

# 江苏农业科学

第 50 卷 第 5 期 2022 年 3 月 5 日

## 目 次

### ● 专论与综述

- 农光互补的研究综述及展望 ..... 陈 健,王玲俊(1)
- 作物异源附加系创建方法及应用 ..... 禄小溪,孟 珊,沈新莲,等(10)

### ● 生物技术

- 辣椒基因组密码子使用偏性分析 ..... 刘 潮,韩利红,吴丽芳,等(16)
- 农作物中 *CryIA(c)* 和 *CP4-EPSPS* 转基因成分双重实时荧光 PCR 检测方法的建立  
..... 罗建兴,刘国强,其勒木格,等(23)
- 基于 BSA-seq 方法定位贵州高粱抗炭疽病害关键遗传区段 ..... 陈满静,任 艳,彭 秋,等(28)
- 希金斯炭疽菌中 NPFxD 基序蛋白找寻及其生物信息学分析 ..... 陈光建,章 悦,韩长志(35)
- 江西铅山红芽芋 *TIFY 9* 基因克隆与功能分析 ..... 赵 红,邓雨晴,曾淑琴,等(41)

### ● 遗传育种与耕作栽培

- 不同基本苗对无人飞播水稻产量、品质及抗倒伏特性的影响 ..... 朱海滨,俞 航,马中涛,等(50)
- 河南沿黄地区高产优良食味粳稻品种(系)筛选及其特征特性 ..... 殷春渊,王书玉,刘贺梅,等(60)
- 豫南直播稻多效唑调控试验研究 ..... 胡 杨,段 斌,何世界,等(68)
- 不同灌溉方式对稻田微气象特征及水稻生长的影响 ..... 邱 峰,景元书(72)
- 贵州稻区产量、养分吸收利用对控释尿素的响应 ..... 罗 跃,张爱华,王文华,等(81)
- 中国稻渔种养系统水稻产量差及影响因素的整合分析 ..... 张丁月,张卫峰,曹玉贤,等(88)
- 不同季节生态型水稻植株干物质积累及产量的比较 ..... 李成伟,龚松玲,曹 培,等(96)
- 根瘤菌接种方式对复播大豆籽粒灌浆特性及产量的影响 ..... 吴 树,徐 玥,张 磊,等(101)

### ● 植物保护

- 不同大小入侵小飞蓬资源分配特性 ..... 张宝成,孙 晴,黄小桐,等(107)
- 绿盲蝽危害对水蜜桃产量与品质的影响 ..... 金唯新,姜义平,沈 斐,等(113)

●园艺与林学

大白菜生物钟突变体 *lcc-1* 突变表型的遗传分析 ..... 马孝颖,王 浩,任桂康,等(117)

根肿菌侵染对大白菜叶绿素荧光参数和光合特性的影响 ..... 司 佳,陶新意,张思萌,等(123)

秸秆隔层及水氮管理对番茄光合特性、产量品质和水氮利用的影响 ..... 王如珂,郭相平,曹克文,等(128)

平欧杂种榛榛果发育动态及营养成分变化规律 ..... 张 丽,安文雅,贾志国(135)

蛭石为主的复合基质对辣椒植株生长发育及产量的影响 ..... 刘衍晨,白惠敏,乔 鹏,等(141)

●畜牧兽医与水产蚕桑

藏猪和大约克猪 *FBX032* 基因多态性及表达差异分析 ..... 王 宇,徐士军,孙雪倩,等(146)

清远麻鸡慢羽系屠宰性状与体尺性状的主成分分析 ..... 董静超,陈家雪,李 华,等(151)

新疆家蚕肠道菌群多样性分析 ..... 刘语涵,李 莉,张来斌,等(156)

●贮藏加工与检测分析

不同玉米材料及生长期玉米须中总黄酮和多糖含量分析 ..... 徐建霞,郑常祥,邵明波,等(162)

