



中文核心期刊
中国科学引文数据库(CSCD)来源期刊
中国精品科技期刊
中国科技核心期刊
RCCSE 中国核心学术期刊
中国农业核心期刊

ISSN 1000-4440

CN 32-1213/S

江苏农业学报

Jiangsu Journal of Agricultural Sciences

第34卷 第6期

Vol. 34 No.6

2018

江苏省农业科学院主办

ISSN 1000-4440



万方数据

江苏农业学报

第三十四卷
第六期

二〇一八年十二月三十一日

江苏省农业科学院

江苏农业学报

第34卷 第6期 2018年12月31日

目次

遗传育种·生理生化

- 云粳系列水稻品种分子身份证的构建 管俊娇 杨晓洪 王江民 张 鹏 黄清梅 白 洁 余志慧 张建华(1201)
- 高产杂交水稻两优培九衰老进程中剑叶差异蛋白质组学分析 王莹慧 孙萌萌 汪育文 吴 敏 陈国祥(1207)
- 大气 CO₂ 浓度升高对糙米和精米中矿质营养元素含量的影响
..... 蒋 倩 朱建国 朱春梧 刘 钢 徐 习 张继双(1217)
- 1996–2015 年江苏省淮南麦区育成品种的遗传多样性分析
..... 吕国锋 范金平 高德荣 张 勇 陆成彬 张晓祥 王 慧 刘业宇 吴素兰 张伯桥(1225)
- 陆地棉 VR018 抗黄萎病 QTL 定位
..... 赵 君 张大伟 徐剑文 徐海江 刘剑光 朱家辉 吴巧娟 孔 杰 肖松华 阿里普·艾尔西(1232)
- 玉米籽粒灌浆特性及其与茎秆糖分的关系 华鹤良 赵 青 李国生 曹振奇 王 杰 卞云龙(1239)
- 嗜热内切葡聚糖酶(*E1*)植物亚细胞定位表达载体的构建及验证
..... 李齐东 高 璐 蒋建雄 武艳芳 李 霞 王永丽 刘瑶瑶 孙建中(1247)

植物保护

- 高光谱和图像特征相融合的生菜病害识别 芦 兵 孙 俊 毛罕平 杨 宁 武小红(1254)
- 稻田杂草对草甘膦和草铵膦的敏感性差异 张玉池 刘 琪 相世刚 强 胜 宋小玲(1260)

耕作栽培·资源环境

- 表油菜素内酯在缓解水稻砷毒害中的作用
..... 练旺民 徐 薇 孟卓玲 陶之欢 金 珂 郑 晶 张佳艺 刘庆坡(1267)
- 拔节期弱光和渍水胁迫对春玉米光合作用、根系生长及产量的影响
..... 高 祺 李 明 朴 琳 晏君瑶 李 乔 肖佳雷 金 萍(1276)
- 经济欠发达地区测土配方施肥技术推广的影响因素分析 李子琳 李 婕 郭 熙 江叶枫 林建平(1287)
- 揉搓与稀碱联合预处理对水稻秸秆酶解产糖率及结构的影响
..... 马贤武 王 凯 刘 轩 荣昭强 李晓林 刘玉涛(1294)
- 利用空心莲子草阻控猪场废水扩散 曹志强 张 刚 王德建 郑继成 张世洁(1300)

畜牧兽医·水产养殖

猪伪狂犬病毒野毒株与疫苗株的多重 PCR 鉴别

..... 姜子义 李 碧 蔡 瑶 颜久洪 龚双燕 樊 毅 黄剑波 朱 玲 徐志文(1307)

鸭骨骼肌 *TNNI1* 基因 CpG 岛区甲基化与 mRNA 差异表达

..... 姬改革 束婧婷 单艳菊 章 明 屠云洁 巨晓军 刘一帆(1312)

园 艺

大蒜苗期农艺性状与青蒜产量的关系 郭文琦 张培通 李春宏 殷剑美 韩晓勇 王 立(1319)

甘蓝晚抽薹基因 *BoFLC3* 克隆、序列分析和亚细胞定位 戴忠良 陈 丽 山 溪 秦文斌 肖 燕 朱建飞(1324)

葡萄赤霉素合成关键基因 *VvGA20ox2* 的克隆、亚细胞定位和表达分析 高世敏 董 阳 王 武 陶建敏(1331)

一个凤丹 *PoFAD2* 基因家族新成员 *PoFAD2-2* 的克隆及表达模式分析

..... 孙 静 陈 明 孟家松 张克亮 陶 俊(1339)

基于视觉注意机制的黄绿色苹果图像分割 车金庆 王 帆 王艺洁 吕继东 马正华(1347)

加工贮藏·质量安全

基于 RSM 和 MLP-ANN 的草莓果浆超声酶解参数优化 丛嘉昕 宋江峰 李大婧 刘春泉 包怡红(1354)

超声波联合一磷酸腺苷(AMP)对鸡胸肉的嫩化效果 张 坤 吴海虹 邹 烨 王道营 徐为民(1362)

基于响应面 and 主成分分析的速冻微波青稞鱼面品质改良 肖 猛 丁 捷 赵雪梅 何江红 黄益前(1370)

