

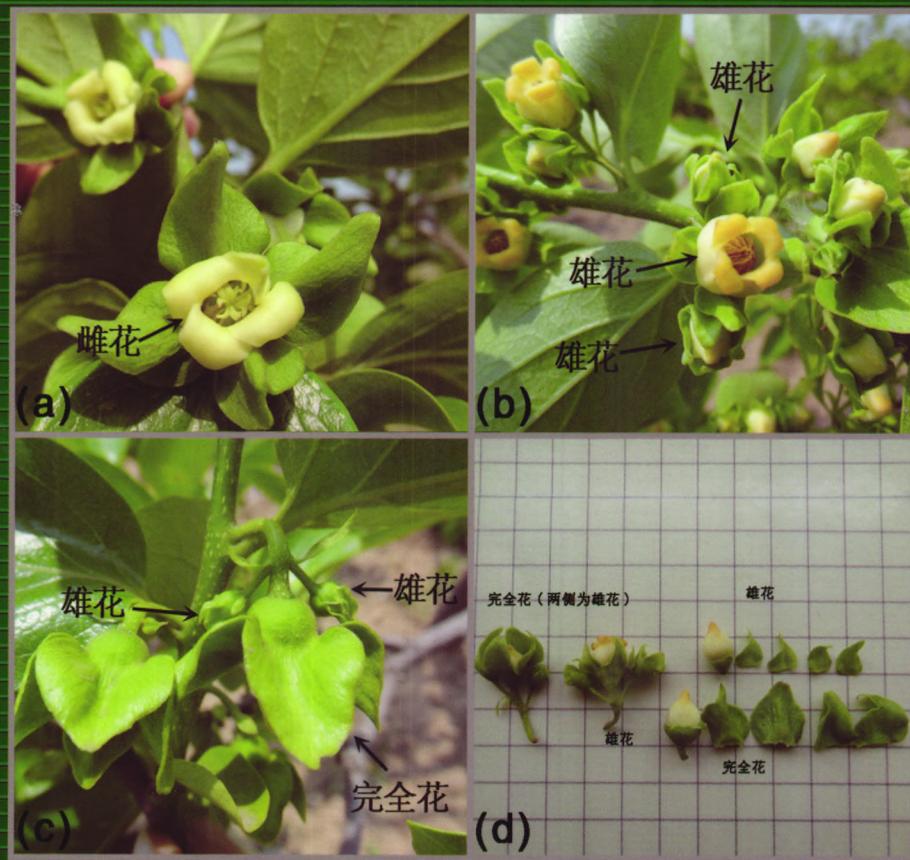


全国中文核心期刊  
CSCD核心库期刊

ISSN 1007-4333  
CODEN ZNDXAA

# 中国农业大学学报

JOURNAL OF CHINA  
AGRICULTURAL  
UNIVERSITY



‘禅寺丸’大小孢子发生与雌雄配子体发育的研究  
DOI:10.11841/j.issn.1007-4333.2016.10.06

Vol. 21 No. 10 2016

## 目 次

小麦低磷响应基因的筛选与表达分析

..... 尚文静 贾利华 史磊 林德立 刘娜 郑文明(1)

基于表型性状和 SSR 标记的山西省青狗尾草资源遗传多样性分析

..... 张耀元 任彦鑫 禾璐 张雁明 张彬 王兴春 李红英 韩渊怀(11)

利用高温发酵菌糠研制水稻育秧基质

..... 郑丹 王轶 赵春霞 陈全国 程薇 郭鹏 崔宗均(23)

淀粉含量不同木薯品种内源 IAA 与淀粉合成关键酶活性 ..... 樊吴静 罗兴录 朱艳梅(30)

花前和花期高温对香白杏花器官发育的影响

..... 陈康玉 陆晓 赵宁 甘露 张海霞 刘国杰(37)

‘禅寺丸’大小孢子发生与雌雄配子体发育

..... 李加茹 孙鹏 韩卫娟 张嘉嘉 杜改改 傅建敏 李芳东(44)

过表达番茄 *Sly-miR*397 基因增强拟南芥的耐旱性

..... 向娟 林鹏 李兴盛 李双桃 刘梦云 张磊 郭仰东(51)

生物有机肥对西葫芦生长及根结线虫防效的影响 ..... 路平 董海龙 徐玉梅 王建明(59)

基于图像处理技术的四种苜蓿叶部病害的识别

..... 秦丰 刘东霞 孙炳达 阮柳 马占鸿 王海光(65)

