

江苏农业科学

第 50 卷 第 8 期 2022 年 4 月 20 日

目 次

●“草地贪夜蛾防控”专题

- 蠋蝽若虫对草地贪夜蛾 3~5 龄幼虫的捕食能力 孟建玉,李治模,董详立,等(1)
- 紫茉莉种子对草地贪夜蛾的生物活性 李敬丹,付璇,孙嘉洛,等(5)
- 植物次生代谢物质对草地贪夜蛾解毒酶活性及相关基因表达的影响 王柄权,程凌寒,方宇,等(11)
- 草地贪夜蛾的捕食性天敌昆虫研究进展 任雪敏,徐志文,赵斌,等(15)
- 应用转基因玉米防治草地贪夜蛾 梁晋刚,谢悦,肖冰,等(23)
- 草地贪夜蛾对 4 个玉米品种的产卵和取食选择特性 王有慧,陈文华,易传辉,等(26)
- 1 株草地贪夜蛾寄生真菌的分离鉴定及活性测试 何俊琅,何景超,华宏伟,等(32)
- 13 种化学杀虫剂对草地贪夜蛾的室内杀卵活性和田间防效 杨帆,望勇,骆海波,等(37)

●专论与综述

- 施氮对大豆结瘤、固氮及产量影响的研究进展 侯慧云,高峰,高同国,等(42)
- 高光谱图像在农作物病害检测识别中的研究进展 胡政,张艳,尚静,等(49)
- 形态标记在植物中的应用研究进展 马道承,王凌晖,梁机(55)

●生物技术

- 玉米生育期相关性状 QTL 定位 陈俊宇,卢峰,陈婉莹,等(63)
- CMAB008 单抗阳离子交换层析介质寿命确认 邵顺儒,郭清城,侯盛,等(69)
- 木薯 2C 型蛋白磷酸酶基因 *MePP2C55* 的克隆及表达分析 曾坚,谢雅倩,陈丽萍,等(73)

●遗传育种与耕作栽培

- 不同春玉米品种穗部及籽粒性状对机收品质的影响 张凯旋,俞新华,王雨晴,等(79)
- 孕穗期受渍对小麦生理指标及产量构成因素的影响 刘会宁,朱建强(83)
- 化学打顶剂对新疆早熟棉花农艺及产量性状的影响 王国栋,曾胜和,梁飞,等(87)
- 茎鞘非结构性碳水化合物积累运转与稻米品质对播期和行距配置的响应
..... 谢裕林,于雅洁,董明辉,等(93)
- 氯化钙浸种对干旱胁迫下花生种子萌发及幼苗生理特性的影响 范小玉,陈雷,刘卫星,等(101)
- 穗肥施氮量和结实期遮光对水稻产量和干物质积累特征的影响 王坤庭,陶钰,邢志鹏,等(105)

复合微生物菌肥拌种对黑青稞生长发育及品质的影响	何建清,张格杰,赵伟进,等(111)
-------------------------------	--------------------

●植物保护

双斑长跗蚱叶甲取食对棉花挥发物组成和含量的影响	杨 陈,郭丹丹,何婉洁,等(117)
大蒜白腐菌粗毒素活性分析与组分鉴定	朱言杰,马金骏,周冬梅,等(125)
7 种杀菌剂对小粒材小蠹 3 种伴生镰刀菌的室内毒力测定	章 宇,梁 甜,巨云为,等(128)
2 株源于红树林具有黑曲霉抗性细菌的筛选及发酵条件优化	阮羽萱,郑添鹏,魏宝阳,等(133)

●园艺与林学

脱毒对大蒜生长、碳氮代谢的影响	刘灿玉,杨 峰,陆信娟,等(141)
光照度和基质含水量互作对加工型番茄幼苗根系生长及生理影响的综合评价	孙世君,赵 斌,张海博,等(145)
基于 AHP 法的穹窿山主要芳香植物资源评价及康养景观应用	李英姿,张 兴,张姗姗,等(151)
高畦、整枝和避雨栽培对朝天椒形态特征与营养品质的影响	蒋月喜,陈振东,蒋 哲,等(157)

