



- 全国优秀农业期刊 湖南省一级期刊 湖南省优秀期刊
- 中国科技论文与引文数据库(CSTPCE)核心期刊
- 《中国学术期刊综合评价数据库》统计源期刊
- 《中国核心期刊(遴选)数据库》收录期刊
- “万方数据——数字化期刊群”全文上网期刊
- 中文科技期刊全文数据库来源期刊

ISSN 1006-060X
CN 43-1099/S

湖南农业科学

HUNAN AGRICULTURAL SCIENCES

2022年11月 第11期

Nov. 2022 Number 11

HUNAN AGRICULTURAL SCIENCES

湖南省农业科学院
湖南省星火计划促进会
湖南农业大学

主办

湖南农业科学

2022年第11期(总第446期)

目次

生物技术·遗传育种

青稞硝酸盐转运蛋白基因 HvnNPF4.5 的克隆和亚细胞定位

..... 刘凡语, 安立昆, 姚晓华, 姚有华, 崔永梅, 白羿雄, 李 新, 吴昆仑 (1)

银杏 BBX 家族生物信息学鉴定及表达分析

..... 王立芹, 曹振玉, 何长流, 王小青, 李路文, 杨美玲 (8)

活性炭与白砂糖互作对褐苞薯蕷试管薯诱导的影响

..... 李丽红, 华树妹, 陈芝华, 李 清, 邓才生, 黄哲鸿 (15)

耕作栽培·生理生化

呼伦贝尔地区燕麦与豌豆混播对燕麦产量和品质的影响

..... 刘建明, 周镇磊, 曹 东, 刘宝龙, 王东霞, 张怀刚 (19)

叶面调理剂对上二棚烟叶内在品质的影响

..... 靳志丽, 周 雨, 王凯歌, 李小慧, 杨勇辉, 李 虎, 敬礼恒 (24)

土壤肥料·资源环境

冬种紫云英对石灰性水稻土紫潮泥锌形态的影响

..... 褚 飞, 谢 坚, 李海露, 饶中秀, 李万明, 董春华, 杨曾平 (28)

微纳米硅微生物菌剂对水稻的降镉和增产效应

..... 康 权, 康 健, 颜合洪, 张春波 (36)

煤气化渣配施平菇菌糠对矿区土壤中紫花苜蓿幼苗根系的影响

..... 艾 国, 惠生娟, 邓仲勋, 尚瑞勇, 陈 花 (40)

湖南毛里湖湿地外来入侵物种研究

..... 林继华, 陈盼盼, 谢淑花, 李 妙 (45)

植物保护·园艺园林

香樟叶片及果实挥发油化学成分及抑菌活性测定

..... 肖新波, 何衍彪, 李意成, 周芸芸, 尹周 (50)

番茄立枯病生防菌株 B11-64 的鉴定及其生防特性

..... 舒芳玲, 李凤芳, 黎起秦, 袁高庆, 林纬 (55)

不同种类花粉对七星瓢虫繁殖能力的影响

..... 刘东阳, 伍兴隆, 陈雨, 余佳敏, 王勇, 江连强, 龙岗, 蒲德强 (60)

野生马泡瓜营养成分测定和抗氧化评价

..... 赵绚花, 欧立军, 姜青山, 陈金良, 张志旭 (65)

加工贮藏·检测分析

一种风味猪骨膏的研制

..... 刘卉琳, 曲超, 肖蓉, 周晓晨, 刘绍 (68)

城步峒茶红茶加工工艺研究

..... 杨拥军, 刘红艳, 董春华, 吴文亮, 刘伟英, 李维, 康彦凯, 肖友成 (73)

分散固相萃取高效液相色谱法测定蔬菜中灭蝇胺残留

..... 刘兰, 周培华, 汤春甫, 康绍英, 周兴旺, 袁列江 (78)

UPLC-MS/MS 检测氟吡菌酰胺在菜豆中的残留及消解动态

..... 李凯龙, 姚燕霞, 姜锦林, 罗路云, 陈武瑛, 黄洪, 熊浩, 陈昂 (84)

农业经济与管理

湖南省水生蔬菜产业现状与发展建议

..... 杨建国, 汪端华, 李倩, 吴双花, 王鑫, 刘衍 (88)

湖南村级集体经济组织经营性收入水平评价及典型模式分析

..... 邓文, 罗云寿, 刘胜轩, 刘英, 黄振国, 肖景峰, 詹祎蕊 (92)

黄河流域农业生态效率测度及影响因素分析

..... 杨昕蕾, 凡启兵 (96)

专论·综述

生物有机肥在作物品质改良和土壤修复中的研究进展

..... 郭之乐, 杨宸, 孙朝阳, 路斯哈, 马彦波, 侯余勇, 王巍杰 (101)

广告..... (封二、封三)

HUNAN AGRICULTURAL SCIENCES

No. 11 (Tot. 446) 2022

CONTENTS

Cloning and subcellular localization analysis of nitrate transporter gene *HvnNPF4.5* from hullless barley

