

江苏农业科学

第 48 卷 第 16 期 2020 年 8 月 20 日

目 次

●“乡村振兴”专栏

- 城镇化背景下湖南贫困地区村民自治现状及困境分析——基于 130 个偏远村庄的调查 向林峰(1)
- 宗族势力依然影响乡村治理的效果吗? ——以小型农田水利设施为例 韩刘璐,王 蕾(7)
- 基于层次分析法的美丽乡村景观评价——以重庆市合川区为例 高 瑜(14)
- 基于乡村振兴战略视角的农业科技成果转化资金绩效评价 金 萍,戴红君,王媛媛(21)
- 孔雀河流域聚落分布特征及驱动力解析 古力孜热·买买提,马利刚,王宏卫,等(25)
- 深度贫困地区生鲜农产品双渠道供应链运作协调机制 李彩秋,徐 菱,杨天旻,等(32)

●专论与综述

- 高温影响水稻颖花育性的生理机制综述 宋有金,吴 超(41)
- 棉花耐盐机理与盐害防御研究进展 宋 丽,刘喜平,仲 杰,等(48)
- 近 10 年水产动物抗逆育种研究进展 付璐璐,王 峥,王 磊,等(52)
- 果树器官脱落的研究进展 郝紫微,吴 潇,刘 哲,等(58)
- 水直播和旱直播对水稻产量与品质的影响综述 黄 健,朱 安,汪 浩,等(67)

●生物技术

- 食源性单核细胞增生型李斯特菌 *lmoF2365_0032* 基因克隆及序列分析 刘扬扬,马 勋,康立超,等(74)
- SCF 在绵羊黑色素细胞中的表达研究 赵园园,孟金柱(79)
- 基于线粒体 *CO I* 基因序列的 2 种仿对虾遗传差异 李晓玲,郑亦佳,陈丹妮,等(82)
- 蜂毒前溶血肽原基因的改造及其原核表达 郭新军(87)

●遗传育种与耕作栽培

- 四川盆地水稻高温热害影响评估 陈东东,栗晓玮,王 森(91)
- 机插水稻漂浮育秧对不同水体水质的影响 董玉兵,庄 春,纪 力,等(96)
- 海藻提取物对水稻产量及养分利用的影响 孙 晓,尹皓婵,张占田,等(100)
- 甲基磺酸乙酯诱变对绿豆种子萌发及幼苗生长的影响 高 营,闫 强,袁星星,等(104)
- 3 种微生物菌肥对烤烟生长发育及烟叶产量和质量的影响 徐宗昌,李天卫,蔡宪杰,等(108)
- 木薯不同时期施钾对淀粉合成关键酶活性和淀粉积累的影响 罗兴录,吴美艳,陶 林(115)
- 紫肉食用型甘薯品种川紫薯 2 号优化栽培技术 吴 洁,沈学善,屈会娟,等(120)

●植物保护

- 基于激光共聚焦显微技术鉴别小麦矮腥黑穗病菌和光腥黑穗病菌 刘俭俭,张建民,陈万权,等(126)
- 棉长管蚜和棉蚜对其蜜露的选择性反应 闫文静,张玉栋,吴 娜,等(130)
- 轻简化设施栽培食用菌的虫害调查分析与物理防控 林金盛,曲绍轩,骆 昕,等(135)
- 烟区棉铃虫齿唇姬蜂发生规律及其田间控制作用 邓 婉,李 密,伍绍龙,等(141)

●园艺与林学

江苏丘陵地区 12 个中华猕猴桃品种的引种适应性比较	陈 成,王 依,姚俊宇,等(146)
基于 LED 光源水培生菜最佳光配方的筛选	崔世钢,陈 苗,张永立,等(152)
绿色木霉与哈茨木霉对黄瓜幼苗促生作用机理的研究	刘 畅,张欣玥,蔡汶妤,等(156)
枇杷品种火炬设施栽培关键技术	葛志刚,秦中华(160)
温度处理对六堡茶茶苗抗性生理和 DNA 甲基化水平的影响	叶锦培,陈仕香,唐世斌,等(164)
观赏草在花境中的应用及配置手法	张肖娟(168)
不同西瓜品种果实性状与裂果的相关性	刘 壮,高美玲,王 丽,等(173)
秋水仙素对菊苣多倍体的诱导	赵建华,任国辉,郑金双(177)
我国平原地区野生羊肚菌资源及保护途径探讨	李 勇,史新敏,樊继德,等(183)
荷花品种表型性状遗传多样性分析	原 鑫,李文玲,刘召强,等(188)
20 株草菇遗传多样性的分析	赵光辉,方洪枫,陈 剑,等(194)
不同施肥水平对设施番茄中微量元素吸收的影响	廉晓娟,王 艳,梁新书,等(197)

