



全国中文核心期刊
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2期

Vol. 34 No.2

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
第二期

二〇一八年四月三十日

江苏省农业科学院

江苏农业学报

第34卷 第2期 2018年04月30日

目次

遗传育种·生理生化

- 杂草稻竞争对栽培稻氮素积累量、氮素利用率及产量的影响 吴云艳 (241)
- 晚播条件下小麦籽粒产量、硬度与蛋白质含量对品种、施氮量和密度的响应
..... 胡文静 程顺和 高致富 吴荣林 陆成彬 (245)
- 蓖麻液泡膜质子泵 *RcVPI* 基因克隆与表达分析
..... 李惠根 王晓宇 李平 从娇娇 张丽雪 张继星 冀照君 穆莎茉莉 (251)
- 芥蓝牻牛儿苗基牻牛儿苗基焦磷酸合成酶基因 *BoaGGPSSI* 的克隆及表达分析
..... 薛生玲 江敏 常嘉琪 段妍雯 陈涛 郝宇 张芬 孙勃 (259)
- 利用不依赖连接反应的克隆方法构建 pCHF3-MAP65-1-YFP 和 pCHF3-MAP65-2-YFP 表达载体 王培培 韩榕 (266)
- miR-27a 与 *SCF* 靶向关系鉴定 赵园园 孟金柱 (271)

植物保护

- 基于拉曼光谱的稻瘟病诊断 冷小梅 谭峰 才巧玲 薛龄季轩 姜珊 李冬 (276)
- 黄瓜绿斑驳花叶病毒 *CP* 基因克隆及亚细胞定位
..... 范小燕 杨柳 季英华 任春梅 缪倩 韩玉春 章松柏 程兆榜 鲁红学 (281)
- 基于环境信息和深度自编码网络的农作物病害预测模型 张善文 黄文准 张传雷 (288)
- 油菜和小麦秸秆水浸提液对千金子种子萌发和幼苗生长的影响及其应用
..... 李茹 陈国奇 张玉华 刘庆虎 张凯 董立尧 (293)

耕作栽培·资源环境

- 不同作物-香蕉轮作对香蕉生产及土壤肥力质量的影响
..... 赖朝圆 杨越 陶成圆 王一鸣 郭继阳 王蓓蓓 阮云泽 赵艳 (299)
- 基于模糊免疫 PID 算法的施肥营养液 pH 值调节 刘玲 牛海霞 (307)
- 基于数码照片的草地植被盖度快速提取方法对比 徐金勤 邱新法 丁肖 何永健 王丹丹 (313)
- 不同苕麻品种对土壤中镉、铅富集的差异 朱守晶 史文娟 揭雨成 (320)
- 蜡样芽孢杆菌菌体及其胞外聚合物对 Cd^{2+} 的吸附作用 李学龙 刘国丽 李超 李跃 杨镇 (327)
- 铅污染对不同生境芦苇体内抗氧化酶系统的影响
..... 张娜 杨双童 非朱阳春 范茹芹 卢信 刘丽珠 穆春生 张振华 (333)
- 多功能生态塘对高密度水产养殖尾水的净化效果 常雅军 陈婷 周庆 刘晓静 姚东瑞 韩士群 (340)

畜牧兽医·水产养殖

- 党参多糖对仔猪小肠黏膜免疫功能的影响
..... 李成 尹莉莉 朱电锋 何嫣婷 李曼曼 丁雪东 李玉 王希春 吴金节 (347)

Fh8 明显增强 PCV2 Cap 蛋白的可溶性表达及抗原性

..... 郭芸芸 张碧成 孙小涵 汪 伟 何孔旺 牛家强 张雪寒 (356)

高效佐剂对猪细小病毒和圆环病毒二联灭活疫苗的免疫增强效果

..... 张雪花 张道华 陆吉虎 梅 梅 华 涛 唐 波 侯继波 唐应华 (361)

H9N2 亚型禽流感病毒对鸡的免疫抑制机制

..... 刘青涛 李 银 刘 娜 杨 婧 韩凯凯 刘宇卓 赵冬敏 黄欣梅 田宇杰 (368)

