



ISSN 0578-1752
CODEN CKNYAR

中国农业科学

SCIENTIA AGRICULTURA SINICA

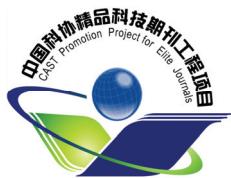
第 55 卷 第 2 期

Vol. 55 No. 2

2022



中国农业科学院 主办
中国农学会



目 次

作物遗传育种 · 种质资源 · 分子遗传学

233-247 doi: 10.3864/j.issn.0578-1752.2022.02.001

宁麦系列小麦品种的性状特点及相关基因位点分析

姜朋 张鹏 姚金保 吴磊 何漪 李畅 马鸿翔 张旭

248-264 doi: 10.3864/j.issn.0578-1752.2022.02.002

陆地棉吐絮率的限制性两阶段多位点全基因组关联分析及候选基因预测

谢晓宇 王凯鸿 秦晓晓 王彩香 史春辉 宁新柱 杨永林 秦江鸿 李朝周 马麒 宿俊吉

265-279 doi: 10.3864/j.issn.0578-1752.2022.02.003

玉米种质资源抗腐霉茎腐病和镰孢茎腐病精准鉴定

段灿星 曹言勇 董怀玉 夏玉生 李红 胡清玉 杨知还 王晓鸣

耕作栽培 · 生理生化 · 农业信息技术

280-294 doi: 10.3864/j.issn.0578-1752.2022.02.004

两种磷素水平下小麦苗期对于干旱胁迫的离子组和代谢组响应

李刚 白阳 贾子颖 马正阳 张祥池 李春艳 李诚

295-306 doi: 10.3864/j.issn.0578-1752.2022.02.005

单株小麦生理生态控制的等距单粒线播法研究

李佩 何瑞银 汪小岳 丁启朔

307-319 doi: 10.3864/j.issn.0578-1752.2022.02.006

种植密度和喷施乙烯利对夏玉米木质素代谢和抗倒伏性能的调控

耿文杰 李宾 任佰朝 赵斌 刘鹏 张吉旺

植物保护

320-328 doi: 10.3864/j.issn.0578-1752.2022.02.007

嗜碱假单胞菌 Ej2 对稻瘟病的防治效果及对水稻内源激素的影响

沙月霞 黄泽阳 马瑞

329-338 doi: 10.3864/j.issn.0578-1752.2022.02.008

飞蝗表皮蛋白 LmKnk3-5'的抗体制备及组织定位

张睿 张学尧 赵小明 马恩波 张建珍

土壤肥料·节水灌溉·农业生态环境

339-349

doi: 10.3864/j.issn.0578-1752.2022.02.009

腐殖酸单侧刺激对玉米根系生长的影响

周丽平 袁亮 赵秉强 李燕婷

350-364

doi: 10.3864/j.issn.0578-1752.2022.02.010

单季麦秸还田促进小麦-玉米周年碳效率和经济效益协同提高

王良 刘元元 钱欣 张慧 代红翠 刘开昌 高英波 方志军 刘树堂 李宗新

园艺

365-377

doi: 10.3864/j.issn.0578-1752.2022.02.011

断根与打顶对番茄嫁接愈合的抑制作用

崔青青 孟宪敏 段韞丹 庄团结 董春娟 高丽红 尚庆茂

378-389

doi: 10.3864/j.issn.0578-1752.2022.02.012

氮素水平及形态对娃娃菜根系特征及生理指标的影响

马玉峰 周忠雄 李雨桐 高雪琴 乔亚丽 张文斌 颀建明 胡琳莉 郁继华

食品科学与工程

390-402

doi: 10.3864/j.issn.0578-1752.2022.02.013

3种粳稻籽粒水分解吸过程中的裂纹变化

邵小龙 徐文 王潇 杨晓静 沈飞 刘琴

畜牧·兽医·资源昆虫

403-414

doi: 10.3864/j.issn.0578-1752.2022.02.014

荷斯坦牛泌乳早期体细胞数对生产性能的影响及遗传参数估计

竹磊 张海亮 陈少侃 安涛 罗汉鹏 刘林 黄锡霞 王雅春

415-424

doi: 10.3864/j.issn.0578-1752.2022.02.015

呼伦贝尔地区牛体表寄生蜱中羊种布鲁氏菌的分离与鉴定

黄天鹏 郭旭 孙长云 陈经雕 朝木丽格 武婕 格日勒图

CONTENTS

CROP GENETICS & BREEDING·GERMPLASM RESOURCES·MOLECULAR GENETICS

233-247 doi: 10.3864/j.issn.0578-1752.2022.02.001

Phenotypic Characteristics and Related Gene Analysis of Ningmai Series Wheat Varieties

JIANG Peng, ZHANG Peng, YAO JinBao, WU Lei, HE Yi, LI Chang, MA HongXiang, ZHANG Xu

248-264 doi: 10.3864/j.issn.0578-1752.2022.02.002

Restricted Two-Stage Multi-Locus Genome-Wide Association Analysis and Candidate Gene Prediction of Boll Opening Rate in Upland Cotton

