

中文核心期刊
中国科学引文数据库来源期刊
中国科技核心期刊

ISSN 1008-0864
CN 11-3900/S
CODEN ZNKDAJ



Q K 2 0 0 6 2 9 6

中国农业科技导报

Journal of
Agricultural Science
and Technology

2020年 第22卷 第 2 期

中华人民共和国科学技术部主管 中国农村技术开发中心主办

中国农业科技导报

第22卷 第2期 2020年2月

目 次

农业创新论坛

- 中国稻谷生产率的地域差异和时空分异——基于稻谷主产区的实证分析 王恒,高鸣(1)
2013—2018年全球玉米育种研究发展态势分析 齐世杰,赵静娟,郑怀国(12)

生物技术 生命科学

- 植物MAPK级联途径应答的非生物胁迫研究进展 周秒依,任雯,赵冰兵,李韩帅,刘亚(22)
花青素代谢调控植物彩叶研究进展 万东璞,于卓,吴燕民,丁梦琦,李金博,周美亮(30)
拟南芥SWEET1/2/3基因突变体构建及功能鉴定 辛红佳,李鹏程,滕守振,李圣彦,汪海,郎志宏(39)
外源褪黑素对烟草幼苗抗旱性生理机制的影响 贺嘉豪,陈建中,徐坚强,向金友,
杨懿德,张学伟,宁尚辉,王林,刘园,杨洋,景延秋,程玉渊(50)
'阳光玫瑰'葡萄无核化研究进展 王莎,程大伟,李明,顾红,李正阳,祁帅,陈锦永(58)
干旱胁迫对酸枣幼苗生理特性的影响 邹苗,王月林,李钢铁,冯斐,麻云霞,赵雨兴,石麟,任余燕(65)
基于不同土壤质地棉花根际微生物和酶活性特征分析 刘松涛,田春丽,曹雯梅,郑贝贝,李鹏程,董合林(73)

智慧农业 农机装备

- 基于高光谱成像技术的蓝莓果实成熟度识别研究(英文) 马淏,张开,金鑫,姬江涛,朱旭(80)
基于自适应模糊神经网络的鱼类投喂预测方法研究 陈澜,杨信廷,孙传恒,王以忠,徐大明,周超(91)

食品质量 加工储运

- 蜂蜜成熟过程中主要成分和抑菌特性变化研究 欧爱群,郭娜娜,刘富海,刘然,彭文君,李江红(101)
温度和湿度对紫甘薯贮藏品质的影响 郭亮虎,王镇,李楠,逯腊虎,高炜,郭雅娴,武宗信(107)

生物制造 资源生态

- 基于Malmquist DEA的甘肃内陆河流域农业水土资源利用效率及匹配特征研究 徐娜,张军,张仁陟(115)
常用肥料对作物重金属积累的影响及其机理研究进展 张蕾,李洋,张阳(123)
留膜留茬免耕栽培条件下旱作玉米生长季土壤氮素供应动态特征 张建军,党翼,赵刚,樊廷录,王磊,程万莉,李尚中,王淑英,雷康宁(132)
阴山北麓不同林分类型土壤持水性能研究 芳菲,秦富仓,李龙,杨振奇(140)
覆膜时期对油菜生长与产量的影响 王丹,田效琴,李卓,庄文化,刘永红,敬树忠,李浩杰(149)
基于产值和感官指标的豫中“上六片”烟叶栽培措施优化 刘扣珠,高真真,夏素素,李建华,顿松阳,李洪亮,王京,段卫东,史宏志(158)
添加菌剂和石灰对剑麻麻渣堆肥腐熟效果及养分含量的影响 谭施北,习金根,陈河龙,
郑金龙,黄兴,贺春萍,吴伟怀,梁艳琼,张世清,高建明,李锐,易克贤(166)

方法与技术创新

- 转基因玉米T25数字PCR方法的建立与验证 李夏莹,武玉花,李俊,肖晓琳,张飞燕,梁晋刚,王颖潜,张旭冬,张秀杰(173)
川黄柏中盐酸小檗碱HPLC测定优化及其抑菌活性评价 刘洋,冉聪,游桂香,何婧芝,吴卫,侯凯(179)

征订启事 《中国农业科技导报》征订启事(封二) 《生物技术进展》征订启事(封三)

作者投稿指南(187)

JOURNAL OF AGRICULTURAL SCIENCE AND TECHNOLOGY

Vol.22 No.2 Feb. 2020

CONTENTS

AGRICULTURAL INNOVATION FORUM

- Regional Difference and Spatial-temporal Differentiation of Rice Production Efficiency in China —— An Empirical Analysis Based on Main Rice Production Areas WANG Heng, GAO Ming(1)
Development Trend Analysis of Global Maize Breeding Research from 2013 to 2018 QI Shijie, ZHAO Jingjuan, ZHENG Huaiqiu(12)