复方中草药制剂对肉鸡肌肉发育和肉品质的影响

..... 靳二辉 周先建 孙 启 周金星 李升和 金光明 (374)

高、低产双黄蛋高邮鸭卵巢结构及生殖激素和相关基因差异

..... 张 蕾 张响英 章敬旗 张 扬 常国斌 陈国宏 董 颺 吴炳鑫 王 健 (385)

饲料中补饲非常规饲料对育肥羊屠宰性能、血液生化指标及肉品质的影响

..... 孟梅娟 涂远璐 白云峰 张 凯 高立鹏 (390)

中华鲟 TaqMan 实时荧光 PCR 检测方法的建立

..... 陈光哲 郑红霞 祝长青 (399)

园 艺

不同外源物质对低温弱光次生盐渍化复合逆境下黄瓜幼苗生长、抗氧化系统及光合作用的影响

..... 李雅洁 张其安 陆晓民 (404)

有机物料接种蚯蚓对设施菠菜产量及品质的影响

..... 吴 迪 刘满强 焦加国 薛利红 杨林章 (411)

桃果实 *PLD α* 基因的表达及生物信息学分析

..... 高 珊 张 凯 朱树华 (418)

不同特异种质罗汉果的遗传差异及杂交优势预测

..... 覃信梅 蒋水元 韩 愈 向巧彦 李 虹 甘金佳 梁勇诗 黄夕洋 (425)

加工贮藏·质量安全

玻璃态贮藏条件下玉米粉类胡萝卜素的稳定性

..... 肖亚冬 宋江峰 李大婧 章 园 刘春泉 (432)

不同提取方法对大扁杏仁油品质的影响

..... 薛焕焕 张海生 赵鑫帅 薛 菁 孙钰涵 (439)

α -淀粉酶和 γ -淀粉酶水解麦麸淀粉工艺优化

..... 李湘江 杨 丹 邢家溧 沈 坚 郑睿行 张书芬 傅 晓 罗小虎 (447)

一种对 *mcr-1* 阳性大肠杆菌具有裂解作用的噬菌体生物学特性

..... 钟希娜 何 涛 葛展霞 王 冉 (452)

气相色谱-质谱法结合 QuEChERS 法快速检测青椒中 15 种邻苯二甲酸酯

..... 严煌倩 李 勇 翟丽菲 龙 玲 程金金 陈小龙 葛 静 杨丽璇 余向阳 (459)

农业经济·农业信息

中等收入陷阱的成因探讨与中国跨越路径思考

..... 徐珍玉 陶振全 (466)

综 述

禾本科植物细胞壁合成调控研究进展

..... 胡炜晨 张 同 胡 振 王令强 (472)

JIANGSU JOURNAL OF AGRICULTURAL SCIENCES

Vol.34 No.2 April 30 2018

CONTENTS

CROP GENETICS AND BREEDING · PHYSIOLOGY AND BIOCHEMISTRY

- Effect of weedy rice competition on the nitrogen accumulation, nitrogen utilization efficiency and yield of cultivated rice
..... WU Yun-yan (241)
- Response of grain yield, hardness and protein content to cultivar, nitrogen fertilizer rate and plant density under late sowing condition
..... HU Wen-jing, CHENG Shun-he, GAO Zhi-fu, WU Rong-lin, LU Cheng-bin (245)
- Cloning and expression analysis of vacuolar membrane proton pump *RcVPI* gene from castor (*Ricinus communis* L.)
..... LI Hui-gen, WANG Xiao-yu, LI Ping, CONG Jiao-jiao, ZHANG Li-xue, ZHANG Ji-xing, JI Zhao-jun, MU Sha-moli (251)
- Cloning and expression analysis of geranylgeranyl pyrophosphate synthase gene (*BoaGGPPS1*) in *Brassica oleracea* var. *alboglabra*
..... XUE Sheng-ling, JIANG Min, CHANG Jia-qi, DUAN Yan-wen, CHEN Tao, HAO Yu, ZHANG Fen, SUN Bo (259)
- Construction of the pCHF3-*MAP65-1*-YFP and the pCHF3-*MAP65-2*-YFP vectors with ligation-independent cloning method
..... WANG Pei-pei, HAN Rong (266)
- Identification of targeted relationship between miR-27a and *SCF* ZHAO Yuan-yuan, MENG Jin-zhu (271)

