

江苏农业科学

第49卷 第19期 2021年10月5日

目 次

●“种业振兴”专栏

- 我国作物种业国际竞争力评价研究与提升对策 郑怀国,秦晓婧,齐世杰,等(1)
基于ESI的全球作物生物育种领域研究前沿分析 齐世杰,赵静娟,郑怀国(9)
江苏省乡土特色种质资源保护与开发利用 朱银,邹淑琼,汪巧玲,等(19)
江苏地区扁豆主要表型性状的多样性评价 苏彩霞,孟珊,栾春荣,等(24)
蒜黄种质资源农艺性状的综合评价及聚类分析 葛洁,樊继德,杨青青,等(29)
大豆种质资源主要农艺性状的评价与分析 黎松松,许文静,张威,等(35)

●专论与综述

- 植物防御反应的研究进展 王诗宇,王志兴,张丽丽,等(39)
绣球属植物组织培养研究进展 秦紫艺,陈双双,王华娣,等(45)
小麦抗赤霉病遗传与机理研究现状与展望 廖森,方正武,张春梅,等(51)
 ω -6多不饱和脂肪酸氧化产物4-羟基壬烯醛的研究进展 马晶晶,孙冲,张牧焓,等(57)
白芨资源综合利用现状及展望 钱丽华,尹舒雅,陆娜,等(64)

●生物技术

- 地黄促生内生尖孢镰刀菌GG22基因组结构分析 朱昀昊,彭淑萍,赵乐,等(72)
一种高通量鉴定甘蓝型油菜耐低氮种质的方法及其应用 万何平,何冰冰,陈敬东,等(78)
珍稀濒危植物堇叶紫金牛扦插和组培繁殖 刘守赞,叶建丰,王江铭,等(84)

●遗传育种与耕作栽培

- 基于稻鳝综合种养模式水稻品种产量及品质比较研究 王华,孙小淋,顾盈,等(89)
环境因子和颖花构造对水稻颖花关闭的效应 黄友明,曾晓春(94)
纳米氧化锌对水稻种子发芽和幼苗生长的影响 舒小冬,诸俊,顾大路,等(101)
高产早熟抗病大豆新品种南农50的选育与栽培技术 王吴彬,邱家训,盖钧镒(107)
优良食味粳稻南粳56的选育及主要特征特性 朱镇,张亚东,陈涛,等(109)
玉米种子活力及幼苗生长特性对其成熟度的响应 许海涛,王文文,王友华,等(113)
稻麦轮作下长期秸秆还田和钾肥施用后效对水稻产量和土壤肥力的影响 袁国印,宋航,邹威威,等(117)

增施微生物菌肥对烤烟生长发育及烟叶品质的影响 李茜,苏国权,危月辉,等(123)

基于通径系数和 GGE 双标图的大粒花生综合分析 邓丽,郭敏杰,苗建利,等(129)

●植物保护

蔬菜田蜗牛的发生及防治对策 徐德进,徐广春,徐鹿,等(134)

河南商丘月季黑斑病病原菌鉴定及生物学特性 娄喜艳,郭洋洋,裴冬丽(138)

25% 高效氯氟氰菊酯快速释放型微胶囊悬浮剂的研制 朱震,高聪芬(144)

●园艺与林学

侧柏水势对干旱胁迫与复水的响应特征 冯树林,周婷,黄优,等(149)

环剥对红阳猕猴桃果实品质及糖代谢的影响 杨勇,陈露,陈成,等(156)

高光合速率与高叶绿素含量薄壳山核桃种质筛选 陈军,蔡金峰(164)

杏鲍菇生物学特性及栽培配方初筛 陆珠,于廷申,于春艳(168)

不同栽培辅料诱导对 3 个香菇菌株液体发酵产漆酶活力的影响 熊雪,李鹏,王莹,等(172)

●畜牧兽医与水产蚕桑

羊抗人载脂蛋白 A1 多克隆抗体的制备及免疫佐剂优化 邓碧华,姚明霞,周明旭,等(180)

基于特有基因 VY93_RS02885 为靶标的滑液支原体 qPCR 检测方法建立

..... 徐彬,张敬峰,卢凤英,等(183)

●贮藏加工与检测分析

22 份蒲公英资源酚酸类成分提取及体外功能活性分析 张晓东,孙立亚,孟然,等(190)

盐胁迫对黄蜀葵不同部位总黄酮含量及抗氧化活性的影响 宁亚茹,韩民利,张晓东,等(196)

●农业工程与信息技术

基于辐热积的 NFT 栽培生菜生长模型 陈永快,黄语燕,兰婕,等(201)

基于迭代函数系统的三维树木静动态可视化研究 胡杰,刘娟,邓林强,等(205)

基于光温模型的吉林省马铃薯物候期预测效果比较 杨近鹏,何英彬,张胜利,等(209)

●资源与环境

施用生物质炭条件下减施氮肥对玉米生长和土壤的影响 刘敏,纪立东,王锐,等(216)

6 种稻田除草剂对斑马鱼和大型溞的急性毒性 吴若函,郭晓瑜,辛星,等(223)

炭醋材料对土壤磷素流失的影响 李宗壕,达布希拉图(226)

广西桂林市主要桃园土壤养分状况及重金属、抗生素污染评价 陆泰良,陆安祥,阳爱民,等(232)

●农业经济与管理

我国克氏原螯虾产业调查分析与发展对策建议 任妮,戴红君,张琤琤,等(241)

自然灾害、农户传统风险管理手段与天气指数保险需求——以松花江流域洪水灾区农户为例

..... 秦社华,李云建,汤颖梅(247)

