

江苏农业科学

第 52 卷 第 16 期 2024 年 8 月 20 日

目 次

● 专论与综述

- 温室巡检机器人关键技术研究进展与展望 王少聪,杜肖鹏,丁小明,等(1)
- 植物低温胁迫应答 bHLH 转录因子研究进展 李 珊,马红义,李承男,等(11)
- 微塑料对土壤理化性质和生物特性的影响及其降解研究进展 杨文硕,梁 鑫,王旭刚,等(20)
- 辽宁滨海稻区稻米品质影响因素分析及优质栽培技术探讨 郑英杰,王柏秋,于亚辉,等(30)

● 生物技术

- 白蜡树叶绿体基因组结构特征及系统发育分析 黄 松,张 辉,邱 林,等(36)
- 我国未批准的转基因油菜 MS11 品系双重数字 PCR 精准定量检测方法建立
..... 钱昌元,左翠花,孙 欣,等(45)
- 国审小麦新品种信麦 163 关键功能基因解析 陈真真,王 轲,申冠宇,等(53)
- 六倍体栽培小麦 AP2/ERF 基因家族的全基因组鉴定及表达分析 张 新,李敏敏,赵 杨,等(58)
- 德阳柿 SPL 基因家族鉴定及在成花调控中的功能分析 李家艳,丁 瑜,安怡珂,等(69)
- 基于 SNP 标记的玉米散粉吐丝间隔期 QTL 定位 陈 坤,刘亚利,覃宏宇,等(79)

● 遗传育种与耕作栽培

- 小麦花药液体漂浮培养体系优化及黄淮麦区高花药培养力基因型筛选 ... 王永霞,张弯弯,常莹莹,等(87)
- 大豆行距对玉米 || 大豆间作营养品质和土壤养分的影响 董 韦,李思梦,王 维,等(94)
- 不同水稻不育系对盐胁迫的生理响应及耐盐性评价 徐远道,王钰媛,杨益善(101)
- 大豆—玉米轮作模式下不同施肥措施对土壤肥力及大豆产量的影响 梁文卫,毕影东,李 炜,等(110)
- 水氮互作对超高产小麦灌浆和抗衰老特性的影响 余双双,陈 磊,郭冰玲,等(117)
- 基质覆盖式免耕播种技术对玉米出苗及生长发育的影响 史健伟,邹华芬,严晓丽,等(125)

190 份广西鲜食玉米自交系叶酸、维生素 E、锌含量分析与评价	邹成林,黄开健,莫润秀,等(134)
不同分子量羊栖菜多糖对烟草抗旱性和土壤微生物的影响	陈芊如,龚鹏飞,杨 波,等(141)
●植物保护	
解淀粉芽孢杆菌 PB-1 对灰葡萄孢的抑菌机理	杨 蕊,石红利,郎剑锋,等(149)
西洋杜鹃叶斑病病原菌分离鉴定及生物学特性分析和防控药剂筛选	田芸菁,芦俊佳,杨明国,等(155)
烟草疫霉拮抗菌的分离鉴定及其生防和发酵特性	曾祥难,刘新源,彭 博,等(161)
湖南栽培油菜品种根肿病抗性鉴定及防控	丁 琳,梁海迪,赵 辉,等(170)
●园艺与林学	
209 份甜瓜种质资源果实性状的综合评价	冯路路,闫洪朗,王曼曼,等(178)
激素浓度及花穗整形长度对夏黑葡萄果实品质的影响	王明洁(186)
营养液用量对无土栽培番茄生长、品质及需肥规律的影响	王东升,胡卫丛,黄忠阳,等(191)
温室不同遮阳部位与遮阳密度对番茄光合特性的影响	王文元,倪纪恒(197)
●畜牧兽医与水产蚕桑	
不同地理种群克氏原螯虾形态差异及相关分子标记研究	高 杨,田 灿,姜京京,等(203)
蚯蚓硒制备工艺优化及其在番鸭中的应用效果	刘珍妮,吴丽娟,田玉玲,等(214)
●农业工程与信息技术	
基于无人机多光谱的全周期枣树叶片 SPAD 值检测	洪国军,谢俊博,张 灵,等(221)
基于深度学习的轻量化农作物叶片病害识别模型	周江龙,王天一,李 论,等(230)
一种基于改进神经网络算法 ResNet50 的玉米病虫害识别模型	冯 峰,周 鑫,陈诗瑶,等(239)
●资源与环境	
基于秸秆堆肥发酵的花卉栽培基质研究	管 斌,刘春风,王全智,等(245)
微生物菌肥对龙脑型阴香根际轻基质中微生物多样性及功能的影响	江颖超,李永泉,何波祥,等(252)
基于系统动力学的农用地碳汇碳源效应分析——以喀什地区为例	林彦君,木合塔尔·艾买提,阿迪莱·伊斯马伊力(263)
●农业经济与管理	
我国美丽乡村建设研究现状、热点与趋势——基于 CiteSpace 和 SATI 的可视化分析	谢小梅,亢志华(271)
新时代江苏农村“三新”经济培育与发展路径	汪 翔,沈贵银(279)