高粱抗性淀粉辅助治疗胃癌的研究 ..... 南姝利,尚世龙,曾宪鹏,等(168)

烘烤过程中烟叶色度信号值与主要化学成分的关系 ..... 黄 涛,俞世康,顾会战,等(173)

●农业工程与信息技术

不同花生荚果类型对机械剥壳效果的影响 ..... 丁 彬,谢吉先,冯梦诗,等(180)

基于 EFAST 的 DSSAT 模型对南疆地区棉花参数敏感性分析及适用性评价  
..... 高 浚,周保平,王 昱,等(185)

基于 WOFOST 模型的河南省冬小麦产量差的时空特征分析 ..... 秦雅倩,孙嘉玥,王 岩,等(191)

●资源与环境

碳水耦合作用对土壤活性有机碳组分及碳库管理指数的影响 ..... 王雨晴,和江鹏,乔赵崇,等(199)

香蕉园间种甘薯对土壤物理性状和结构的影响 ..... 李燕培,王 静,林佳琦,等(205)

不同添加物对杏鲍菇渣发酵及基质化利用的影响 ..... 许文钊,顾 妍,程 瑞,等(212)

有机硅功能肥对不同利用方式下土壤团聚性和抗蚀性的影响 ..... 温晓兰,宋福如,石温慧,等(218)

一株高地芽孢杆菌的鉴定与促生能力研究 ..... 张文韬,杨 皓,毛国豪,等(225)

●农业经济与管理

非洲猪瘟背景下政策性保险对于江苏省养殖户生产恢复的影响 ..... 谢志扬(229)

生态约束、大数据嵌入与绿色农业全产业链协同 ..... 吴 绒,梁 琦(234)

江苏农业科研机构推进科技创新与科学普及融合发展的对策 ..... 彭 英,周雨濛,耿茂林(241)

农业科研机构成果转化模式及能力提升对策 ..... 王 宁,梁凯桐,顾巍巍,等(246)

# JIANGSU AGRICULTURAL SCIENCES

Vol. 50 No. 5 March 5 2022

## CONTENTS

### Monograph and Review

- Research review and prospect of agriculture – solar power complementarity ..... *Chen Jian, et al*(1)
- Establishment and application of crop alien addition lines ..... *Lu Xiaoxi, et al*(10)

### Bio-technology

- Genome – wide codon usage bias analysis of *Capsicum annuum* ..... *Liu Chao, et al*(16)
- Development of a duplex real – time PCR method for detection of genetically modified components *CryIA(c)* and *CP4 – EPSPS*  
in crops ..... *Luo Jianxing, et al*(23)
- Mapping of key genetic segments of sorghum resistance to anthracnose in Guizhou Province based on BSA – seq method  
..... *Chen Manjing, et al*(28)
- Search for NPFxD motif protein in *Colletotrichum higginsanum* and its bioinformatics analysis ..... *Chen Guangjian, et al*(35)
- Cloning and functional analysis of *TIFY 9* gene in *Colocasia esculenta* L. Schott var. *cormosus* ‘Hongyayu’ in Jiangxi Province  
..... *Zhao Hong, et al*(41)

### Genetics and Breeding • Tillage and Cultivation

- Effects of different basic seedlings on yield, quality and lodging resistance of unmanned aerial sowing rice  
..... *Zhu Haibin, et al*(50)
- Screening and characteristics of japonica rice varieties (lines) with high yield and good taste in the Yellow River Region of  
Henan Province ..... *Yin Chunyuan, et al*(60)
- Experimental study on regulation of paclobutrazol in direct seeding rice in southern Henan ..... *Hu Yang, et al*(68)
- Impacts of different irrigation methods on micrometeorological characteristics of paddy field and growth of rice  
..... *Qiu Feng, et al*(72)
- Response of rice yield, nutrient absorption and utilization to controlled – loss urea in Guizhou Province ..... *Luo Yue, et al*(81)
- Meta – analysis of rice yield difference and its influencing factors in Chinese rice – fish co – culture system  
..... *Zhang Dingyue, et al*(88)
- Comparison of dry matter accumulation and yield of ecotype rice in different seasons ..... *Li Chengwei, et al*(96)
- Effects of rhizobium inoculation method on grain filling characteristics and yield of repeated soybean ..... *Wu Shu, et al*(101)