JIANGSU AGRICULTURAL SCIENCES

Vol. 49 No. 19 October 5 2021

CONTENTS

Seed Industry Revitalization

Evaluation research and promotion countermeasures of China's international competitiveness in crop seed industry	Zheng Huaiqiu, et al(1)
Research frontier analysis of global crop biological breeding based on ESI	Qi Shijie, et al(9)
Study on conservation, development and utilization of local characteristic germplasm resources in Jiangsu Province	Zhu Yin, et al(19)
Diversity evaluation of main phenotypic traits of <i>Lablab purpureus</i> in Jiangsu area	Su Caixia, et al(24)
Comprehensive evaluation and cluster analysis of agronomic traits of garlic yellow germplasm resources	Ge Jie, et al(29)
Evaluation and analysis of main agronomic traits of soybean germplasm resources	Li Songsong, et al(35)

Monograph and Review

Research progress of plant defense response	Wang Shiyu, et al(39)
Research progress on tissue culture of <i>Hydrangea</i> plants	Qin Ziyi, et al(45)
Research current status and prospect of inheritance and mechanism of fusarium head blight resistance in wheat	Liao Sen, et al(51)
Research progress of 4 – hydroxynonenal, an oxidation product of ω – 6 polyunsaturated fatty acids	Ma Jingjing, et al(57)
Status and prospect of comprehensive utilization of <i>Bletilla striata</i> resources	Qian Lihua, et al(64)

Bio-technology

Genomic structure analysis of plant growth – promoting endophytic <i>Fusarium oxysporum</i> GG22 in <i>Rehmannia glutinosa</i>	Zhu Yunhao, et al(72)
A high – throughput method for identification of low – nitrogen – tolerant germplasm of <i>Brassica napus</i> and its application	Wan Heping, et al(78)
Cutting and tissue culture propagation of rare and endangered <i>Ardisia violacea</i>	Liu Shouzan, et al(84)

Genetics and Breeding · Tillage and Cultivation

Comparative study on rice yield and quality based on rice – eel comprehensive breeding model	Wang Hua, et al(89)
Effects of environmental factors and spikelet structure on closure of rice spikelets	Huang Youming, et al(94)
Impacts of zinc oxide nanoparticles on seed germination and seedling growth of rice	Yin Xiaodong, et al(101)
Breeding and cultivation techniques of new soybean cultivar Nannong 50 with high yield, early maturity and disease resistance	Wang Wubin, et al(107)
Breeding and main characters of japonica rice cultivar Nanjing 56 with good eating quality	Zhu Zhen, et al(109)
Responses of seed vigor and seedling growth characteristics to maturity of maize	Xu Haitao, et al(113)
Effects of long – term straw returning and potassium fertilizer application on rice yield and soil fertility under rice – wheat rotation	Yuan Guoyin, et al(117)
Influences of microbial fertilizer on growth and quality of flue – cured tobacco	Li Qian, et al(123)
Comprehensive analysis of peanut cultivars with big grain based on path coefficient and GGE biplot	Deng Li, et al(129)

Plant Protection

- Occurrence and control of snails in vegetable fields Xu Dejin, et al(134)
Identification and biological characteristics of pathogen of rose black spot in Shangqiu, Henan Province Lou Xiyan, et al(138)
Development of 25% lambda - cyhalothrin quick release microcapsule suspension Zhu Zhen, et al(144)

Horticulture and Forestry

- Response characteristics of water potential of *Platycladus orientalis* seedlings to drought stress and rewatering Feng Shulin, et al(149)
Effects of girdling treatment on fruit quality and sugar metabolism of Hongyang kiwifruit Yang Yong, et al(156)
Screening of *Carya illinoensis* germplasm with high photosynthetic rate and high chlorophyll content Chen Jun, et al(164)
Biological characteristics and preliminary screening of cultivation formula for *Pleurotus eryngii* Lu Zhu, et al(168)
Effects of different cultivation auxiliary materials on laccase production activity of 3 kind of *Lentinula edodes* strains in liquid fermentation Xiong xue, et al(172)

Husbandry and Veterinary · Aquaculture and Sericulture

- Preparation of goat anti - human apolipoprotein A1 polyclonal antibody and optimization of immune adjuvant Deng Bihua, et al(180)
Establishment of a qPCR detection method for *Mycoplasma synoviae* based on unique gene *VY93_RS02885* as the target Xu Bin, et al(183)

Storage and Processing · Detection

- Extraction and *in vitro* functional activity analysis of phenolic acids from 22 dandelion resources Zhang Xiaodong, et al(190)
Impacts of salt stress on total flavonoids content and antioxidant activity in different parts of *Abelmoschus manihot* Ning Yaru, et al(196)

Agricultural Engineering and Information Technology

- Growth model of lettuce cultivated by NFT based on product of thermal effectiveness and photosynthesis active radiation Chen Yongkuai, et al(201)
Static and dynamic visualization research of 3D trees based on iterated function system Hu Jie, et al(205)
Comparative study on potato phenological period prediction effects based on photothermal model in Jilin Province Yang Jinpeng, et al(209)

Resources and Environment

- Effects of nitrogen fertilizer reduction on maize growth and soil under biochar application Liu Min, et al(216)
Acute toxicity of six herbicides to *Brachydanio rerio* and *Daphnia magna* Straus in paddy fields Wu Ruohan, et al(223)
Effect of charcoal vinegar materials on soil phosphorus loss Li Zonghao, et al(226)
Soil environment and potential ecological risk assessment of main peach orchards in Guilin City, Guangxi Zhuang Autonomous Region Lu Tailiang, et al(232)

Agricultural Economy and Management

- Investigation and analysis of China's crayfish industry and suggestions for development Ren Ni, et al(241)
Natural disasters, farmers' traditional risk management methods and weather index insurance demand—Taking farmers in flood area of Songhua River Basin as an example Qin Shehua, et al(247)