基于卷积神经网络和支持向量机算法的马铃薯表面缺陷检测 许伟栋 赵忠盖(1378)

绿原酸对鸡肉腐败菌的抑菌机理

..... 苏萌萌 孙芝兰 刘 芳 吴海虹 张新笑 诸永志 王道营 徐为民 罗 章(1386)

用于检测转基因作物中调控元件的质粒标准分子的构建

..... 邢宇俊 陆丹丹 吴季荣 徐剑宏 王国园 梁 杰 史建荣(1392)

农业经济·农业信息

品种创新与甘薯产业发展 易中懿 汪 翔 徐雪高 秦建军 陆建珍 戴起伟(1401)

江苏省玉米生产情况调研与分析 张世博 施龙建 俞春涛 陈国清 刘志勇 袁建华 陆卫平 陆大雷(1410)

综 述

中国食用甘薯育种现状及展望 谢一芝 郭小丁 贾赵东 马佩勇 边小峰 禹 阳(1419)

植物耐低磷胁迫的根系适应性机制研究进展 许仙菊 张永春(1425)

植物抗黄瓜花叶病毒基因研究进展 郭广君 王述彬 刘金兵 潘宝贵 刁卫平 戈 伟 高长洲(1430)

高光泽番茄育种及果实表面光泽度 周 蓉 赵统敏 赵丽萍 王银磊 宋刘霞 余文贵(1437)

JIANGSU JOURNAL OF AGRICULTURAL SCIENCES

Vol.34 No.6 December 31 2018

CONTENTS

CROP GENETICS AND BREEDING · PHYSIOLOGY AND BIOCHEMISTRY

Establishment of molecular identity for rice variety of Yunjing series

..... GUAN Jun-jiao, YANG Xiao-hong, WANG Jiang-min, ZHANG Peng, HUANG Qing-mei, BAI Jie, YU Zhi-hui, ZHANG Jian-hua(1201)

Comparative flag leaf proteomic profiling of high-yielding hybrid rice Liangyoupeijiu during senescence

..... WANG Ying-hui, SUN Meng-meng, WANG Yu-wen, WU Min, CHEN Guo-xiang(1207)

Influence of free-air CO₂ enrichment (FACE) on the content of mineral nutrient elements in brown rice and white rice

..... JIANG Qian, ZHU Jian-guo, ZHU Chun-wu, LIU Gang, XU Xi, ZHANG Ji-shuang(1217)

Genetic diversity analysis of winter wheat cultivars developed in Huainan region of Jiangsu province from 1996 to 2015

..... LYU Guo-feng, FAN Jin-ping, GAO De-rong, ZHANG Yong, LU Cheng-bin,
ZHANG Xiao-xiang, WANG Hui, LIU Ye-yu, WU Su-lan, ZHANG Bo-qiao(1225)

Quantitative trait locus mapping for Verticillium wilt resistance in upland cotton VR018

..... ZHAO Jun, ZHANG Da-wei, XU Jian-wen, XU Hai-jiang, LIU Jian-guang, ZHU Jia-hui, WU Qiao-juan, KONG Jie, XIAO Song-hua, AUPU Aierxi(1232)

Kernel filling characteristics and their relationship with stalk sugar content in maize

..... HUA He-liang, ZHAO Qing, LI Guo-sheng, CAO Zhen-qi, WANG Jie, BIAN Yun-long(1239)

Construction and verification of the thermophilic endoglucanase (EI) subcellular plant expression vector

..... LI Qi-dong, GAO Lu, JIANG Jian-xiong, WU Yan-fang, LI Xia, WANG Yong-li, LIU Yao-yao, SUN Jian-zhong(1247)

PLANT PROTECTION

Disease recognition of lettuce with feature fusion based on hyperspectrum and image

..... LU Bing, SUN Jun, MAO Han-ping, YANG Ning, WU Xiao-hong(1254)

Sensitivity difference of weeds in rice field to glyphosate and glufosinate

..... ZHANG Yu-chi, LIU Qi, XIANG Shi-gang, QIANG Sheng, SONG Xiao-ling(1260)

FARMING AND CULTIVATION · RESOURCE AND ENVIRONMENT

Effects of supplementation of epibrassinolide on alleviation of arsenic stress in rice

..... LIAN Wang-min, XU Wei, MENG Zhuo-ling, TAO Zhi-huan, JIN Ke, ZHENG Jing, ZHANG Jia-yi, LIU Qing-po(1267)

Effects of weak light and waterlogging stress at jointing stage on photosynthesis, root growth and yield of spring maize

..... GAO Qi, LI Ming, PIAO Lin, YAN Jun-yao, LI Qiao, XIAO Jia-lei, JIN Ping(1276)

Analysis on the factors influencing the application of soil testing and fertilizer recommendation in underdeveloped areas

..... LI Zi-lin, LI Jie, GUO Xi, JIANG Ye-feng, LIN Jian-ping(1287)

Study on the effects of rubbing-alkali pretreatment on enzymatic hydrolysis reducing sugar yield and structure of rice straw

