





## 目次

### 作物遗传育种·种质资源·分子遗传学

4255-4264 doi: 10.3864/j.issn.0578-1752.2021.20.001

重要育种亲本川麦 44 对衍生品种的遗传贡献

罗江陶 郑建敏 邓清燕 刘培勋 蒲宗君

4265-4273 doi: 10.3864/j.issn.0578-1752.2021.20.002

甘薯丝裂原活化蛋白激酶 *MPK6* 对低温胁迫的响应

靳容 刘明 赵鹏 张强强 张爱君 唐忠厚

4274-4285 doi: 10.3864/j.issn.0578-1752.2021.20.003

*PvEG261* 对普通菜豆镰孢菌枯萎病抗性和抗旱性的影响

薛仁凤 丰明 黄宇宁 Matthew BLAIR Walter MESSIER 葛维德

### 耕作栽培·生理生化·农业信息技术

4286-4298 doi: 10.3864/j.issn.0578-1752.2021.20.004

我国现代植棉理论与技术的新发展——棉花集中成熟栽培

聂军军 代建龙 杜明伟 张艳军 田晓莉 李召虎 董合忠

4299-4311 doi: 10.3864/j.issn.0578-1752.2021.20.005

基于参数化和非参数化法的棉花生物量高光谱遥感估算

周萌 韩晓旭 郑恒彪 程涛 田永超 朱艳 曹卫星 姚霞

4312-4325 doi: 10.3864/j.issn.0578-1752.2021.20.006

不同降雨年型黑膜垄作对土壤水肥环境及马铃薯产量和效益的影响

杨封科 何宝林 董博 王立明

### 植物保护

4326-4336 doi: 10.3864/j.issn.0578-1752.2021.20.007

苹果锈果类病毒在 7 个品种苹果上的分子变异及系统发育关系

李紫腾 曹钰晗 李楠 孟祥龙 胡同乐 王树桐 王亚南 曹克强

4337-4347 doi: 10.3864/j.issn.0578-1752.2021.20.008

TaqMan 探针法实时荧光定量 PCR 检测西瓜潜隐病毒

赵立群 邱艳红 张晓飞 刘慧 杨静静 张建 张海军 徐秀兰 温常龙

4348-4357 doi: 10.3864/j.issn.0578-1752.2021.20.009

番茄 *SIN-like* 的克隆、表达与抗病毒功能

刘昌云 李欣羽 田绍锐 王靖 裴悦宏 马小舟 樊光进 汪代斌 孙现超

## 土壤肥料·节水灌溉·农业生态环境

4358-4369 doi: 10.3864/j.issn.0578-1752.2021.20.010  
 绿色发展背景下农业生态补偿理论内涵与定价机制  
 周颖 梅旭荣 杨鹏 刘静

4370-4384 doi: 10.3864/j.issn.0578-1752.2021.20.011  
 陕西省小农户作物生产的减肥潜力及经济效益评价  
 米晓田 石磊 何刚 王朝辉

4385-4395 doi: 10.3864/j.issn.0578-1752.2021.20.012  
 深翻、有机无机肥配施对稻田水分渗漏和氮素淋溶的影响  
 王瑾瑜 程文龙 槐圣昌 武红亮 邢婷婷 于伟家 武际 李敏 卢昌艾

## 园艺

4396-4404 doi: 10.3864/j.issn.0578-1752.2021.20.013  
 控制桃粘/离核 PG 基因的 BAC 克隆筛选与序列分析  
 孟君仁 牛良 邓丽 潘磊 鲁振华 崔国朝 王志强 曾文芳

4405-4420 doi: 10.3864/j.issn.0578-1752.2021.20.014  
 不同砧木对鲜食葡萄生长和香气品质的影响  
 孙磊 王晓玥 王慧玲 闫爱玲 张国军 任建成 徐海英

4421-4433 doi: 10.3864/j.issn.0578-1752.2021.20.015  
 ‘融安金柑’‘滑皮金柑’及‘脆蜜金柑’贮藏期品质、贮藏特性及果皮转录组分析  
 刘杰 唐志鹏 李菲菲 熊江 吕壁纹 马小川 唐超兰 李泽航 周铁 盛玲 卢晓鹏

## 食品科学与工程

4434-4445 doi: 10.3864/j.issn.0578-1752.2021.20.016  
*p*-香豆酸通过加速伤口处聚酚软木脂和木质素的沉积促进马铃薯块茎愈伤  
 梁伟 朱亚同 柴秀伟 孔蕊 李斌山 李永才 毕阳 DOV Prusky

