

江苏农业科学

第48卷 第5期 2020年3月5日

目次

●“乡村振兴”专栏

- 债务融资、耕地质量与土地产出——基于滨海县实地调研数据的实证分析 王 睿,李辰哲,汪 翔(1)
- 贫困县玉米种植户政策性农业保险需求档次分析——基于黑龙江省林甸县的调研 齐 彧,王 宁(8)
- 浙江省精品民宿空间分布特征及形成因素 刘 霜(13)
- 水生态文明村建设评价指标体系构建及应用 袁 芳,刘 昭,房焕英,等(20)
- 基于“公司+合作社+农户”的蛋鸡绿色供应链运作模式优化 黄明田(25)
- 基于层次分析法的西部地区就业扶贫实施绩效评价——以新疆和静县为例
..... 王 瑞,王华丽,赵艳梅(30)
- 江苏省农业电子商务发展情况及对策建议 谈晶晶(36)
- M估计稳健回归的贫困地区空巢老人养老意愿及其影响因素——基于河南省T县的调查
..... 王雪菀,杨立敏,亚西尔·阿不力克木(40)
- 认知冲突下农民参与培训的影响因素分析——基于化学农药科学使用的实证
..... 崔元培,齐 国,万 蕾,等(45)

●生物技术

- 基于线粒体DNA标记对3个华鲮群体的遗传结构分析 朱传坤,潘正军,常国亮,等(50)
- 燕麦成熟胚愈伤组织诱导的优化 田 娟,孙墨可,董玉迪,等(57)
- 梁山慈竹SSR-PCR体系的优化 王丽丽,孙昌法,胡尚连(61)

●遗传育种与耕作栽培

- 糯玉米叶夹角的遗传模型分析 王 军,李洪涛,许瀚元,等(65)
- 常熟市玉米地方品种陆市小黄糯分子标记辅助选择的改良 张 戟,钱春桃,王志丰,等(71)
- 苏北夏玉米机械粒收品种筛选与制约因素探讨 邵 青,刘冬玲,孔令杰(76)
- 气候变化背景下东北地区春玉米生育期变化分析 淮贺举,孙 宁,于景鑫,等(80)
- 不同增效剂与氮肥减量配施在水稻上的应用效果 王 薇,张耀玲,郝兴顺,等(84)
- 谷子种质资源重要性状的统计分析 李 艳,马庆州,王彦辉,等(88)
- 叶面喷施尿素对谷子郑农谷09-6光合特性及产量的影响 王彦辉,韩燕丽,樊永强,等(92)
- 甘薯脱毒微型薯育苗技术研究 沈升法,吴列洪,项 超,等(97)
- 艾比湖流域棉花产量影响因素研究 伊木然江·阿卜来提,张永福,于苏云江·吗米提敏,等(100)

●植物保护

- 噻呋酰胺处理种子防治水稻纹枯病试验研究 杨红福,姚克兵,束兆林,等(107)
- γ -聚谷氨酸对6种植物病原真菌的室内毒力测定 汪少丽,王英姿,王洪涛,等(110)
- 土壤施用不同调节剂对棉花苗期立枯病的防治效果 闫飞燕,赵 强,张 特,等(113)
- 6种药剂对白首乌主要害虫中华蓇蓂肖叶甲的防效 郭树庆,李 斌,吴承东,等(117)

●园艺与林学

- 乙烯利和追肥处理对番茄品质的影响 刘广洋,刘中笑,张延国,等(121)

| | |
|----------------------------------|--------------------|
| 外源生长调节剂控制番茄和辣椒徒长及对产量和品质的影响 | 李小鹏,徐刚,郭世荣,等(126) |
| 不同水肥处理对生姜生理生长指标的影响 | 霸惠惠,王莹,张刘东,等(132) |
| 响应面法优化野生白灵菇菌丝生长条件 | 许俊齐,贾君,徐超,等(137) |
| 人工栽培蛹虫草液体菌种发酵工艺优化 | 马麦艳,陈方圆,张相锋,等(143) |
| 海鲜菇栽培料中细菌菌落结构及多样性分析 | 徐兵,陆灏钰,韦雪铭,等(148) |

