



## 目次

### 作物遗传育种·种质资源·分子遗传学

1421-1430 doi: 10.3864/j.issn.0578-1752.2018.08.001  
玉米 SLAF 标记的开发及其在玉米果皮纤维素含量 BSA 分析中的应用  
杜龙岗 王美兴

1431-1447 doi: 10.3864/j.issn.0578-1752.2018.08.002  
谷子萌发期响应干旱胁迫的基因表达谱分析  
许冰霞 尹美强 温银元 裴帅帅 柯贞进 张彬 原向阳

### 耕作栽培·生理生化·农业信息技术

1448-1463 doi: 10.3864/j.issn.0578-1752.2018.08.003  
镁锌肥追施时期对优良食味粳稻产量及品质的影响  
李军 肖丹丹 邓先亮 朱大伟 邢志鹏 胡雅杰 崔培媛 郭保卫 魏海燕 张洪程

1464-1474 doi: 10.3864/j.issn.0578-1752.2018.08.004  
一款无人机高光谱传感器的验证及其在玉米叶面积指数反演中的应用  
陈鹏飞 李刚 石雅娇 徐志涛 杨粉团 曹庆军

### 植物保护

1475-1483 doi: 10.3864/j.issn.0578-1752.2018.08.005  
番茄叶霉病菌对咯菌腈敏感基线的建立及田间防治效果评价  
禾丽菲 陈乐乐 肖斌 赵时峰 李秀环 慕卫 刘峰

1484-1492 doi: 10.3864/j.issn.0578-1752.2018.08.006  
不同温度下两株球孢白僵菌侵染西花蓟马的生长动力学及其毒力  
刘晓晨 吴圣勇 雷仲仁 王海鸿

1493-1503 doi: 10.3864/j.issn.0578-1752.2018.08.007  
棉铃虫磷脂酰乙醇胺结合蛋白的克隆及表达分析  
赵洁 任苏伟 刘宁 艾新宇 马纪 刘小宁

### 土壤肥料·节水灌溉·农业生态环境

1504-1517 doi: 10.3864/j.issn.0578-1752.2018.08.008  
地膜覆盖、氮肥与密度及其互作对黄土旱塬春玉米氮素吸收、转运及生产效率的影响  
李婷 李世清 占爱 刘建亮

1518-1526 doi: 10.3864/j.issn.0578-1752.2018.08.009

磷肥施用深度对夏玉米产量及根系分布的影响

杨云马 孙彦铭 贾良良 贾树龙 孟春香

1527-1536 doi: 10.3864/j.issn.0578-1752.2018.08.010

夏玉米施用不同缓释化处理氮肥的效果及氮肥去向

周丽平 杨俐苹 自由路 卢艳丽 王磊

1537-1546 doi: 10.3864/j.issn.0578-1752.2018.08.011

黄土高原旱地夏季休闲期土壤硝态氮淋溶与降水年型间的关系

夏梦洁 马乐乐 师倩云 陈竹君 周建斌

## 园艺

1547-1555 doi: 10.3864/j.issn.0578-1752.2018.08.012

黄腐酸对番茄幼苗适应低磷胁迫的生理调控作用

张丽丽 刘德兴 史庆华 巩彪

1556-1567 doi: 10.3864/j.issn.0578-1752.2018.08.013

猕猴桃园套种吉祥草对土壤酶活性及果实产量、品质的影响

张承 王秋萍 周开拓 吴小毛 龙友华 李姣红 尹显慧

## 食品科学与工程

1568-1576 doi: 10.3864/j.issn.0578-1752.2018.08.014

麦角硫因抑制双孢蘑菇褐变及其与能量代谢关系

蔺凯丽 黄琦 黄琦辉 靳祯亮 姜天甲 郑小林

## 畜牧·兽医·资源昆虫

1577-1589 doi: 10.3864/j.issn.0578-1752.2018.08.015

基于RNA-Seq技术的牦牛体外受精胚胎发育转录组分析

字向东 罗斌 夏威 郑玉才 熊显荣 李键 钟金城 朱江江 张正帆

1590-1597 doi: 10.3864/j.issn.0578-1752.2018.08.016

山羊胎儿肌肉干细胞的分离培养与成肌诱导分化

睢梦华 郑琪 吴昊 丁建平 刘勇 李文雍 储明星 张子军 凌英会

## 研究简报

1598-1606 doi: 10.3864/j.issn.0578-1752.2018.08.017

枇杷叶片发育基因 *EjGRF5* 与启动子克隆及其在不同倍性枇杷中的表达

刘超 王玲利 吴岷 党江波 尚维 郭启高 梁国鲁

1607-1616 doi: 10.3864/j.issn.0578-1752.2018.08.018

猪CBR1基因不同拷贝形式克隆及其多态性分析

齐传翔 徐奎 牟玉莲 杨述林 李奎 吴添文

## CONTENTS

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

1421-1430 doi: 10.3864/j.issn.0578-1752.2018.08.001  
**SLAF-Marker Development and Its Application in BSA Analysis of Cellulose Content in Pericarp of Maize Kernel**  
DU LongGang, WANG MeiXing

1431-1447 doi: 10.3864/j.issn.0578-1752.2018.08.002  
**Gene Expression Profiling of Foxtail Millet (*Setaria italica* L.) Under Drought Stress During Germination**  
XU BingXia, YIN MeiQiang, WEN YinYuan, PEI ShuaiShuai, KE ZhenJin, ZHANG Bin, YUAN XiangYang

