



ISSN 0578-1752
CODEN CKNYAR

中国农业科学

SCIENTIA AGRICULTURA SINICA

第 54 卷 第 2 期

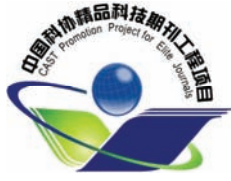
Vol. 54 No. 2

2021



中国农业科学院
中国农学会

主办



目次

作物遗传育种·种质资源·分子遗传学

- 239-247 doi: 10.3864/j.issn.0578-1752.2021.02.001
小麦籽粒黄色素含量检测方法的改良与应用
翟胜男 刘爱峰 李法计 刘成 郭军 韩冉 訾妍 汪晓璐 吕莹莹 刘建军
- 248-260 doi: 10.3864/j.issn.0578-1752.2021.02.002
陆地棉盐胁迫应答基因 *GhPEAMT1* 的克隆及功能分析
王娜 赵资博 高琼 何守朴 马晨辉 彭振 杜雄明
- 261-270 doi: 10.3864/j.issn.0578-1752.2021.02.003
油菜高油酸种质的创建及高油酸性状遗传与生理特性的分析
龙卫华 浦惠明 高建芹 胡茂龙 张洁夫 陈松

耕作栽培·生理生化·农业信息技术

- 271-285 doi: 10.3864/j.issn.0578-1752.2021.02.004
初花期淹水胁迫对大豆叶片 AsA-GSH 循环的损伤及烯效唑的缓解效应
王诗雅 郑殿峰 项洪涛 冯乃杰 刘雅 刘美玲 靳丹 牟保民
- 286-295 doi: 10.3864/j.issn.0578-1752.2021.02.005
光周期对糜子生长发育及叶片内源激素的调控效应
王君杰 田翔 秦慧彬 王海岗 曹晓宁 陈凌 刘思辰 乔治军

植物保护

- 296-309 doi: 10.3864/j.issn.0578-1752.2021.02.006
马铃薯健株与黄萎病株根际土壤真菌群落结构及其对碳源利用特征
赵卫松 郭庆港 苏振贺 王培培 董丽红 胡卿 鹿秀云 张晓云 李社增 马平
- 310-323 doi: 10.3864/j.issn.0578-1752.2021.02.007
中国野生毛葡萄芪合酶基因表达及对葡萄抗白粉病的影响
丁茜 赵凯茜 王跃进
- 324-333 doi: 10.3864/j.issn.0578-1752.2021.02.008
四种杀虫剂 LC₂₅ 对 Q 型烟粉虱成虫取食行为的影响
何云川 王新谱 洪波 张婷婷 周雪飞 贾彦霞

土壤肥料·节水灌溉·农业生态环境

- 334-344 doi: 10.3864/j.issn.0578-1752.2021.02.009
长期免耕和深松提高了土壤团聚体颗粒态有机碳及全氮含量
李景 吴会军 武雪萍 王碧胜 姚宇卿 吕军杰

345-356 doi: 10.3864/j.issn.0578-1752.2021.02.010
 地膜覆盖与施肥对秸秆碳氮在土壤中固存的影响
 王淑颖 李小红 程娜 付时丰 李双异 孙良杰 安婷婷 汪景宽

园艺

357-369 doi: 10.3864/j.issn.0578-1752.2021.02.011
 GA₃介导 miR171s 及其靶基因 *VvSCLs* 调控葡萄种子发育的作用分析
 王文然 解振强 诸葛雅贤 白云赫 管乐 吴伟民 张培安 郑婷 房经贵 王晨

370-378 doi: 10.3864/j.issn.0578-1752.2021.02.012
 基于简化基因组测序的越橘杂交后代鉴定
 刘有春 刘威生 王兴东 孙斌 刘修丽 杨艳敏 魏鑫 杨玉春 张舵 刘成 李天忠

食品科学与工程

379-391 doi: 10.3864/j.issn.0578-1752.2021.02.013
 高温胁迫下糙米短期储藏气味指纹图谱变化规律的动态分析
 刘强 刘纪伟 田恬 严薇 刘兵 赵思琪 胡秋辉 丁超

392-399 doi: 10.3864/j.issn.0578-1752.2021.02.014
 稳定同位素技术在肉羊产地溯源中的应用
 王倩 李政 赵姗姗 郝梦洁 张九凯 王明林 郭军 赵燕