### Plant Protection

- Study on resource allocation characteristics of invasive *Erigeron canadensis* ..... *Zhang Baocheng, et al*(107)
- Influence of damage by *Apolygus lucorum* on yield and quality of peach ..... *Jin Weixin, et al*(113)

### Horticulture and Forestry

- Genetic analysis of mutant phenotype of biological clock mutant *lcc – 1* in Chinese cabbage ..... *Ma Xiaoying, et al*(117)
- Effects of *Plasmiodiophora brassicae* infection on chlorophyll fluorescence parameters and photosynthetic characteristics of  
Chinese cabbage ..... *Si Jia, et al*(123)

Impacts of straw interlayer and water – nitrogen management on photosynthesis,yield,quality and water – nitrogen utilization  
of tomatoes ..... Wang Ruke,et al(128)

Development dynamics and nutrient composition changes of Ping’ou hybrid hazelnuts ..... Zhang Li,et al(135)

Effects of vermiculite – based composite matrix on plant growth and yield of peppers ..... Liu Yanchen,et al(141)

**Husbandry and Veterinary · Aquaculture and Sericulture**

Analysis of *FBXO32* gene polymorphism and expression difference between Tibetan and Yorkshire pigs  
..... Wang Yu,et al(146)

Principal component analysis of slaughter traits and body size traits in late – feathering Qingyuan partridge chickens  
..... Dong Jingchao,et al(151)

Study on diversity of intestinal flora of *Bombyx mori* in Xinjiang area ..... Liu Yuhan,et al(156)

**Storage and Processing · Detection**

Analysis of contents of total flavonoids and polysaccharides in corn silks in different corn materials and growth periods  
..... Xu Jianxia,et al(162)

Study on adjuvant treatment of sorghum resistant starch in gastric cancer ..... Nan Shuli,et al(168)

Relationship between tobacco color scale signal value and main chemical composition during baking  
..... Huang Tao,et al(173)

**Agricultural Engineering and Information Technology**

Effect of different pod types on mechanical husking of peanut ..... Ding Bin,et al(180)

Sensitivity analysis and applicability evaluation of DSSAT model based on EFAST for cotton parameters in southern Xinjiang  
..... Gao Jun,et al(185)

Study on spatial and temporal characteristics of winter wheat yield difference based on WOFOST model in Henan Province  
..... Qin Yaqian,et al(191)

**Resources and Environment**

Effects of carbon water coupling on soil labile organic carbon components and carbon pool management index  
..... Wang Yuqing,et al(199)

Influences of sweet potato interplanting in banana orchards on soil physical properties and structure ..... Li Yanpei,et al(205)

Effects of different additives on fermentation and matrix utilization of *Pleurotus eryngii* residues ..... Xu Wenzhao,et al(212)

Impacts of organic silicon functional fertilizer on soil aggregation and anti – erodibility under different utilization methods  
..... Wen Xiaolan,et al(218)

Identification and growth promoting ability of a strain of *Bacillus altitudinis* ..... Zhang Wentao,et al(225)

**Agricultural Economy and Management**

Impact of policy insurance on pig farmers’ production recovery behavior under background of African swine fever  
..... Xie Zhiyang(225)

Ecological constraint,big data embedding and green agriculture whole industry chain coordination ..... Wu Rong,et al(234)

Countermeasures for promoting integrated development of scientific and technological innovation and scientific popularization  
in Jiangsu agricultural scientific research institutions ..... Peng Ying,et al(241)

Study on achievement transformation mode and capacity promotion strategy for agricultural research institutions  
..... Wang Ning,et al(246)