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

1448-1463 doi: 10.3864/j.issn.0578-1752.2018.08.003  
**Effects of Topdressing Magnesium and Zinc Fertilizers at Different Periods on Yield and Quality of *Japonica* Rice with Good Eating Quality**  
LI Jun, XIAO DanDan, DENG XianLiang, ZHU DaWei, XING ZhiPeng, HU YaJie, CUI PeiYuan, GUO BaoWei, WEI HaiYan, ZHANG HongCheng

1464-1474 doi: 10.3864/j.issn.0578-1752.2018.08.004  
**Validation of an Unmanned Aerial Vehicle Hyperspectral Sensor and Its Application in Maize Leaf Area Index Estimation**  
CHEN PengFei, LI Gang, SHI YaJiao, XU ZhiTao, YANG FenTuan, CAO QingJun

**PLANT PROTECTION**

1475-1483 doi: 10.3864/j.issn.0578-1752.2018.08.005  
**Establishment of Sensitivity Baseline and Evaluation of Field Control Efficacy of Fludioxonil Against *Fulvia fulva***  
HE LiFei, CHEN LeLe, XIAO Bin, ZHAO ShiFeng, LI XiuHuan, MU Wei, LIU Feng

1484-1492 doi: 10.3864/j.issn.0578-1752.2018.08.006  
**Growth Kinetics and Virulence of Two *Beauveria bassiana* Strains in *Frankliniella occidentalis* Under Different Temperatures**  
LIU XiaoChen, WU ShengYong, LEI ZhongRen, WANG HaiHong

1493-1503 doi: 10.3864/j.issn.0578-1752.2018.08.007  
**Cloning and Expression of Phosphatidylethanolamine Binding Protein in *Helicoverpa armigera***  
ZHAO Jie, REN SuWei, LIU Ning, AI XinYu, MA Ji, LIU XiaoNing

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

1504-1517 doi: 10.3864/j.issn.0578-1752.2018.08.008  
**Effects of Film Mulching, Nitrogen Fertilizer, Plant Density and Its Interaction on Nitrogen Accumulation, Translocation and Production Efficiency of Spring Maize on Dryland of Loess Plateau**  
LI Ting, LI ShiQing, ZHAN Ai, LIU JianLiang

1518-1526 doi: 10.3864/j.issn.0578-1752.2018.08.009  
**Effects of Phosphorus Fertilization Depth on Yield and Root Distribution of Summer Maize**  
YANG YunMa, SUN YanMing, JIA LiangLiang, JIA ShuLong, MENG ChunXiang

1527-1536

doi: 10.3864/j.issn.0578-1752.2018.08.010

**Effects of Different Slow-Released Nitrogen Fertilizers on Summer Maize and Nitrogen Fate in the Field**

ZHOU LiPing, YANG LiPing, BAI YouLu, LU YanLi, WANG Lei

1537-1546

doi: 10.3864/j.issn.0578-1752.2018.08.011

**The Relationship of NO<sub>3</sub><sup>-</sup>-N Leaching and Rainfall Types During Summer Fallow in the Loess Plateau Dryland**

XIA MengJie, MA LeLe, SHI QianYun, CHEN ZhuJun, ZHOU JianBin

**HORTICULTURE**

1547-1555

doi: 10.3864/j.issn.0578-1752.2018.08.012

**Physiological Regulatory Effects of Fulvic Acid on Stress Tolerance of Tomato Seedlings Against Phosphate Deficiency**

ZHANG LiLi, LIU DeXing, SHI QingHua, GONG Biao

1556-1567

doi: 10.3864/j.issn.0578-1752.2018.08.013

**Effects of Intercropping *Reineckia Carnea* on Soil Enzyme Activity and Kiwifruit Fruit Yield, Quality in Kiwifruit Orchard**

ZHANG Cheng, WANG QiuPing, ZHOU KaiTuo, WU XiaoMao, LONG YouHua, LI JiaoHong, YIN XianHui

**FOOD SCIENCE AND ENGINEERING**

1568-1576

doi: 10.3864/j.issn.0578-1752.2018.08.014

**Browning Inhibition and Energy Metabolism Mechanism of *Agaricus bisporus* by Ergothioneine Treatment**

LIN KaiLi, HUANG Qi, HUANG QiHui, JIN ZhenLiang, JIANG TianJia, ZHENG XiaoLin

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

1577-1589

doi: 10.3864/j.issn.0578-1752.2018.08.015

**Transcriptomic Analysis of IVF Embryonic Development in the Yak (*Bos grunniens*) Via RNA-Seq**

ZI XiangDong, LUO Bin, XIA Wei, ZHENG YuCai, XIONG XianRong, LI Jian, ZHONG JinCheng, ZHU JiangJiang, ZHANG ZhengFan

1590-1597

doi: 10.3864/j.issn.0578-1752.2018.08.016

**Isolation, Culture and Myogenic Differentiation of Muscle Stem Cells in Goat Fetal**

SUI MengHua, ZHENG Qi, WU Hao, DING JianPing, LIU Yong, LI WenYong, CHU MingXing, ZHANG ZiJun, LING YingHui

**RESEARCH NOTES**

1598-1606

doi: 10.3864/j.issn.0578-1752.2018.08.017

**Molecular Cloning of Leaf Developmental Gene *EjGRF5*, Its Promoter and Expression Analysis in Different Ploidy Loquat (*Eriobotrya japonica* (Thunb.) Lindl.)**

LIU Chao, WANG LingLi, WU Di, DANG JiangBo, SHANG Wei, GUO QiGao, LIANG GuoLu

1607-1616

doi: 10.3864/j.issn.0578-1752.2018.08.017

**Cloning of Porcine CBR1 Gene's Different Copy Forms and Analysis of Its Polymorphism**

QI ChuanXiang, XU KUI, MU YuLian, YANG ShuLin, LI Kui, WU TianWen