4446-4455 doi: 10.3864/j.issn.0578-1752.2021.20.017  
 添加山茶油对肌原纤维蛋白凝胶特性的影响  
 韩柯颖 冯潇 杨玉玲 李珊珊 魏苏萌 陈玉敏

## 畜牧·兽医·资源昆虫

4456-4465 doi: 10.3864/j.issn.0578-1752.2021.20.018  
 转录因子 TEAD4 对猪早期胚胎发育的调控  
 张丹丹 许腾腾 高迪 齐昕 宁伟 汝振远 张翔栋 郭腾龙 申屠璐燕 于童 马洋洋 李运生 张运海 曹祖兵

4466-4477 doi: 10.3864/j.issn.0578-1752.2021.20.019  
 山羊 TNNT3 基因可变剪切及其对骨骼肌细胞分化的作用  
 陈媛 蔡禾 李利 王林杰 仲涛 张红平

4478-4486 doi: 10.3864/j.issn.0578-1752.2021.20.020  
 基于 SodC 单克隆抗体的胞内劳森菌 IPMA 抗原检测方法的建立及应用  
 李敏雪 李剑男 周红 肖宁 蔺辉星 马喆 范红结

## CONTENTS

**CROP GENETICS & BREEDING·GERMPLASM RESOURCES·MOLECULAR GENETICS**

4255-4264 doi: 10.3864/j.issn.0578-1752.2021.20.001

**The Genetic Contribution of the Important Breeding Parent Chuanmai 44 to Its Derivatives**

LUO JiangTao, ZHENG JianMin, DENG QingYan, LIU PeiXun, PU ZongJun

4265-4273 doi: 10.3864/j.issn.0578-1752.2021.20.002

***IbMKP6*, A Mitogen-Activated Protein Kinase, Confers Low Temperature Tolerance in Sweetpotato**

JIN Rong, LIU Ming, ZHAO Peng, ZHANG QiangQiang, ZHANG AiJun, TANG ZhongHou

4274-4285 doi: 10.3864/j.issn.0578-1752.2021.20.003

**Effects of *PvEG261* Gene on the Fusarium Wilt and Drought-Resistance in Common Bean**

XUE RenFeng, FENG Ming, HUANG YuNing, Matthew BLAIR, Walter MESSIER, GE WeiDe

**TILLAGE & CULTIVATION·PHYSIOLOGY & BIOCHEMISTRY·AGRICULTURE INFORMATION TECHNOLOGY**

4286-4298 doi: 10.3864/j.issn.0578-1752.2021.20.004

**New Development of Modern Cotton Farming Theory and Technology in China - Concentrated Maturation Cultivation of Cotton**

NIE JunJun, DAI JianLong, DU MingWei, ZHANG YanJun, TIAN XiaoLi, LI ZhaoHu, DONG HeZhong

4299-4311 doi: 10.3864/j.issn.0578-1752.2021.20.005

**Remote Sensing Estimation of Cotton Biomass Based on Parametric and Nonparametric Methods by Using Hyperspectral Reflectance**

ZHOU Meng, HAN XiaoXu, ZHENG HengBiao, CHENG Tao, TIAN YongChao, ZHU Yan, CAO WeiXing, YAO Xia

4312-4325 doi: 10.3864/j.issn.0578-1752.2021.20.006

**Effects of Black Film Mulched Ridge-Furrow Tillage on Soil Water- Fertilizer Environment and Potato Yield and Benefit Under Different Rainfall Year in Semiarid Region**

YANG FengKe, HE BaoLin, DONG Bo, WANG LiMing

**PLANT PROTECTION**

4326-4336 doi: 10.3864/j.issn.0578-1752.2021.20.007

**Molecular Variation and Phylogenetic Relationship of Apple Scar Skin Viroid in Seven Cultivars of Apple**

LI ZiTeng, CAO YuHan, LI Nan, MENG XiangLong, HU TongLe, WANG ShuTong, WANG YaNan, CAO KeQiang

4337-4347 doi: 10.3864/j.issn.0578-1752.2021.20.008

**The Detection of *Citrullus lanatus* Cryptic Virus Using TaqMan-qPCR Method**

ZHAO LiQun, QIU YanHong, ZHANG XiaoFei, LIU Hui, YANG JingJing, ZHANG Jian, ZHANG HaiJun, XU XiuLan, WEN ChangLong