●畜牧兽医与水产蚕桑

1 例冠状病毒、大肠杆菌和肺炎克雷伯氏菌引起的犊牛腹泻	王海燕,管远红,蔡丙严,等(201)
对猪小腔卵泡孤雌激活胚胎发育力的初步探索	宋尚桥,马围围,曾素先,等(205)
病死猪肉骨粉与鱼粉营养成分对比分析	程小飞,向 劲,李传武,等(208)
贵州青贮玉米生产性能比较及主要性状相关性分析	朱 欣,陈光燕,李龙兴,等(212)
小柴胡汤及其拆方对体外四氯化碳致肝细胞损伤的影响	李晶晶,王思芦,李金娉,等(217)

●贮藏加工与检测分析

基于特征融合与冗余剔除的普洱茶种类电子鼻识别方法	徐 赛,张倩倩(222)
川秋葵微粉体外降血脂作用及对小鼠肠道菌群的影响	辛松林,舒 娟,韦章琳,等(228)
基于可见近红外光谱的不同建模方法对河套蜜瓜糖度检测精度的影响	张德虎(235)

●农业工程与信息技术

基于 SolidWorks 的齿轮传动结构分析与设计	朱 超,符晓玲,王 苗,等(241)
一种基于网格的空间聚类算法及在基本农田规划中的应用	吴彦澎(250)
基于 CFD - DEM 耦合的土壤渗透性数值分析	李云川,赵靖隆,石平平,等(255)

●资源与环境

太行山区 NDVI 时空变化及其对气候因子的响应	余 汛,王 莉,景海涛,等(260)
近 59 年江汉平原降水气候变化特征分析	邓艳君,郑治斌,张伦瑾,等(268)
浙西某地土壤重金属特征分析及风险安全评价	黄 雯,梁 河,陶 丽,等(278)
茶叶中 23 株真菌的分离鉴定	管飘萍,Enkhbayar Munkhbayar,黄紫贝,等(285)
洱海流域上游耕地氮磷排放强度空间分析	郭羽鑫,郑宏刚,吴碧兰,等(291)
2 株固氮菌的分离与鉴定	陆依琳,赵晴雨,彭 学(298)
近 26 年和田绿洲人口对 LULC 时空变化分析及其生态响应	梁田田,张永福,夏 楠,等(302)

●农业经济与管理

不同学科背景下我国农业科技人才的学术竞争力分析	程金花,郭 婷,任 妮(309)
旅游目的地系统与城镇化耦合及空间分异——以河南省为例	李 伟,刘海杰(315)
江苏省弱筋小麦产业节点矛盾分析及对策	盖玉芳,雪 峰,肖 洒,等(324)
农户社会财富地位对借款可获性的影响	黄稳书,汪 阳(328)

JIANGSU AGRICULTURAL SCIENCES

Vol. 48 No. 16 August 20 2020

CONTENTS

Rural Revitalization

- Analysis of current situation and predicament of villager autonomy in poor areas of Hunan Province under background of urbanization—Based on a survey of 130 remote villages *Xiang Linfeng*(1)
- Does clan force still influence rural governance effect? —Taking small scale irrigation systems as an example *Han Liulu, et al*(7)
- Landscape evaluation of beautiful country based on the analytic hierarchy process—Taking Hechuan District of Chongqing City as an example *Gao Yu*(14)
- Performance assessment of agricultural science and technology achievements transformation fund based on perspective of rural revitalization strategy *Jin Ping, et al*(21)
- Analysis of distribution characteristics and driving forces of settlements in Peacock River Basin *Gulizire Maimaiti, et al*(25)
- Study on coordination mechanism of dual – channel supply chain operation of fresh agricultural products in deep poverty area *Li Caiqiu, et al*(32)

Monograph and Review

- Physiological mechanism of high temperature affecting fertility of rice spikelets; a review *Song Youjin, et al*(41)
- Research progress of salt tolerance mechanism and salt damage prevention of cotton *Song Li, et al*(48)
- Research progress of resistance breeding of aquatic animals in recent ten years *Fu Lulu, et al*(52)
- Research progress on organ abscission of fruit trees *Hao Ziwei, et al*(58)
- Effects of water direct – seeding and dry direct – seeding on yield and quality of rice; a review *Huang Jian, et al*(67)

Bio-technology

- Cloning and sequence analysis of *lmoF2365_0032* gene of food – borne *Listeria monocytogenes* *Liu Yangyang, et al*(74)
- Study on expression of SCF in sheep melanocytes *Zhao Yuanyuan, et al*(79)
- Study on genetic differences of *Parapanaeopsis hardwickii* and *P. tenella* based on *COI* gene sequences *Li Xiaoling, et al*(82)
- Modification of prepromelittin gene and its expression in prokaryotic cells *Guo Xinjun*(87)

Genetics and Breeding • Tillage and Cultivation

- Impact assessment of high temperature heat damage on rice in Sichuan Basin *Chen Dongdong, et al*(91)
- Effects of floating sprout cultivation technology of machine – transplanted rice on water quality of different water bodies *Dong Yubing, et al*(96)
- Influences of seaweed extracts on rice yield and nutrient utilization *Sun Xiao, et al*(100)
- Impacts of ethyl methane sulfonate (EMS) mutagenesis on seed germination and seedling growth of mung bean *Gao Ying, et al*(104)
- Effects of three types of microbial fertilizers on growth, yield and quality of flue – cured tobacco *Xu Zongchang, et al*(108)
- Impacts of potassium fertilizer application at different stages on key enzyme activities and starch accumulation in starch synthesis of cassava *Luo Xinglu, et al*(115)
- Optimal cultivation techniques of purple fresh – eating sweet potato cultivar “Chuanzishu No. 2” based on orthogonal experiment *Wu Jie, et al*(120)