BIOTECHNOLOGY & LIFE SCIENCE

- Advances on the MAPK Cascade Pathway in Response to Abiotic Stress in Plant ZHOU Miaozi, REN Wen, ZHAO Bingbing, LI Hanshuai, LIU Ya(22)
Regulation of Anthocyanin Metabolism on Colored Leaves of Plants WAN Dongpu, YU Zhuo, WU Yanmin, DING Mengqi, LI Jinbo, ZHOU Meiliang(30)
Construction and Functional Characterization of Mutants of *Arabidopsis SWEET1/2/3 Genes* XIN Hongjia, LI Pengcheng, TENG Shouzhen, LI Shengyan, WANG Hai, LANG Zhihong(39)
Effects of Exogenous Melatonin on Physiological Mechanism of Drought Resistance of Tobacco Seedlings HE Jiahao, CHEN Jianzhong, XU Jianqiang, XIANG Jinyou, YANG Yide, ZHANG Xuewei, NING Shanghui, WANG Lin, LIU Yuan, YANG Yang, JING Yanqiu, CHENG Yuyuan(50)
Research Progress on Seedless-Induced Production of 'Shine Muscat' Grape WANG Sha, CHENG Dawei, LI Ming, GU Hong, LI Zhengyang, QI Shuai, CHEN Jinyong(58)
Effects of Drought Stress on Physiological Characteristics of *Ziziphus jujuba* var. *spinosa* Seedlings ZOU Miao, WANG Yuelin, LI Gangtie, FENG Fei, MA Yunxia, ZHAO Yuxing, SHI Lin, REN Yuyan(65)
Characteristics Analysis of Rhizosphere Microorganisms and Enzyme Activities of Cotton Based on Different Soil Textures LIU Songtao, TIAN Chunli, CAO Wenmei, ZHENG Beibei, LI Pengcheng, DONG Helin (73)

INTELLIGENT AGRICULTURE & AGRICULTURAL MACHINERY

- Identification of Blueberry Fruit Maturity Using Hyperspectral Images Technology MA Hao, ZHANG Kai, JIN Xin, JI Jiangtao, ZHU Xu(80)
Fish Feeding Prediction Method Based on Adaptive Network Fuzzy Inference System CHEN Lan, YANG Xinting, SUN Chuanheng, WANG Yizhong, XU Daming, ZHOU Chao(91)

FOOD QUALITY & PROCESSING AND STORAGE

- Research on Changes of Main Components and Antibacterial Properties During Honey Ripening Process OU Aiqun, GUO Nana, LIU Fuhai, LIU Ran, PENG Wenjun, LI Jianghong(101)
Effects of Temperature and Humidity on Storage Quality of Purple Sweet Potato GUO Lianghu, WANG Zhen, LI Nan, LU Lahu, GAO Wei, GUO Yaxian, WU Zongxin(107)

BIO-MANUFACTURING & RESOURCE AND ECOLOGY

- Study on Utilization Efficiency and Matching Features of Agricultural Soil and Water Resources in Inland River Basin of Gansu Province Based on Malmquist DEA XU Na, ZHANG Jun, ZHANG Renzhi(115)
Research Progress on Effects of Common Fertilizers on Heavy Metal Accumulation in Crops and Its Mechanism ZHANG Lei, LI Yang, ZHANG Yang(123)
Dynamic Characteristics of Soil Nitrogen Supply in Maize Growing Season of No-tillage Plastic Film and Stubbles With Residues in Dryland ZHANG Jianjun, DANG Yi, ZHAO Gang, FAN Tinglu, WANG Lei, CHENG Wanli, LI Shangzhong, WANG Shuying, LEI Kangning(132)
Study on Soil Water Storage Performance of Different Forest Types at the North Piedmont of Yinshan Mountains FANG Fei, QIN Fucang, LI Long, YANG Zhenqi(140)
Effect of Film Mulching Period on Growth and Yield of Rape WANG Dan, TIAN Xiaoqin, LI Zhuo, ZHUANG Wenhua, LIU Yonghong, JING Shuzhong, LI Haojie(149)
Optimization of Tobacco Upper Six Leaves Cultivation Measures in Central Henan Based on Output Value and Sensory Indexes LIU Kouzhu, GAO Zhenzhen, XIA Susu, LI Jianhua, DUN Songyang, LI Hongliang, WANG Jing, DUAN Weidong, SHI Hongzhi(158)
Effect of Microbial Inoculants and Lime Addition on Composting Maturity and Nutrient Content of Sisal Residue TAN Shibei, XI Jinggen, CHEN Helong, ZHENG Jinlong, HUANG Xing, HE Chunping, WU Weihuai, LIANG Yanqiong, ZHANG Shiqing, GAO Jianming, LI Rui, YI Kexian(166)

INNOVATIVE METHODS AND TECHNOLOGIES

- Establishment and Testing of Genetically Modified T25 Maize Digital PCR Method LI Xiaying, WU Yuhua, LI Jun, XIAO Xiaolin, ZHANG Feiyan, LIANG Jingang, WANG Haoqian, ZHANG Xudong, ZHANG Xiujie(173)
Determination of Berberine Hydrochloride in Crystal of *Phellodendron chinensis* by HPLC and Evaluation of Bacteriostatic Activity LIU Yang, RAN Cong, YOU Guixiang, HE Jingzhi, WU Wei, HOU Kai(179)

中文核心期刊
中国科学引文数据库（CSCD）来源期刊
中国科技核心期刊（中国科技论文统计源期刊）
中国核心期刊（遴选）数据库收录期刊
RCCSE中国核心学术期刊（A）
中国农业核心期刊
中国学术期刊综合评价数据库来源期刊
中国期刊网、《中国学术期刊（光盘版）》全文收录期刊

**Journal of
Agricultural Science
and Technology**

新浪微博
中国农业科技导报

微信公众号
nykjdb



ISSN 1008-0864



9 771008 086204