..... LIU Fan-yu, AN Li-kun, YAO Xiao-hua, YAO You-hua, CUI Yong-mei, BAI Yi-xiong, LI Xin, WU Kun-lun (1)

Bioinformatics identification and expression analysis of GbBBX family in *Ginkgo biloba*

..... WANG Li-qin, CAO Zheng-yu, HE Chang-liu, WANG Xiao-qing, LI Lu-wen, YANG Mei-ling (8)

Interactive effects of activated carbon and white granule sugar on the microtuber induction of *Dioscorea persimilis*

..... LI Li-hong, HUA Shu-mei, CHEN Zhi-hua, LI Qing, DENG Cai-sheng, HUANG Zhe-hong (15)

Effects of mixed-sowing of oat and pea on yield and quality of oat in Hulunbuir Region

..... LIU Jian-ming, ZHOU Zhen-lei, CAO Dong, LIU Bao-long, WANG Dong-xia, ZHANG Huai-gang (19)

Effects of foliar conditioners on intrinsic quality of upper leaves of flue-cured tobacco

..... JIN Zhi-li, ZHOU Yu, WANG Kai-ge, LI Xiao-hui, YANG Yong-hui, LI Hu, JING Li-heng (24)

Effect of planting winter Chinese milk vetch on zinc forms in purple alluvial soil of paddy

..... CHU Fei, XIE Jian, LI Hai-lu, RAO Zhong-xiu, LI Wan-ming, DONG Chun-hua, YANG Zeng-ping (28)

Effect of micro-nano silicon microbial inoculant on reducing cadmium and increasing yield of rice

..... KANG Quan, KANG Jian, YAN He-hong, ZHANG Chun-bo (36)

Effects of coal gasification slag combined with *Pleurotus ostreatus* medium residue on root growth of alfalfa seedlings in soil of coal

mine areas AI Guo, HUI Sheng-juan, DENG Zhong-xun, SHANG Rui-yong, CHEN Hua (40)

Investigation on invasive alien species in Maoli Lake wetland of Hunan Province

..... LIN Ji-hua, CHEN Pan-pan, XIE Shu-hua, LI Miao (45)

Chemical components and antimicrobial activity of volatile oil from leaves and fruits of *Cinnamomum camphora*

..... XIAO Xin-bo, HE Yan-biao, LI Yi-cheng, ZHOU Yun-yun, YIN Zhou (50)

Identification of strain B11-64 and its biocontrol characteristics against tomato rhizoctonia rot

..... SHU Fang-ling, LI Feng-fang, LI Qi-qin, YUAN Gao-qing, LIN Wei (55)

Effects of different species of pollens on fecundity of *Coccinella septempunctata*

..... LIU Dong-yang, WU Xing-long, CHEN Yu, YU Jia-min, WANG Yong, JIANG Lian-qiang, LONG Gang, PU De-qiang (60)

Evaluation of nutritional components and antioxidant activity of wild *Cucumis melo* L. var. *agrestis* Naud.

..... ZHAO Xuan-hua, OU Li-jun, JIANG Qing-shan, CHEN Jin-liang, ZHANG Zhi-xu (65)

Development of flavor pig bone paste

..... LIU Hui-lin, QU Chao, XIAO Rong, ZHOU Xiao-chen, LIU Shao (68)

Study on Chengbuduntsa black tea processing technology

..... YANG Yong-jun, LIU Hong-yan, DONG Chun-hua, WU Wen-liang, LIU Wei-ying, LI Wei, KANG Yan-kai, XIAO You-cheng (73)

Dispersive solid-phase extraction of cyromazine residues in vegetables and its determination by high performance liquid chromatography

..... LIU Lan, ZHOU Pei-hua, TANG Chun-fu, KANG Shao-ying, ZHOU Xing-wang, YUAN Lie-jiang (78)

Residue and dissipation dynamic of fluopyram in kidney beans determined by UPLC-MS/MS

... LI Kai-long, YAO Yan-xia, JIANG Jin-lin, LUO Lu-yun, CHEN Wu-ying, HUANG Hong, XIONG Hao, CHEN Ang (84)

Status quo and development suggestions of Hunan aquatic vegetable industry

..... YANG Jian-guo, WANG Duan-hua, LI Qian, WU Shuang-hua, WANG Xin, LIU Kan (88)

Evaluation of the operating income level of Hunan village-level collective economic organizations and analysis of typical models

..... DENG Wen, LUO Yun-shou, LIU Sheng-xuan, LIU Ying, HUANG Zhen-guo, XIAO Jing-feng, ZHAN Yi-ru (92)

Measurement of agricultural ecological efficiency of the Yellow River Basin and analysis of its influencing factors

..... YANG Xin-lei, FAN Qi-bing (96)

Research progress on bioorganic fertilizer for quality improvement of crops and soil remediation

..... GUO Zhi-le, YANG Chen, SUN Chao-yang, LU Si-han, MA Yan-bo, HOU Yu-yong, WANG Wei-jie (101)