牛源致病性 *Escherichia coli* O<sub>8</sub> 对小鼠小肠结构及免疫相关细胞的影响

..... 陈玉洁 敖日格乐 王纯洁 杨斯琴(76)

金霉素对獭兔盲肠菌群和免疫功能的影响 ..... 文斌 邹芙蓉 曾东 汪平 郭小林

倪学勤 傅祥超刘宁 张凯 杜丹 徐昌文(85)

产 γ-氨基丁酸植物乳杆菌对小鼠生长、血清抗氧化能力及盲肠菌群的影响

..... 徐毓琴 王振华 潘康成 张娇 谷笑笑 冯杰(93)

碎石含量影响下紫色土坡面径流流速变化过程及土壤侵蚀的阶段性

..... 韩珍 王小燕 李馨欣(102)

气吸式免耕播种机的振动测试与振动理论分析

..... 刘月琴 刘飞 赵满全 董帅 张旭(109)

不同积温计算方法作物发育期模拟效果比较

..... 吴玉洁 叶彩华 姜会飞 闫梦玲 倪子璇(117)

猪肉可追溯体系质量安全效应研究——基于生猪屠宰加工企业的视角

..... 刘增金 乔娟 张莉侠(127)

禽流感风险下肉鸡养殖户消毒行为及影响因素 ..... 黄泽颖 王济民 王晨 欧阳儒彬(135)

蛋鸡生产与鸡蛋价格动态变化关系 ..... 周荣柱 秦富(145)

我国农产品价格与 CPI 动态关联性分析 ..... 石自忠 王明利 胡向东(155)

农产品进出口贸易的季节特征识别 ..... 韩洁 田志宏 陈红华(165)

基于非参数核密度估计法的红枣市场价格波动与风险评估 ..... 李凤 马惠兰 苏洋(172)

我国近海捕捞经营组织形态的现状调查与分析——基于福建省的调研数据

..... 郑思宁 黄祖辉 林光纪(180)

中韩 FTA 背景下中国农产品对韩国出口前景分析 ..... 孙致陆 李先德(188)

基于文献计量学及网络分析的能值研究综述

..... 刘文婧 耿涌 田旭 孙露 高翠侠 陈伟(200)

## CONTENTS

- Screening and expression analysis of genes responded to low phosphate in wheat root ..... *SHANG Wen-jing, JIA Li-hua, SHI Lei, LIN De-li, LIU Na, ZHENG Wen-ming* (1)
- Genetic diversity analysis of green foxtail germplasm resources in Shanxi Province based on phenotypes and SSR markers ..... *ZHANG Yao-yuan, REN Yan-xin, HE Lu, ZHANG Yan-ming, ZHANG Bin, WANG Xing-chun, LI Hong-ying, HAN Yuan-huai* (11)
- Study of fermented spent mushroom substrate of *Pleurotus eryngii* as basic materials for rice seedling ..... *ZHENG Dan, WANG Yi, ZHAO Chun-xia, CHEN Jin-guo, CHENG Wei, GUO Peng, CUI Zong-jun* (23)
- Endogenous IAA and the activities of starch synthesis key enzymes in cassava varieties with different starch content ..... *FAN Wu-jing, LUO Xing-lu, ZHU Yan-mei* (30)
- Effect of high temperature in the pre-blooming and blooming periods on flower development of Xiangbaixing apricot ..... *CHEN Kang-yu, LU Xiao, ZHAO Ning, GAN Lu, ZHANG Hai-xia, LIU Guo-jie* (37)
- Study on sporogenesis and gametogenesis of Zenjimaru ..... *LI Jia-ru, SUN Peng, HAN Wei-juan, ZHANG Jia-jia, DU Gai-gai, FU Jian-min, LI Fang-dong* (44)
- Overexpression of tomato *Sly-miR397* gene enhances drought tolerance in *Arabidopsis thaliana* ..... *XIANG Juan, LIN Peng, LI Xing-sheng, LI Shuang-tao, LIU Meng-yun, ZHANG Lei, GUO Yang-dong* (51)
- Effects of bio-organic fertilizer on zucchini growth and control of root-knot nematode ..... *LU Ping, DONG Hai-long, XU Yu-mei, WANG Jian-ming* (59)
- Recognition of four different alfalfa leaf diseases based on image processing technology ..... *QIN Feng, LIU Dong-xia, SUN Bing-da, RUAN Liu, MA Zhan-hong, WANG Hai-guang* (65)
- Effect of pathogenic *Escherichia coli* O<sub>8</sub> from cow feces on the small intestinal structure and immunity-associated cells of mice ..... *CHEN Yu-jie, Ao-ri-ge-le, WANG Chun-jie, YANG Si-qin* (76)
- Effect of chlortetracycline on cecum microflora and immune function of rex rabbits ..... *WEN Bin, ZOU Fu-qin, ZENG Dong, WANG Ping, GUO Xiao-lin, NI Xue-qin, FU Xiang-chao, LIU Ning, ZHANG Kai, DU Dan, XU Chang-wen* (85)
- Effects of  $\gamma$ -aminobutyric acid-producing *Lactobacillus plantarum* on growth performance, serum antioxidant capacity and caecal microflora in mice ..... *XU Yu-qin, WANG Zhen-hua, PAN Kang-cheng, ZHANG Jiao, GU Xiao-xiao, FENG Jie* (93)