●畜牧兽医与水产蚕桑

| | |
|--|--------------------|
| 配合饲料驯饲频率对虎龙斑幼鱼驯化效果的影响 | 李涛,黄小林,杨育凯,等(153) |
| 猪瘟耐热活疫苗节能冻干曲线的优化研究 | 左晓昕,赵艳红,邓碧华,等(156) |
| 不同光照度下紫菜栽培区定生绿藻叶绿素荧光特征研究 | 陶菊红,张涛,朱建一,等(162) |
| 胭脂鱼幼鱼与成鱼间的形态差异研究 | 曾丽雯,黄坤,廖梅竹,等(166) |
| 尼罗罗非鱼盐碱选育 4 代耐受性和生长性能评估 | 宋凌元,赵亮亮,张成硕,等(171) |
| 拮抗凡隆气单胞菌的海洋放线菌 AC08F5 的鉴定及活性物质初步研究 | 陈静,夏艳秋,朱强(175) |

●贮藏加工与检测分析

| | |
|--------------------------------|-------------------|
| 紫马铃薯花色苷的超声辅助提取工艺优化 | 刘德明,张莹,邬克彬,等(181) |
| 稻米直链淀粉含量的 96 微孔高通量快速测定方法 | 陈莹,杨瑰丽,郭涛,等(185) |
| 不同贮藏温度对云薯 105 马铃薯生理品质的影响 | 杨明,包媛媛,张新永,等(189) |
| 绿豆种子超声波-热泵联合同歇干燥动力学研究 | 陶志超,杨昭,余飞,等(193) |

●农业工程与信息技术

| | |
|---------------------------|--------------------|
| 基于 LoRa 的温室智能补光系统研制 | 李晋蒲,曹瑞红,赵建贵,等(198) |
| 春季塑料大棚内气温和相对湿度变化特征 | 赵玮,石茗化,张艳艳,等(205) |
| 基于深度学习的地面苹果识别与计数 | 荆伟斌,胡海棠,程成,等(210) |
| 日光温室卷帘及通风口控制系统研制 | 曹瑞红,李晋蒲,赵建贵,等(219) |

●资源与环境

| | |
|--|----------------------|
| 环境因子对鄱阳湖沉积物中内源磷释放的影响 | 袁轶君,刘娜娜,陈传红,等(227) |
| 温和湿热条件下碱预处理对玉米秸秆厌氧发酵的影响 | 王禹霄飞,孙云博,曲威(236) |
| 3 种城郊防护林土壤呼吸与温湿度的关系 | 张成芳,李德生,魏佳宇,等(243) |
| 利用生物炭与 PHBV 固相脱氮系统净化河蟹养殖水体 | 施林林,金梅娟,沈明星,等(250) |
| 2 种生物炭对复合污染土壤中重金属形态的影响 | 朱园芳,朱华军,刘玉学,等(255) |
| CO ₂ 注入对矿业废水中钙离子的去除 | 陈流通,谢洪勇,奥利陶维恩,等(259) |
| 内生木霉 P3.9 菌株在枇杷根际土壤中的定殖能力测定 | 鲁海菊,谢欣悦,陶宏征,等(263) |
| 除店老酒大曲中耐高温霉菌的筛选与产酶条件优化 | 刘延波,张丽婷,赵志军,等(268) |
| 一株高效解钾菌的筛选鉴定及其对烟草吸收钾磷的影响 | 吴俊林,张正杨,李翔,等(276) |
| 有机复合肥对土壤水分入渗特性的影响 | 兰简琪,谢世友(280) |
| 一株产蛋白酶的中度嗜盐菌 <i>Salinivibrio</i> sp. MK070915 的选育及产酶条件优化 | 耿静,韩秋霞,高文静,等(287) |

●农业经济与管理

| | |
|---|------------------|
| 激励性薪酬对研发人员主动创新行为的影响——创新意愿与组织创新氛围的作用 | 王玉峰,宋彬彬,王树进(295) |
| 基于事故树与贝叶斯网络的农产品供应链风险评估 | 杨怀珍,胡葛君(304) |
| 基于层次分析法的农民专业合作社经营风险识别与防控 | 殷捷,殷玉武(310) |