PLANT PROTECTION

- Diagnosis of rice blast based on Raman spectroscopy
..... LENG Xiao-mei, TAN Feng, CAI Qiao-ling, XUELING Ji-xuan, JIANG Shan, LI Dong (276)
- Cloning and subcellular localization of coat protein encoded by *Cucumber green mottle mosaic virus*
..... FAN Xiao-yan, YANG Liu, JI Ying-hua, REN Chun-mei, MIAO Qian, HAN Yu-chun, ZHANG Song-bai, CHENG Zhao-bang, LU Hong-xue (281)
- Forecasting model of crop disease based on environment information and deep auto-encoder network
..... ZHANG Shan-wen, HUANG Wen-zhun, ZHANG Chuan-lei (288)
- Influences of oilseed rape and wheat aquatic straw extract on *Leptochloa chinensis* seed germination and seedling growth, and the application potential LI Ru, CHEN Guo-qi, ZHANG Yu-hua, LIU Qing-hu, ZHANG Kai, DONG Li-yao (293)

FARMING AND CULTIVATION · RESOURCE AND ENVIRONMENT

- Effects of replanted banana after rotation of different crops on banana production and soil fertility quality
..... LAI Chao-yuan, YANG Yue, TAO Cheng-yuan, WANG Yi-ming, GUO Ji-yang, WANG Bei-bei, RUAN Yun-ze, ZHAO Yan (299)
- A regulating process of pH value based on fuzzy immune PID algorithm LIU Ling, NIU Hai-xia (307)
- Research on the rapid extraction approach of grassland vegetation coverage based on digital photos
..... XU Jin-qin, QIU Xin-fa, DING Xiao, HE Yong-jian, WANG Dan-dan (313)
- Variety difference in cadmium and lead accumulation by ramie (*Boehmeria nivea*) from soil
..... ZHU Shou-jing, SHI Wen-juan, JIE Yu-cheng (320)
- Cd²⁺ biosorption by *Bacillus cereus* and its extracellular polymeric substances ... LI Xue-long, LIU Guo-li, LI Chao, LI Yue, YANG Zhen (327)
- The effects of Pb pollution on the antioxidant enzyme system of *Phragmites australis* (common reed) in different habits
..... ZHANG Na, YANG Shuang, TONG Fei, ZHU Yang-chun, FAN Ru-qin, LU Xin, LIU Li-zhu, MU Chun-sheng, ZHANG Zhen-hua (333)
- Purification effect of multi-functional ecological pond on tail water from high density aquaculture
..... CHANG Ya-jun, CHEN Ting, ZHOU Qing, LIU Xiao-jing, YAO Dong-rui, HAN Shi-qun (340)