Plant Protection

- Detection of teliospores of *Tilletia controversa* Kühn and *Tilletia foetida* (Walle.) Lindr based on laser scanning confocal microscope *Liu Jianjian, et al*(126)
- Selective response of *Acyrtosiphon gossypii* and *Aphis gossypii* to their honeydew *Yan Wenjing, et al*(130)
- Investigation and physical control of insect pests for edible fungi in simplified facility cultivation *Lin Jinsheng, et al*(135)
- Occurrence regularity of *Campoletis chloridae* and its natural control effects in tobacco field *Deng Wan, et al*(141)

Horticulture and Forestry

Adaptability comparison of twelve introduced *Actinidia chinensis* cultivars in hilly area of Jiangsu Province Chen Cheng, et al(146)

Screening of optimal light formula of hydroponic lettuce based on LED light source Cui Shigang, et al(152)

Study on growth – promoting mechanism of *Trichoderma viride* and *Trichoderma harzianum* to cucumber seedlings Liu Chang, et al(156)

Key cultivation technologies of loquat cultivar “Torch” in greenhouse Ge Zhigang, et al(160)

Effects of temperature treatments on resistance physiology and DNA methylation level of Liupao tea seedlings Ye Jinpei, et al(164)

Application and combination of ornamental grass in flower border Zhang Xiaojuan (168)

Correlation between fruit characters and fruit cracking of different watermelon cultivars Liu Zhuang, et al(173)

Induction of polyploid chicory by colchicine Zhao Jianhua, et al(177)

Study on wild morchella resources and itsprotection ways in China’s plain areas Li Yong, et al(183)

Genetic diversity analysis of phenotypic traits of lotus varieties Yuan Xin, et al(188)

Genetic diversity analysis of 20 strains of *Volvariella volvacea* Zhao Guanghui, et al(194)

Effects of different fertilization levels on absorption of microelements in protected tomatoes Lian Xiaojuan, et al(197)

Husbandry and Veterinary · Aquaculture and Sericulture

Study on etiology of a case of calf diarrhea co – infected with coronavirus, *Escherichia coli* and *Klebsiella pneumoniae* Wang Haiyan, et al(201)

Preliminary study on development rate of parthenogenesis of porcine small cavity follicles Song Shangqiao, et al(205)

Comparative analysis of nutritional components of dead pork bone meal and fish meal Cheng Xiaofei, et al(208)

Comparison of production performance and correlation analysis of main characters of silage corn in Guizhou Province Zhu Xing, et al(212)

Effect of Xiao Chaihu decoction and its ingredients on *in vitro* carbon tetrachloride (CCl₄) induced hepatocyte injury Li Jingjing, et al(217)

Storage and Processing · Detection

Electronic nose recognition method for Pu’er tea types based on feature fusion and redundancy removal Xu Sai, et al(222)

In vitro hypolipidemic effect of Sichuan okra micropowder and its influence on intestinal flora of mice ... Xin Songling, et al(228)

Influence of different modeling methods based on visible and near infrared spectroscopy on detection precision of sugar content of Hetao muskmelon Zhang Dehu(235)

Agricultural Engineering and Information Technology

Analysis and design of gear transmission structure based on SolidWorks Zhu Chao, et al(241)

A grid – based spatial clustering algorithm and its application in basic farmland planning Wu Yanpeng(250)

Numerical analysis of soil permeability based on CFD – DEM coupling Li Yunchuan, et al(255)

Resources and Environment

Temporal and spatial variation of NDVI and its response to climatic factors in Taihang Mountains Yu Xun, et al(260)

Analysis of climatological characteristics of precipitation in Jiangnan Plain over the past 59 years Deng Yanjun, et al(268)

Characteristic analysis and risk safety assessment of soil heavy metals in a certain area of western Zhejiang Huang Wen, et al(278)

Isolation and identification of 23 strains of fungus in tea Guan Piaoping, et al(285)

Spatial analysis of nitrogen and phosphorus emission intensity of cultivated land in the upper reaches of Erhai River Basin Guo Yuxin, et al(291)

Isolation and identification of 2 strains of nitrogen – fixing bacteria Lu Yilin, et al(298)

Analysis of temporal and spatial changes of LULC and its ecological response of the population in Hotan Oasis in the past 26 years Liang Tiantian, et al(302)

Agricultural Economy and Management

Study on academic competitiveness of China’s agricultural science and technology talents in different subjects Cheng Jinhua, et al(309)

Study on coupling and spatial differentiation between tourism destination system and urbanization —Taking Henan Province as an example Li Wei, et al(315)

Analysis and countermeasures of industrial node contradiction of weak gluten wheat in Jiangsu Province Gai Yufang, et al(324)

Influence of farmers’ social wealth status on the availability of borrowing Huang Wenshu, et al(328)