●畜牧兽医与水产蚕桑

感染鸭疫里默氏菌对鸭小肠黏膜形态结构的影响	陶志云,徐文娟,施祖灏,等(166)
稻虾共养病虾肠道细菌群落变化与病原细菌分离及药物敏感性	石晓媛,王 麒,方明棵,等(169)

●贮藏加工与检测分析

3 种天然保鲜剂对番茄的保鲜效果	张 璐(176)
西马特罗单克隆抗体的制备及胶体金快速检测卡的研发	刘颖沙,刘昭彤,曹亚岐,等(182)

●农业工程与信息技术

基于无模型自适应控制的设施园艺自动导航车辆路径跟踪	陈 娟,姚立健,徐丽君,等(187)
基于跨深度学习模型的作物病害检测方法	李 萍,邵 或,齐国红,等(193)
面向小麦生育进程监测的卷积神经网络精简化研究	李祥宇,任艳娜,马新明,等(199)

●资源与环境

不同配置模式下枣棉间作复合系统耗水特性研究	王沛娟,李 玲,李田甜,等(207)
不同树龄石榴园土壤中微量元素、微生物及土壤酶活性研究	施 娴,孟衡玲,张德刚,等(215)
不同海拔条件下烤烟成熟期根际土壤真菌群落结构及生态特征分析	高卫锴,李茂森,李 超,等(221)
不同渗灌模式对青贮玉米苗期土壤养分变化的影响	刘 震,闫旭东,黄 伟,等(228)
艾比湖湿地黏细菌的分离鉴定及其抗菌活性	王月娥,牛艳慧,钟镇涛,等(234)

●农业经济与管理

“双循环”新发展格局下老龄化对农村居民消费结构的影响——来自江苏的考察	成谢军,王莉娟(243)
以闭环思维提升科研单位纪检监察监督质效的实践探索——以江苏省农业科学院为例	邱昱东(249)

JIANGSU AGRICULTURAL SCIENCES

Vol. 50 No. 8 April 20 2022

CONTENTS

Fall Armyworm Control

- Predation capability of *Arma chinensis* nymph on the 3rd to 5th instar larvae of *Spodoptera frugiperda* ... Meng Jianyu, et al(1)
- Study on biological activity of *Mirabilis jalapa* seed against *Spodoptera frugiperda* Li Jingdan, et al(5)
- Effects of plant secondary metabolites on detoxification enzyme activity and related gene expression of *Spodoptera frugiperda*
..... Wang Bingquan, et al(11)
- Research progress on predatory natural enemy insect of *Spodoptera frugiperda* Ren Xuemin, et al(15)
- Application of genetically modified maize in control of *Spodoptera frugiperda* Liang Jingang, et al(23)
- Characteristics of oviposition and feeding selectivity of *Spodoptera frugiperda* to four different corn cultivars
..... Wang Youhui, et al(26)
- Identification of a strain of endoparasitic fungus in *Spodoptera frugiperda* (Lepidoptera:Noctuidae) and its activity test
..... He Junlang, et al(32)
- Ovicidal activity and control efficacy of thirteen chemical insecticides against *Spodoptera frugiperda* Yang Fan, et al(37)

Monograph and Review

- Research progress on effects of nitrogen application on soybean nodulation, nitrogen fixation and yield ... Hou Huiyun, et al(42)
- Research progress of hyperspectral images in detection and identification of crop diseases Hu Zheng, et al(49)
- Research progress on application of morphological markers in plants Ma Daocheng, et al(55)

Bio-technology

- QTL mapping of growth period related traits in maize Chen Junyu, et al(63)
- Life validation for CMAB008 monoclonal antibody cation exchange chromatographic resin Shao Shunru, et al(69)
- Cloning and expression analysis of *MePP2C55* in *Manihot esculenta* Crantz Zeng Jian, et al(73)