Processes of runoff velocity and stages of soil erosion under the effect of rock fragment content	HAN Zhen ,WANG Xiao-yan ,LI Xin-xin(102)
Analysis of vibration test and vibration theory of air-suction no-tillage planter	LIU Yue-qin ,LIU Fei ,ZHAO Man-quan ,DONG Shuai ,ZHANG Xu(109)
Comparison of the simulation effect of different growing degree-days calculating methods on crop development processes	WU Yu-jie ,YE Cai-hua ,JIANG Hui-fei ,YAN Meng-ling ,NI Zi-xuan(117)
Study on safety effect of pork traceability system:Based on the perspective of pig slaughter enterprise	LIU Zeng-jin ,QIAO Juan ,ZHANG Li-xia(127)
Broiler farmers' behaviors of disinfection under the risk of avian influenza	HUANG Ze-ying ,WANG Ji-min ,WANG Chen ,OUYANG Ru-bin(135)
Research on dynamic change correlations between the production performance of laying hen and egg price	ZHOU Rong-zhu ,QIN Fu(145)
A study on the dynamic correlation between agricultural product prices and CPI in China	SHI Zi-zhong ,WANG Ming-li ,HU Xiang-dong(155)
Seasonal feature recognition on import and export trade of agricultural products	HAN Jie ,TIAN Zhi-hong ,CHEN Hong-hua(165)
Fluctuation and risk evaluation of jujube market price based on the non-parametric kernel density estimation method	LI Feng ,MA Hui-lan ,SU Yang(172)
Investigation and analysis on the current form of offshore fishing management in China: Based on the survey data of Fujian Province	ZHENG Si-ning ,HUANG Zu-hui ,LIN Guang-ji(180)
The prospect of China's agricultural products exports to Korea under China-Korea FTA	SUN Zhi-lu ,LI Xian-de(188)
A review of energy studies based on bibliometric and social network analysis	LIU Wen-jing ,GENG Yong ,TIAN Xu ,SUN Lu ,GAO Cui-xia ,CHEN Wei(200)

**中国农业大学学报**  
**Zhongguo Nongye Daxue Xuebao**

(月刊 1996年创刊)

第21卷 第10期 2016年10月

主管单位 中华人民共和国教育部

主办单位 中国农业大学

主编 李保国

副主编 袁文业

编辑出版 《中国农业大学学报》编辑部  
100193 北京海淀区圆明园西路2号  
010-6273 2619

印 刷 北京科信印刷有限公司

国内发行 《中国农业大学学报》编辑部

国外发行 中国国际图书贸易总公司  
(北京399信箱)

刊号 ISSN 1007 - 4333  
CN 11 - 3837/S

国内定价 30.00元/期  
360.00元/年

**JOURNAL OF CHINA  
AGRICULTURAL UNIVERSITY**

( Monthly, Started in 1996 )

Vol. 21 No. 10 Oct. 2016

**Responsible Institution** Ministry of Education of P. R. C.

**Sponsored by** China Agricultural University

**Editor-in-chief** LI Bao-guo

**Edited, Published and Distributed by** Editorial Board of  
Journal of China Agricultural University

**Address** No. 2 Yuanmingyuan Xilu, Beijing 100193, China

**Abroad Distributed by** China International Book

Trading Corporation, P. O. Box 399, Beijing, China

**Telephone** +86-10-6273 2619

**E-mail** xuebao@cau.edu.cn **http:** //xuebao.cau.edu.cn

**ISSN 1007-4333**