4348-4357 doi: 10.3864/j.issn.0578-1752.2021.20.009

**Cloning, Expression and Anti-Virus Function Analysis of *Solanum lycopersicum* *SIN-like***

LIU ChangYun, LI XinYu, TIAN ShaoRui, WANG Jing, PEI YueHong, MA XiaoZhou, FAN GuangJin, WANG DaiBin, SUN XianChao

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

4358-4369 doi: 10.3864/j.issn.0578-1752.2021.20.010  
**Theoretical Connotations and Pricing Mechanisms for Agricultural Ecological Compensation Within the Context of Green Development**  
ZHOU Ying, MEI XuRong, YANG Peng, LIU Jing

4370-4384 doi: 10.3864/j.issn.0578-1752.2021.20.011  
**Fertilizer Reduction Potential and Economic Benefits of Crop Production for Smallholder Farmers in Shaanxi Province**  
MI XiaoTian, SHI Lei, HE Gang, WANG ZhaoHui

4385-4395 doi: 10.3864/j.issn.0578-1752.2021.20.012  
**Effects of Deep Plowing and Organic-Inorganic Fertilization on Soil Water and Nitrogen Leaching in Rice Field**  
WANG JinYu, CHENG WenLong, HUAI ShengChang, WU HongLiang, XING TingTing, YU WeiJia, WU Ji, LI Min, LU ChangAi

**HORTICULTURE**

4396-4404 doi: 10.3864/j.issn.0578-1752.2021.20.013  
**Screening and Sequence Analysis of BAC Clone Contained PG Gene Controlling Clingstone/Freestone Characteristic of Peach**  
MENG JunRen, NIU Liang, DENG Li, PAN Lei, LU ZhenHua, CUI GuoChao, WANG ZhiQiang, ZENG WenFang

4405-4420 doi: 10.3864/j.issn.0578-1752.2021.20.014  
**The Influence of Rootstocks on the Growth and Aromatic Quality of Two Table Grape Varieties**  
SUN Lei, WANG XiaoYue, WANG HuiLing, YAN AiLing, ZHANG GuoJun, REN JianCheng, XU HaiYing

4421-4433 doi: 10.3864/j.issn.0578-1752.2021.20.015  
**Fruit Quality in Storage, Storability and Peel Transcriptome Analysis of Rong'an Kumquat, Huapi Kumquat and Cuimi Kumquat**  
LIU Lian, TANG ZhiPeng, LI FeiFei, XIONG Jiang, LÜ BiWen, MA XiaoChuan, TANG ChaoLan, LI ZeHang, ZHOU Tie, SHENG Ling, LU XiaoPeng

**FOOD SCIENCE AND ENGINEERING**

4434-4445 doi: 10.3864/j.issn.0578-1752.2021.20.016  
***p*-Coumaric Acid Promoted Wound Healing of Potato Tubers by Accelerating the Deposition of Suberin Poly Phenolic and Lignin at Wound Sites**  
LIANG Wei, ZHU YaTong, CHAI XiuWei, KONG Rui, LI BinShan, LI YongCai, BI Yang, DOV Prusky

4446-4455 doi: 10.3864/j.issn.0578-1752.2021.20.017  
**Effects of Camellia Oil on the Properties of Myofibrillar Protein Gel**  
HAN KeYing, FENG Xiao, YANG YuLing, LI ShanShan, WEI SuMeng, CHEN YuMin

**ANIMAL SCIENCE·VETERINARY SCIENCE·RESOURCE INSECT**

4456-4465 doi: 10.3864/j.issn.0578-1752.2021.20.018  
**Transcription Factor TEAD4 Regulates Early Embryonic Development in Pigs**  
ZHANG DanDan, XU TengTeng, GAO Di, QI Xin, NING Wei, RU ZhenYuan, ZHANG XiangDong, GUO TengLong, SHENTU LuYan, YU Tong, MA YangYang, LI YunSheng, ZHANG YunHai, CAO ZuBing

4466-4477 doi: 10.3864/j.issn.0578-1752.2021.20.019  
**Alternative Splicing of *TNNT3* and Its Effect on the Differentiation of MuSCs in Goat**  
CHEN Yuan, CAI He, LI Li, WANG LinJie, ZHONG Tao, ZHANG HongPing

4478-4486 doi: 10.3864/j.issn.0578-1752.2021.20.020  
**Establishment and Preliminary Application of *Lawsonia intracellularis* IPMA Antigen Detection Method Based on SodC Monoclonal Antibody**  
LI MinXue, LI JianNan, ZHOU Hong, XIAO Ning, LIN HuiXing, MA Zhe, FAN HongJie