JIANGSU AGRICULTURAL SCIENCES

Vol. 48 No. 5 March 5 2020

CONTENTS

Rural Revitalization

- Debt financing, cultivated land quality and land output—An empirical analysis based on field investigation data in Binhai County *Wang Rui, et al*(1)
- Analysis of policy agricultural insurance demand grade for corn growers in poor counties—Based on a survey of Lindian County, Heilongjiang Province *Qi Yu, et al*(8)
- Spatial distribution characteristics and forming factors of boutique homestay in Zhejiang Province *Liu Shuang* (13)
- Establishment and application of evaluation index system for water ecological civilized village construction *Yuan Fang, et al*(20)
- Optimization of green supply chain operation mode for laying hens based on “Company + Cooperative + Farmer” pattern *Huang Mingtian*(25)
- Study on performance of poverty alleviation by employment in western region based on analytic hierarchy process
—Taking Hejing County of Xinjiang as an example *Wang Rui, et al*(30)
- Development situation and suggestions of agricultural e-commerce in Jiangsu Province *Tan Jingjing*(36)
- M-estimation robust regression of pension intention of empty-nesters in poor areas and its influencing factors
—Based on investigation of T County, Henan Province *Wang Xuewan, et al*(40)
- Analysis of factors influencing farmers’ participation in training under cognitive conflict—Evidence based on scientific use of chemical pesticides *Cui Yuanpei, et al*(45)

Bio-technology

- Genetic structure analysis of three *Sarcocheilichthys sinensis* populations based on mitochondrial DNA markers *Zhu Chuankun, et al*(50)
- Optimization of callus induction of mature embryos from oats *Tian Juan, et al*(57)
- Optimization of SSR-PCR system of *Dendrocalamus farinosus* *Wang Lili, et al*(61)

Genetics and Breeding • Tillage and Cultivation

- Analysis of inheritance model for leaf angle of waxy maize *Wang Jun, et al*(65)
- Improvement of molecular marker-assisted selection for a waxy corn landrace “Lushi Yellow” in Changshu City *Zhang Ji, et al*(71)
- Screening of summer maize cultivars for mechanical kernel harvest and its restrictive factors in northern Jiangsu *Shao Qing, et al*(76)
- Study on growth periods of spring maize in Northeast China under climate change *Huai Heju, et al*(80)
- Application effect of different synergists and nitrogen fertilizer reduction on rice *Wang Wei, et al*(84)
- Statistical analysis of some important characters of millet germplasm resources *Li Yan, et al*(88)
- Effects of foliar spray of urea on photosynthetic characteristics and yield of millet cultivar Zhengnonggu 09-6 *Wang Yanhui, et al*(92)
- Study on seedling technology of sweet potato virus-free microtubers *Shen Shengfa, et al*(97)
- Study on factors influencing yield of cotton in Ebinur Lake Basin *Emranjan Ablat, et al*(100)

Plant Protection

- Control effect of seed dressing with thifluzamide on rice sheath blight *Yang Hongfu, et al*(107)
- Indoor toxicity determination of γ -polyglutamic acid to six plant pathogenic fungi *Wang Shaoli, et al*(110)
- Control effect of applying different regulators in soil on cotton seedling blight *Yan Feiyan, et al*(113)
- Control effect of 6 kinds of pesticides on *Chrysochus chinensis*, one of main pests of *Cynanchum bungei* *Guo Shuqing, et al*(117)

Horticulture and Forestry

- Effects of ethephon and topdressing treatment on tomato quality *Liu Guangyang, et al*(121)
- Control of tomato and pepper seedling spindling by exogenous growth regulators and their effects on yield and quality *Li Xiaopeng, et al*(126)

Effects of different water and fertilizer levels on physiological growth indices of ginger Ba Huihui,et al(132)

Optimization of growth conditions of wild *Pleurotus nerbrodensis* mycelium by response surface methodology
..... Xu Junqi,et al(137)