Genetics and Breeding • Tillage and Cultivation

- Effects of ear and grain characters of different spring maize cultivars on machine – harvested quality
..... Zhang Kaixuan, et al(79)
- Impacts of waterlogging at booting stage on physiological indexes and yield components of wheat Liu Huining, et al(83)
- Effects of chemical topping agent on agronomic and yield traits of early maturing cotton in Xinjiang area
..... Wang Guodong, et al(87)
- Response of non – structural carbohydrates accumulation operation and rice quality to sowing date and row spacing configuration
..... Xie Yulin, et al(93)
- Influences of calcium chloride seed soaking on seed germination and seedling physiological characteristics of peanut under
drought stress Fan Xiaoyu, et al(101)
- Effects of panicle nitrogen fertilizer amount and shading during grain filling period on yield and dry matter accumulation
characteristics of rice Wang Kunting, et al(105)
- Impacts of compound microbial fertilizer on growth and quality of black highland barley He Jianqing, et al(111)

Plant Protection

- Effects of feeding by *Monolepta hieroglyphica* Motschulsky on composition and quantity of cotton volatiles
..... Yang Chen, et al(117)

Activity analysis and component identification of crude toxin of garlic white rot pathogen *Sclerotium cepivorum* Zhu Yanjie ,et al(125)

Indoor toxicity test of seven fungicides against three species of *Fusarium* associated with *Xyleborus saxeseni* Zhang Yu ,et al(128)

Screening of two strains of *Aspergillus niger* – resistant bacteria from mangroves and optimization of fermentation conditions Ruan Yuxuan ,et al(133)

Horticulture and Forestry

Effects of detoxification on growth ,carbon – nitrogen metabolism of garlic Liu Canyu ,et al(141)

Comprehensive evaluation on effects of interaction of light intensity and substrate moisture on root growth and physiology of processing tomato seedlings Sun Shijun ,et al(145)

Evaluation of main aromatic plant resources of Qionglong Mountain based on AHP method and their application in health landscape Li Yingzi ,et al(151)

Impacts of high border ,pruning and rainproof cultivation on morphological characteristics and nutritional quality of *Capsicum annuum* var. *conoides* Jiang Yuexi ,et al(157)

Husbandry and Veterinary · Aquaculture and Sericulture

Influence of *Riemerella anatipestifer* infection on morphology structure of small intestinal mucosa of ducks Tao Zhiyun ,et al(166)

Changes of intestinal bacterial community ,isolation of pathogenic bacteria and drug sensitivity of diseased shrimp in rice – shrimp co – cultured system Shi Xiaoyuan ,et al(169)

Storage and Processing · Detection

Effects of three kinds of natural preservatives on preservation of tomato Zhang Lu(176)

Preparation of cimaterol monoclonal antibody and development of colloidal gold rapid detection card Liu Yingsha ,et al(182)

Agricultural Engineering and Information Technology

Path tracking of automatic navigation vehicle in protected horticulture based on model – free adaptive controller Chen Juan ,et al(187)

Crop disease detection method based on cross deep learning model Li Ping ,et al(193)

Study on simplified convolutional neural network for monitoring wheat growth process Li Xiangyu ,et al(199)

Resources and Environment

Research on water consumption characteristics of jujube – cotton intercropping compound system under different configuration modes Wang Peijuan ,et al(207)

Study on soil trace elements , microorganisms and enzyme activities in pomegranate orchards of different ages Shi Xian ,et al(215)

Fungal community structure and ecological characteristics in rhizosphere soil of flue – cured tobacco at mature stage under different elevations Gao Weikai ,et al(221)

Effects of different infiltration irrigation modes on soil nutrient changes of silage maize at seedling stage Liu Zhen ,et al(228)

Isolation ,identification and antimicrobial activities of myxobacteria in the Ebinur Lake Wetland Wang Yuee ,et al(234)

Agricultural Economy and Management

Impact of aging on rural residents’ consumption structure under new development pattern of “dual circulation” —Investigation from Jiangsu Province Cheng Xiejun ,et al(243)

Practical exploration of improving the quality and efficiency of discipline inspection and supervision in scientific research units with closed – loop thinking—Taking Jiangsu Academy of Agricultural Sciences as an example Qiu Yudong(249)