..... MA Xian-wu, WANG Kai, LIU Xuan, RONG Zhao-qiang, LI Xiao-lin, LIU Yu-tao(1294)

Pollution control of piggery wastewater by *Alternanthera philoxeroides*

..... CAO Zhi-qiang, ZHANG Gang, WANG De-jian, ZHENG Ji-cheng, ZHANG Shi-jie(1300)

ANIMAL HUSBANDRY AND VETERINARY SCIENCES · AQUICULTURE

Multiplex PCR identification of pseudorabies vaccine strains and wild viruses

..... JIANG Zi-yi, LI Bi, CAI Yao, YAN Jiu-qi, GONG Shuang-yan, FAN Yi, HUANG Jian-bo, ZHU Ling, XU Zhi-wen(1307)

Difference of CpG island methylation status and mRNA expression level of *TNNI1* gene in duck skeletal muscle

..... JI Gai-ge, SHU Jing-ting, SHAN Yan-ju, ZHANG Ming, TU Yun-jie, JU Xiao-jun, LIU Yi-fan(1312)

HORTICULTURE

The relationship between main agronomic traits and yield of garlic sprout during garlic seedling stage

..... GUO Wen-qi, ZHANG Pei-tong, LI Chun-hong, YIN Jian-mei, HAN Xiao-yong, WANG Li(1319)

Cloning, sequence analysis and subcellular localization of *Brassica oleracea* *BoFLC3* gene

..... DAI Zhong-liang, CHEN Li, SHAN Xi, QIN Wen-bin, XIAO Yan, ZHU Jian-fei(1324)

Cloning, subcellular localization and expression analysis of the key gene *VvGA20ox2* in gibberellin synthesis of grapevine

..... GAO Shi-min, DONG Yang, WANG Wu, TAO Jian-min(1331)

Cloning and bioinformatics analysis of a new *PoFAD2* family member *PoFAD2-2* from *Paeonia ostii* T. Hong & J. X. Zhang

..... SUN Jing, CHEN Ming, MENG Jia-song, ZHANG Ke-liang, TAO Jun(1339)

A segmentation method of yellow and green apple images based on visual attention mechanism

..... CHE Jin-qing, WANG Fan, WANG Yi-jie, LYU Ji-dong, MA Zheng-hua(1347)

PROCESSING AND STORAGE · QUALITY SAFETY

Optimization of ultrasonic enzymolysis of strawberry pulp based on RSM and MLP-ANN

..... CONG Jia-xin, SONG Jiang-feng, LI Da-jing, LIU Chun-quan, BAO Yi-hong(1354)

Optimization of ultrasonic treatment and 5'-adenosine monophosphate (AMP) on the tenderness of chicken breast

..... ZHANG Kun, WU Hai-hong, ZOU Ye, WANG Dao-ying, XU Wei-min(1362)

Quality improvement of quick-frozen microwave highland barley fish noodle based on response surface methodology and principal component analysis

..... XIAO-Meng, DING-Jie, ZHAO Xue-mei, HE Jiang-hong, HUANG Yi-qian(1370)

Potato surface defects detection based on convolution neural networks and support vector machine algorithm

..... XU Wei-dong, ZHAO Zhong-gai(1378)

Antimicrobial mechanism of chlorogenic acid against chicken spoilage bacteria

..... SU Meng-meng, SUN Zhi-lan, LIU Fang, WU Hai-hong, ZHANG Xin-xiao, ZHU Yong-zhi, WANG Dao-ying, XU Wei-min, LUO Zhang(1386)

Construction of standard plasmid molecules of regulatory elements to detect genetically modified crop

..... XING Yu-jun, LU Dan-dan, WU Ji-rong, XU Jian-hong, WANG Yuan-yuan, LIANG Jie, SHI Jian-rong(1392)

AGRICULTURAL ECONOMY AND INFORMATION

Breeding innovation and development of sweet potato industry

..... YI Zhong-yi, WANG Xiang, XU Xue-gao, QIN Jian-jun, LU Jian-zhen, DAI Qi-wei (1401)

Research and analysis of maize production in Jiangsu province

..... ZHANG Shi-bo, SHI Long-jian, YU Chun-tao, CHEN Guo-qing, LIU Zhi-yong, YUAN Jian-hua, LU Wei-ping, LU Da-lei(1410)

REVIEW

Progresses and prospects on edible sweetpotato breeding in China

..... XIE Yi-zhi, GUO Xiao-ding, JIA Zhao-dong, MA Pei-yong, BIAN Xiao-feng, YU Yang(1419)

Research progress on the root adaptation mechanism of plants under low phosphorus stress

..... XU Xian-ju, ZHANG Yong-chun(1425)

Advances in related resistance genes of plant to cucumber mosaic virus

..... GUO Guang-jun, WANG Shu-bin, LIU Jin-bing, PAN Bao-gui, DIAO Wei-ping, GE Wei, GAO Chang-zhou(1430)

High-glossiness tomato breeding and fruit surface glossiness

..... ZHOU Rong, ZHAO Tong-min, ZHAO Li-ping, WANG Yin-lei, SONG Liu-xia, YU Wen-gui(1437)