Optimization of liquid fermentation process for artificial culture of *Cordyceps militaris* Ma Maiyan,et al(143)

Study on bacterial community structure and diversity of *Hypsizygus marmoreus* (Peck) cultivation materials
..... Xu Bing,et al(148)

Husbandry and Veterinary · Aquaculture and Sericulture

Effect of bait domestication frequency with compound feed on domestication of juvenile hybrid grouper, *Epinephelus fuscoguttatus* ♀ × *E. lanceolatus* ♂ Li Tao,et al(153)

Study on optimization of energy – saving freeze – drying curve of swine fever vaccine with heat resistance
..... Zuo Xiaoxin,et al(156)

Study on chlorophyll fluorescence characterization of attached green algae in *Pyropia* cultivation area under different light intensities Tao Juhong,et al(162)

Morphological differences between juvenile and adult *Myxocyprinus asiaticus* Zeng Liwen,et al(166)

Evaluation of salinity – alkalinity tolerance and growth performance of fourth selected generation of *Oreochromis niloticus*
..... Song Lingyuan,et al(171)

Identification of marine actinomycetes strain AC08F5 antagonizing *Aeromonas veronii* and preliminary study on antibacterial active substances Chen Jing,et al(175)

Storage and Processing · Detection

Optimization of ultrasound – assisted extraction process of anthocyanins from purple potato Liu Deming,et al(181)

96 – Hole high – throughput rapid determination method for rice amylose content Chen Ying,et al(185)

Influences of different storage temperature on physiological quality of potato cultivar “Yunshu 105” ... Yang Ming,et al(189)

Study on intermittent ultrasonic – heat pump combined drying kinetics of mung bean seeds Tao Zhichao,et al(193)

Agricultural Engineering and Information Technology

Development of greenhouse intelligent fill light system based on LoRa Li Jinpu,et al(198)

Variety characteristics of air temperature and relative humidity in plastic greenhouse in Spring Zhao Wei,et al(205)

Recognition and counting of ground apples based on deep learning Jing Weinbin,et al(210)

Development of shutter and vent control system for solar greenhouse Cao Ruihong,et al(219)

Resources and Environment

Impacts of environmental factors on release of endogenous phosphorus in sediments of Poyang Lake ... Yuan Yijun,et al(227)

Effect of alkali pretreatment on anaerobic fermentation of corn straw under mild and hydrothermal conditions
..... Wang Yuxiaofei,et al(236)

Relationship between soil respiration and temperature and humidity in three suburban shelterbelts
..... Zhang Chengfang,et al(243)

Purification of mitten crab aquaculture water using solid nitrogen removal system based on biochar and PHBV
..... Shi Linlin,et al(250)

Effects of two kinds of biochar on forms of heavy metals in compound contaminated soil Zhu Yuanfang,et al(255)

Removal of calcium ions from mining wastewater by CO₂ injection Chen Liutong,et al(259)

Determination of colonization ability of endophytic *Trichoderma* P3.9 strain in loquat rhizosphere soil Lu Haiju,et al(263)

Screening of molds with high temperature resistance and optimization of enzyme production conditions in Shedian Laojiu Daqu
..... Liu Yanbo,et al(268)

Screening and identification of an efficient potassium – resolving bacterium and its effect on potassium and phosphorus uptake of tobacco Wu Junlin,et al(276)

Influences of organic compound fertilizer on soil moisture infiltration characteristics Lan Jianqi,et al(280)

Breeding and enzyme production condition optimization of a protease – producing moderate halophilic strain *Salinivibrio* sp. MK070915 Geng Jing,et al(287)

Agricultural Economy and Management

Effect of incentive compensation on active innovation behavior of research personnel – Willingness to innovate and function of organizational innovation atmosphere Wang Yufeng,et al(295)

Risk assessment of agricultural product supply chain based on fault tree and Bayesian network Yang Huaizhen,et al(304)

Recognition, prevention and control of operational risks of farmer cooperatives based on analytic hierarchy process
..... Yin Jie,et al(310)