ANIMAL HUSBANDRY AND VETERINARY SCIENCES · AQUICULTURE

- Effect of *Codonopsis pilosula* polysaccharide on small intestinal mucosa immunity of piglets
..... LI Cheng, YIN Li-li, ZHU Dian-feng, HE Yan-ting, LI Man-man, DING Xue-dong, LI Yu, WANG Xi-chun, WU Jin-jie (347)
- Fasciola hepatica* 8 significantly enhances soluble expression of Cap from PCV2 and its immunogenicity
..... GUO Yun-yun, ZHANG Bi-cheng, SUN Xiao-han, WANG Wei, HE Kong-wang, NIU Jia-qiang, ZHANG Xue-han (356)
- Effect of immunopotentiators on the efficacy of the bivalent vaccine of PPV and PCV2
..... ZHANG Xue-hua, ZHANG Dao-hua, LU Ji-hu, MEI Mei, HUA Tao, TANG Bo, HOU Ji-bo, TANG Ying-hua (361)
- The immunosuppressive mechanism of H9N2 subtype avian influenza virus infection in chickens
..... LIU Qing-tao, LI Yin, LIU Na, YANG Jing, HAN Kai-kai, LIU Yu-zhuo, ZHAO Dong-min, HUANG Xin-mei, TIAN Yu-jie (368)
- The effect of compound Chinese herbal preparation on muscle development and meat quality of broiler
..... JIN Er-hui, ZHOU Xian-jian, SUN Qi, ZHOU Jin-xing, LI Sheng-he, JIN Guang-ming (374)
- Differentiation of ovary structure, reproductive hormones and related genes expression between high and low double-yolk egg laying Gaoyou duck
..... ZHANG Lei, ZHANG Xiang-ying, ZHANG Jing-qi, ZHANG Yang, CHANG Guo-bin, CHEN Guo-hong, DONG Biao, WU Bing-xin, WANG Jian (385)
- Effects of supplementary feeding with un-conventional feeds on slaughter performance, blood biochemical index and meat quality in fattening goats
..... MENG Mei-juan, TU Yuan-lu, BAI Yun-feng, ZHANG Kai, GAO Li-peng (390)
- Establishment of the detection method of TaqMan real-time PCR for *Acipenser sinensis*
..... CHEN Guang-zhe, ZHENG Hong-xia, ZHU Chang-qing (399)

HORTICULTURE

- Effect of different exogenous substances on the growth, antioxidant system and photosynthesis of cucumber seedling under the adverse temperature, light, salt complex condition
..... LI Ya-jie, ZHANG Qi-an, LU Xiao-min (404)
- Effects of inoculating earthworm into facility vegetable field on spinach yield and quality following organic manure amendments
..... WU Di, LIU Man-qiang, JIAO Jia-guo, XUE Li-hong, YANG Lin-zhang (411)
- Bioinformatics analysis and expression of *PLD α* gene in peach fruits GAO Shan, ZHANG Kai, ZHU Shu-hua (418)
- Genetic diversity of different *Siraitia grosvenorii* special germplasm and the prediction of heterosis
..... QIN Xin-mei, JIANG Shui-yuan, HAN Yu, XIANG Qiao-yan, LI Hong, GAN Jin-jia, LIANG Yong-shi, HUANG Xi-yang (425)

PROCESSING AND STORAGE · QUALITY SAFETY

- Carotenoids stability of corn powder during storage in the glassy state
..... XIAO Ya-dong, SONG Jiang-feng, LI Da-jing, ZHANG Yuan, LIU Chun-quan (432)
- Effects of different extraction methods on the quality of *Prunus armeniaca* Linn oil
..... XUE Huan-huan, ZHANG Hai-sheng, ZHAO Xin-shuai, XUE Jing, SUN Yu-han (439)
- Optimization of hydrolyzing starch process in wheat bran by α -amylase and γ -amylase
..... LI Xiang-jiang, YANG Dan, XING Jia-li, SHEN Jian, ZHENG Rui-hang, ZHANG Shu-fen, FU Xiao, LUO Xiao-hu (447)
- Characterization of a lytic bacteriophage infecting *mcr-1*-positive *Escherichia coli*
..... ZHONG Xi-na, HE Tao, GE Zhan-xia, WANG Ran (452)
- Determination of 15 phthalate acid esters in pepper by gas chromatography-mass spectrometry with QuEChERS method
..... YAN Huang-qian, LI Yong, ZHAI Li-fei, LONG Ling, CHENG Jin-jin, CHEN Xiao-long, GE Jing, YANG Li-xuan, YU Xiang-yang (459)

AGRICULTURAL ECONOMY AND INFORMATION

- Analysis on causes of middle income trap and China's crossing strategies XU Zhen-yu, TAO Zhen-quan (466)

REVIEW

- Progress on cell wall biosynthesis and regulation in grasses HU Wei-chen, ZHANG Tong, HU Zhen, WANG Ling-qiang (472)