JIANGSU AGRICULTURAL SCIENCES

Vol. 52 No. 16 August 20 2024

CONTENTS

Monograph and Review

Research progress and prospect of key technologies of greenhouse inspection robot	Wang Shaocong, et al(1)
Research progress of bHLH transcription factors in response to low temperature stress in plant	Li Shan, et al(11)
Research progress on impacts of microplastics on soil physical, chemical and biological properties and their degradation	Yang Wenshuo, et al(20)
Analysis of factors influencing rice quality and discussion on high quality cultivation techniques in coastal rice region of Liaoning Province	Zheng Yingjie, et al(30)

Bio-technology

Chloroplast genome structure characteristics and phylogenetic analysis of <i>Fraxinus chinensis</i>	Huang Song, et al(36)
Establishment of duplex digital PCR quantitative detection method for genetically modified rapeseed event MS11 unproved by Chinese government	Qian Changyuan, et al(45)
Analysis of key functional genes of new nationally approved wheat cultivar Xinmai 163	Chen Zhenzhen, et al(53)
Genome – wide identification and expression analysis of AP2/ERF gene family in hexaploid cultivated wheat	Zhang Xin, et al(58)
Identification of SPL gene family in <i>Diospyros deyangnsis</i> and its functional analysis in regulation of flowering	Li Jiayan, et al(69)
QTL mapping of maize anthesis silking interval based on SNP markers	Chen Kun, et al(79)

Genetics and Breeding • Tillage and Cultivation

Optimization of wheat anther liquid floating culture system and genotype screening for high anther culturability in Huanghuai wheat region	Wang Yongxia, et al(87)
Effects of soybean row spacing on nutrient quality and soil nutrients of maize/soybean intercropping	Dong Wei, et al(94)
Physiological response and salt tolerance evaluation of different rice sterile lines to salt stress	Xu Yuanxiao, et al(101)
Influences of different fertilization measures on soil fertility and soybean yield in soybean – maize rotation mode	Liang Wenwei, et al(110)
Effects of water – nitrogen interaction on grain filling and anti – senescence characteristics of super high – yield wheat	Yu Shuangshuang, et al(117)
Impacts of substrate covered no – till sowing technology on emergence and growth of maize	Shi Jianwei, et al(125)
Analysis and evaluation of folic acid, vitamin E, and zinc content of 190 fresh maize inbred lines in Guangxi area	Zou Chenglin, et al(134)
Effects of different molecular weights of <i>Sargassum fusiforme</i> polysaccharides on drought resistance and soil microorganisms of tobacco	Chen Qianru, et al(141)

Plant Protection

Inhibitory mechanism of *Bacillus amyloliquefacien* PB – 1 against *Botrytis cinerea* Yang Rui ,et al(149)

Isolation , identification , biological characteristics analysis of pathogen causing *Rhododendron simsii* leaf spot and screening of fungicides for its control Tian Yunjing ,et al(155)

Isolation and identification of antagonistic bacteria *Penicillium bilaiae* against *Phytophthora nicotianae* and its biocontrol and fermentation characteristics Zeng Xiangnan ,et al(161)

Resistance identification and control of clubroot of cultivated rapeseed cultivars in Hunan Province Ding Lin ,et al(170)

Horticulture and Forestry

Comprehensive evaluation of fruit traits of 209 muskmelon germplasm resources Feng Lulu ,et al(178)

Influences of gibberellin concentration and panicle shaping length on fruit quality of Summer Black grape Wang Mingjie(186)

Effects of nutrient solution dosage on growth ,quality ,and fertilizer requirement of soilless tomato Wang Dongsheng ,et al(191)

Influences of different shading positions and shading densities on tomato photosynthesis in greenhouse Wang Wen yuan ,et al(197)

Husbandry and Veterinary · Aquaculture and Sericulture

Morphological differences and related molecular markers of *Procambarus clarkii* from different geographical populations Gao Yang ,et al(203)

Optimization of preparation technology of selenium from earthworm and its application in Muscovy duck Liu Zhenni ,et al(214)

Agricultural Engineering and Information Technology

Detection of SPAD values of jujube tree leaves throughout growth cycle based on unmanned aerial vehicle multispectral imaging Hong Guojun ,et al(221)

A lightweight model for crop leaf disease identification based on deep learning Zhou Jianglong ,et al(230)

A maize pest and disease identification model based on improved neural network algorithm ResNet50 Feng Feng ,et al(239)

Resources and Environment

Study on flower culture substrate based on straw compost fermentation Guan Bin ,et al(245)

Effects of microbial fertilizer on diversity and function of microorganisms in light rhizosphere matrix of borneol – type *Cinnamomum burmannii* Jiang Yingchao ,et al(252)

Carbon sink and carbon source effect analysis of agricultural land based on system dynamics; taking Kashgar region as an example Lin Yanjun ,et al(263)

Agricultural Economy and Management

Research status , hot spots and trends of China’s beautiful countryside construction; a visual analysis based on CiteSpace and SATI Xie Xiaomei ,et al(271)

Cultivation and development path of “three new” economy in Jiangsu countryside under new era Wang Xiang ,et al(279)