畜牧·兽医·资源昆虫

400-411 doi: 10.3864/j.issn.0578-1752.2021.02.015
 CRISPR/Cas9 介导的绵羊示踪脐带间充质干细胞系的建立
 李松美 仇雨歌 陈胜男 王晓萌 王春生

412-421 doi: 10.3864/j.issn.0578-1752.2021.02.016
rhPA/GH 双转基因兔的制备及 *rhPA* 表达检测
 宋绍征 于康英 张婷 陆睿 潘生强 成勇 周鸣鸣

422-434 doi: 10.3864/j.issn.0578-1752.2021.02.017
 断奶前后非特异病原性腹泻羔羊生长生理及肠道菌群差异性比较
 杨柠芝 李婷 王燕 陈卓 马义诚 任强林 刘佳佳 杨会国 姚刚

435-448 doi: 10.3864/j.issn.0578-1752.2021.02.018
 蜜蜂球囊菌菌丝和孢子中长链非编码 RNA 的比较及潜在功能分析
 陈华枝 王杰 祝智威 蒋海宾 范元婵 范小雪 万洁琦 卢家轩 郑燕珍 付中民 徐国钧 陈大福 郭睿

研究简报

449-458 doi: 10.3864/j.issn.0578-1752.2021.02.019
 大豆品种特性对腐竹产量及品质的影响
 曾仕晓 年海 程艳波 马启彬 王亮

CONTENTS

CROP GENETICS & BREEDING·GERMPLASM RESOURCES·MOLECULAR GENETICS

239-247 doi: 10.3864/j.issn.0578-1752.2021.02.001

Improvement and Application of the Method for Determining Yellow Pigment Content in Wheat Grain

ZHAI ShengNan, LIU AiFeng, LI FaJi, LIU Cheng, GUO Jun, HAN Ran, ZI Yan, WANG XiaoLu, LÜ YingYing, LIU JianJun

248-260 doi: 10.3864/j.issn.0578-1752.2021.02.002

Cloning and Functional Analysis of Salt Stress Response Gene *GhPEAMT1* in Upland Cotton

WANG Na, ZHAO ZiBo, GAO Qiong, HE ShouPu, MA ChenHui, PENG Zhen, DU XiongMing

261-270 doi: 10.3864/j.issn.0578-1752.2021.02.003

Creation of High-Oleic (HO) Canola Germplasm and the Genetic and Physiological Analysis on HO Trait

LONG WeiHua, PU HuiMing, GAO JianQin, HU MaoLong, ZHANG JieFu, CHEN Song

TILLAGE & CULTIVATION·PHYSIOLOGY & BIOCHEMISTRY·AGRICULTURE INFORMATION TECHNOLOGY

271-285 doi: 10.3864/j.issn.0578-1752.2021.02.004

Damage of AsA-GSH Cycle of Soybean Leaves Under Waterlogging Stress at Initial Flowering Stage and the Mitigation Effect of Uniconazole

WANG ShiYa, ZHENG DianFeng, XIANG HongTao, FENG NaiJie, LIU Ya, LIU MeiLing, JIN Dan, MOU BaoMin

286-295 doi: 10.3864/j.issn.0578-1752.2021.02.005

Regulation Effects of Photoperiod on Growth and Leaf Endogenous Hormones in Broomcorn Millet

WANG JunJie, TIAN Xiang, QIN HuiBin, WANG HaiGang, CAO XiaoNing, CHEN Ling, LIU SiChen, QIAO ZhiJun

PLANT PROTECTION

296-309 doi: 10.3864/j.issn.0578-1752.2021.02.006

Characterization of Fungal Community Structure in the Rhizosphere Soil of Healthy and Diseased-Verticillium Wilt Potato Plants and Carbon Source Utilization

ZHAO WeiSong, GUO QingGang, SU ZhenHe, WANG PeiPei, DONG LiHong, HU Qing, LU XiuYun, ZHANG XiaoYun, LI SheZeng, MA Ping

310-323 doi: 10.3864/j.issn.0578-1752.2021.02.007

Expression of Stilbene Synthase Genes from Chinese Wild *Vitis quinquangularis* and Its Effect on Resistance of Grape to Powdery Mildew

DING Xi, ZHAO KaiXi, WANG YueJin

324-333 doi: 10.3864/j.issn.0578-1752.2021.02.008

Effects of Four Insecticides LC₂₅ on Feeding Behavior of Q-Type *Bemisia tabaci* Adults

