & BREEDING • GERmplasm RESOURCES • MOLECULAR GENETICS**

- 1667 Functional Marker Mapping and Association Analysis of Gene *W16* in Common Wheat LEI Meng-lin, LI Ang, CHANG Xiao-ping, XU Zhao-shi, MA You-zhi, LIU Hui-min, JING Rui-lian
- 1676 Identification and Genetic Analysis of a Cytoplasmic Male Sterile Line in Maize (*Zea mays* L.) ZHU Li-ying, CHEN Jing-tang, HUANG Ya-qun, ZHAO Yong-feng, SONG Zhan-quan
- 1685 Cloning and Polymorphism of 2-Methyl-6-Phytyl-1, 4-Benzoquinol Methyltransferase Gene (*VTE3*) in *Arachis* GUO An-qiang, WAN Yong-shan, LIU Feng-zhen
- 1696 Construction and Sequences Analysis of Full-Length cDNA Library of Tobacco Leaves GONG Da-ping, XIE Min-min, SUN Yu-he

**TILLAGE & CULTIVATION • PHYSIOLOGY & BIOCHEMISTRY • AGRICULTURE INFORMATION TECHNOLOGY**

- 1703 Analysis of Chilling-Tolerance and Determination of Chilling-Tolerance Evaluation Indicators in Cotton of Different Genotypes WU Hui, HOU Li-li, ZHOU Yan-fei, FAN Zhi-chao, SHI Jun-yi, Aliyan-Rouzi, ZHANG Ju-song
- 1714 Screening and Identification of Sorghum Cultivars for Salinity Tolerance During Germination SUN Lu, ZHOU Yu-fei, WANG Che, XIAO Mu-ji, TAO Ye, XU Wen-juan, HUANG Rui-dong

**PLANT PROTECTION**

- 1723 Seasonal Changes in the Cold Hardiness of *Chrysopa pallens* (Rambur) Prepupa YU Ling-yuan, SHI Ai-ju, ZHENG Fang-qiang, LU Hong, ZHANG Fan, XU Yong-yu
- 1731 Wettability Analysis of Pesticides on Rice Leaf XU Guang-chun, GU Zhong-yan, XU De-jin, XU Xiao-long, DONG Yu-xuan

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

- 1741 Effects of Continuous Straw Mulching on Supply Characteristics of Soil Inorganic Nitrogen and Crop Yields WU Ji, GUO Xi-sheng, LU Jian-wei, WANG Yun-qing, ZHANG Xiao-ling, XU Zheng-yu
- 1750 Nitrogen Retention and Supply After Addition of N Fertilizer and Its Combination with Straw in the Soils with Different Fertilities LIANG Bin, ZHAO Wei, YANG Xue-yun, ZHOU Jian-bin

**HORTICULTURE**

- 1758 Molecular Cloning and Sequence Analysis of Acyl-CoA Oxidase Gene from 'Hujingmilu' Peach Fruit QI Yu-jie, ZHANG Xin, YANG Xia, GAO Zhong-shan, JIA Hui-juan
- 1766 Effects of Different Rootstocks on Ripening Quality, Activities and Gene Expression of Aroma-Related Enzymes in Grafting Oriental Melon (*Cucumis melo* var. *makuwa* Makino) TIAN Xiao-bin, QI Hong-yan, LI Yan, JIN Ya-zhong, LIU Wen-wei, XU Xiao-fei

- 1775 Proteomic Analysis of Early Somatic Embryogenesis in Longan (*Dimocarpus longan* Lour.) LAI Cheng-chun, LAI Zhong-xiong, FANG Zhi-zhen, HE Yuan, JIANG Shun-ri
- 1791 Effect of the Extracted Solution from the Style of *Rosa rugosa* on the Growth *in Vitro* of Pollen Tube of *R. rugosa* and *R. chinensis* DING Yi-ming, ZHAO Lan-yong, ZHANG Ling, SUN Hua-cai, WANG Xin-gang

**STORAGE • FRESH-KEEPING • PROCESSING**

- 1798 Effects of Modified Sweet Potato Pectins on the Proliferation of Cancer Cells ZHANG Yan-yan, MU Tai-hua, ZHANG Miao

**ANIMAL SCIENCE • RESOURCE INSECT**

- 1807 Effects of Transportation on Serum Proteome in Dairy Cows YUAN Ting-jie, WANG Jia-qi, YANG Yong-xin, BU Deng-pan, YANG Jin-hui, ZHOU Ling-yun
- 1814 Bioinformatic Analysis of Myostatin Gene 5' Regulatory Region from Sheep and Effect of Progesterone on the Activity of the Regulatory Region QIN Jian, DU Juan, YANG Ya-qun, DU Rong
- 1826 The Difference Expression Profiles of miR-181a and Transcription Regulation Region Analysis in Chicken SUN Gui-rong, LI Ming, KANG Xiang-tao, LI Guo-xi, TIAN Ya-dong, HAN Rui-li, BAI Yi-chun
- 1833 Proteomic Comparison on Malpighian Tubules Between Larvae Stage and Pupal Stage of Silkworm (*Bombyx mori*) ZOU Yong, ZHONG Xiao-wu, ZHANG Li-ping, ZHAO Ping, XIA Qing-you

**VETERINARY SCIENCE**

- 1840 Study on the Fusion Expression and Bioactivity of Porcine Interferon  $\alpha$ ,  $\beta$  and  $\gamma$  ZHENG Ming, BIAN Chuan-zhou, WANG Lao-qi, WANG Yong-fen
- 1848 Constructions of Arkadia and UCH37 Expression Vectors and Effects on TGF- $\beta$ 1/Smad7 Signal Pathway LIAO Fang-fang, YUAN Si-chun, ZHANG Zhong-wen, WU Guo-juan

**RESEARCH NOTES**

- 1857 Analysis on Molecular Evolution of *HbSUT3* in *Hevea* Species LIN Fei-peng, FAN Yu-jie, LONG Xiang-yu, HU Yan-shi, TANG Chao-rong
- 1864 Effects of Exogenous Nitric Oxide on Main Growth and Physiological Characteristics of Seedlings of Cotton Under NaCl Stress LI Cui-fang, LIU Lian-tao, SUN Hong-chun, ZHANG Yong-jiang, ZHU Xiu-jin, LI Cun-dong
- 1873 A Quick Multiplex PCR Method for the Identification of Four Meat Ingredients in Food Products HE Wei-ling, ZHANG Chi, YANG Jing, HUANG Ming, YANG Jun
- 1881 Effects of Lactic Acid Bacteria on APRIL and IL-10 Secretion in Caco-2 Cells HUANG Yi, HUANG Qin, LI Ya-li, CUI Zhi-wen, LI Wei-fen, YU Dong-you