XIE XiaoYu, WANG KaiHong, QIN XiaoXiao, WANG CaiXiang, SHI ChunHui, NING XinZhu, YANG YongLin, QIN JiangHong, LI ChaoZhou, MA Qi, SU JunJi

265-279 doi: 10.3864/j.issn.0578-1752.2022.02.003

Precise Characterization of Maize Germplasm for Resistance to Pythium Stalk Rot and Gibberella Stalk Rot

DUAN CanXing, CAO YanYong, DONG HuaiYu, XIA YuSheng, LI Hong, HU QingYu, YANG ZhiHuan, WANG XiaoMing

TILLAGE & CULTIVATION·PHYSIOLOGY & BIOCHEMISTRY·AGRICULTURE INFORMATION TECHNOLOGY

280-294 doi: 10.3864/j.issn.0578-1752.2022.02.004

Phosphorus Altered the Response of Ionomics and Metabolomics to Drought Stress in Wheat Seedlings

LI Gang, BAI Yang, JIA ZiYing, MA ZhengYang, ZHANG XiangChi, LI ChunYan, LI Cheng

295-306 doi: 10.3864/j.issn.0578-1752.2022.02.005

Uniform Distance Single Seed Linear Seeding Method for Control of Wheat Physiology and Ecology

LI Pei, HE RuiYin, WANG XiaoChan, DING QiShuo

307-319 doi: 10.3864/j.issn.0578-1752.2022.02.006

Regulation Mechanism of Planting Density and Spraying Ethephon on Lignin Metabolism and Lodging Resistance of Summer Maize

GENG WenJie, LI Bin, REN BaiZhao, ZHAO Bin, LIU Peng, ZHANG JiWang

PLANT PROTECTION

320-328 doi: 10.3864/j.issn.0578-1752.2022.02.007

Control Efficacy of *Pseudomonas alcaliphila* Strain Ej2 Against Rice Blast and Its Effect on Endogenous Hormones in Rice

SHA YueXia, HUANG ZeYang, MA Rui

329-338 doi: 10.3864/j.issn.0578-1752.2022.02.008

Antibody Preparation and Subcellular Localization of LmKnk3-5' in *Locusta migratoria*

ZHANG Rui, ZHANG XueYao, ZHAO XiaoMing, MA EnBo, ZHANG JianZhen

SOIL & FERTILIZER·WATER-SAVING IRRIGATION·AGROECOLOGY & ENVIRONMENT

339-349

doi: 10.3864/j.issn.0578-1752.2022.02.009

Effects of Single-Sided Application of Humic Acid on Maize Root Growth

ZHOU LiPing, YUAN Liang, ZHAO BingQiang, LI YanTing

350-364

doi: 10.3864/j.issn.0578-1752.2022.02.010

The Single Season Wheat Straw Returning to Promote the Synergistic Improvement of Carbon Efficiency and Economic Benefit in Wheat- Maize Double Cropping System

WANG Liang, LIU YuanYuan, QIAN Xin, ZHANG Hui, DAI HongCui, LIU KaiChang, GAO YingBo, FANG ZhiJun, LIU ShuTang, LI ZongXin

HORTICULTURE

365-377

doi: 10.3864/j.issn.0578-1752.2022.02.011

Inhibiting Effect of Root-Cutting and Top-Pinching on Graft Healing of Tomato

CUI QingQing, MENG XianMin, DUAN YunDan, ZHUANG TuanJie, DONG ChunJuan, GAO LiHong, SHANG QingMao

378-389

doi: 10.3864/j.issn.0578-1752.2022.02.012

Effects of Nitrogen Level and Form on Root Morphology of Mini Chinese Cabbage and Its Physiological IndexMA YuFeng, ZHOU ZhongXiong, LI YuTong, GAO XueQin, QIAO YaLi, ZHANG WenBin, XIE JianMing¹, HU LinLi, YU JiHua

FOOD SCIENCE AND ENGINEERING

390-402

doi: 10.3864/j.issn.0578-1752.2022.02.013

Fissure Development of Three Japonica Rice Grain during Water Desorption

SHAO XiaoLong, XU Wen, WANG Xiao, YANG XiaoJing, SHEN Fei, LIU Qin

ANIMAL SCIENCE·VETERINARY SCIENCE·RESOURCE INSECT

403-414

doi: 10.3864/j.issn.0578-1752.2022.02.014

Impacts of Somatic Cell Count in Early Lactation on Production Performance over the Whole Lactation and Its Genetic Parameters in Holsteins Cattle

ZHU Lei, ZHANG HaiLiang, CHEN ShaoKan, AN Tao, LUO HanPeng, LIU Lin, HUANG XiXia, WANG YaChun

415-424

doi: 10.3864/j.issn.0578-1752.2022.02.015

Isolation and Identification of *Brucella melitensis* from Ticks on Cattle Surface in Hulunbuir Area

HUANG TianPeng, GUO Xu, SUN ChangYun, CHEN JingDiao, CHAOMULIGE, WU Jie, GERILETU