HE YunChuan, WANG XinPu, HONG Bo, ZHANG TingTing, ZHOU XueFei, JIA YanXia

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

334-344 doi: 10.3864/j.issn.0578-1752.2021.02.009

Long-Term Conservation Tillage Enhanced Organic Carbon and Nitrogen Contents of Particulate Organic Matter in Soil Aggregates

LI Jing, WU HuiJun, WU XuePing, WANG BiSheng, YAO YuQing, LÜ JunJie

345-356

doi: 10.3864/j.issn.0578-1752.2021.02.010

Effects of Plastic Film Mulching and Fertilization on the Sequestration of Carbon and Nitrogen from Straw in Soil

WANG ShuYing, LI XiaoHong, CHENG Na, FU ShiFeng, LI ShuangYi, SUN LiangJie, AN TingTing, WANG JingKuan

HORTICULTURE

357-369

doi: 10.3864/j.issn.0578-1752.2021.02.011

Function Analysis of GA₃ Mediate miR171s and Its Target Genes VvSCLs in Grape Seed Development

WANG WenRan, XIE ZhenQiang, ZHUGE YaXian, BAI YunHe, GUAN Le, WU WeiMin, ZHANG PeiAn, ZHENG Ting, FANG JingGui, WANG Chen

370-378

doi: 10.3864/j.issn.0578-1752.2021.02.012

Identification of F₁ Hybrids in Blueberry (*Vaccinium corymbosum* L.) Based on Specific-Locus Amplified Fragment Sequencing (SLAF-seq)

LIU YouChun, LIU WeiSheng, WANG XingDong, SUN Bin, LIU XiuLi, YANG YanMin, WEI Xin, YANG YuChun, ZHANG Duo, LIU Cheng, LI TianZhong

FOOD SCIENCE AND ENGINEERING

379-391

doi: 10.3864/j.issn.0578-1752.2021.02.013

Dynamic Analysis for the Characteristics of Flavor Fingerprints for Brown Rice in Short-Term Storage Under High Temperature Stress

LIU Qiang, LIU JiWei, TIAN Tian, YAN Wei, LIU Bing, ZHAO SiQi, HU QiuHui, DING Chao

392-399

doi: 10.3864/j.issn.0578-1752.2021.02.014

Application of Stable Isotope Technology in the Origin Traceability of Sheep

WANG Qian, LI Zheng, ZHAO ShanShan, QIE MengJie, ZHANG JiuKai, WANG MingLin, GUO Jun, ZHAO Yan

ANIMAL SCIENCE·VETERINARY SCIENCE·RESOURCE INSECT

400-411

doi: 10.3864/j.issn.0578-1752.2021.02.015

CRISPR/Cas9 Mediated Exogenous Gene Knock-in at ROSA26 Locus in Sheep Umbilical Cord Mesenchymal Stem Cells

LI SongMei, QIU YuGe, CHEN ShengNan, WANG XiaoMeng, WANG ChunSheng

412-421

doi: 10.3864/j.issn.0578-1752.2021.02.016

Preparation and Expression of rhPA/GH Double Transgenic Rabbits

SONG ShaoZheng, YU KangYing, ZHANG Ting, LU Rui, PAN ShengQiang, CHENG Yong, ZHOU MingMing

422-434

doi: 10.3864/j.issn.0578-1752.2021.02.017

Comparison of Growth Physiology and Gut Microbiota Between Healthy and Diarrheic Lambs in Pre- and Post-Weaning Period

YANG NingZhi, LI Ting, WANG Yan, CHEN Zhuo, MA YiCheng, REN QiangLin, LIU JiaJia, YANG HuiGuo, YAO Gang

435-448

doi: 10.3864/j.issn.0578-1752.2021.02.018

Comparison and Potential Functional Analysis of Long Non-Coding RNAs Between *Ascosphaera apis* Mycelium and Spore

CHEN HuaZhi, WANG Jie, ZHU ZhiWei, JIANG HaiBin, FAN YuanChan, FAN XiaoXue, WAN JieQi, LU JiaXuan, ZHENG YanZhen, FU ZhongMin, XU GuoJun, CHEN DaFu, GUO Rui

RESEARCH NOTES

449-458

doi: 10.3864/j.issn.0578-1752.2021.02.019

Effects of Different Soybean Varieties on the Yield and Quality of Yuba

ZENG ShiXiao, NIAN Hai, CHENG YanBo, MA QiBin, WANG Liang