



ISSN 1009-9980  
CN41-1308/S

# 果树学报

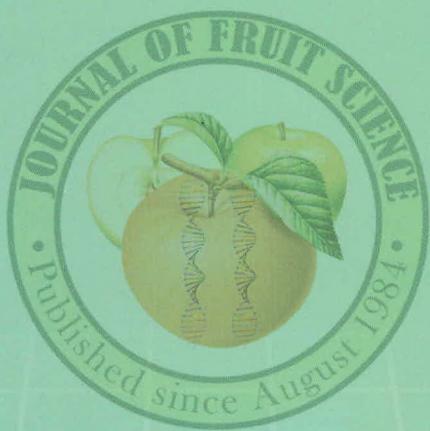
GUOSHU XUEBAO

JOURNAL OF FRUIT SCIENCE

第32卷 第1期

Vol.32 No.1

2015



ISSN 1009-9980

中国农业科学院郑州果树研究所 主办

# 果 树 学 报

JOURNAL OF FRUIT SCIENCE

(双月刊 Bimonthly)

2015年 第32卷 第1期

## 目 次

### 种质资源·遗传育种·分子生物学

- 广西龙胜野生宜昌橙种群生命表分析 ..... 邓崇岭, 刘冰浩, 陈传武, 唐 艳, 丁 萍, 付慧敏, 陈仁电, 石健泉 (1)  
贵州砂梨种质资源遗传多样性的ISSR分析 ..... 张 起, 安华明 (6)  
三倍体葡萄柚实生后代多倍体的发掘与SSR遗传鉴定 ..... 梁武军, 解凯东, 谢宗周, 徐 强, 伊华林, 郭文武 (13)  
根域限制对‘巨峰’葡萄花色苷代谢途径关键基因表达的影响 ..... 王 博, 何建军, 李节法, 虞秀明, 白 扬, 谢兆森, 张才喜, 白先进, 赵丽萍, 王世平 (19)  
三明野生蕉*Ran*基因克隆及其组织特异性与低温胁迫表达分析 ..... 张雅玲, 方智振, 赖钟雄 (26)  
4个枇杷品种S基因型鉴定及新基因*S<sub>3</sub>-RNase*序列分析 ..... 杨 芹, 付 燕, 王永清, 陶 炼, 邓群仙, 范建新, 邓仁菊 (37)  
龙眼亚硫酸盐氧化酶(*DlSO*)基因的克隆及表达分析 ..... 帅 良, 李 静, 韩冬梅, 吴振先 (43)  
6种野生草莓基因组大小估算 ..... 陈丙义, 李金凤, 霍恒志, 万春雁, 章 镇, 乔玉山, 麋 林 (51)  
'冬枣'与'临猗梨枣'自然授粉后代果实性状研究 ..... 张 钟, 黄 建, 殷 晓, 李新岗, 刘廷俊 (57)

### 栽培·生理·生态

- 缺镁温州蜜柑果园的施镁效应研究 ..... 温明霞, 吴韶辉, 王 鹏, 金国强, 朱潇婷, 石学根 (63)  
赣南脐橙园土壤有效铜含量分布特征研究 ..... 范玉兰, 卢映琼, 李 峰, 薛 琪, 李 勋, 钟八莲, 彭良志 (69)  
桃砧木组织培养和扦插生根的解剖学观察 ..... 白晓燕, 王力荣, 王新卫, 朱更瑞, 方伟超, 曹 珂, 陈昌文, 李 勇 (74)

缺硼胁迫对不同基因型葡萄硼效率及硼积累、分配的影响	黄 玖,潘学军,张文娥,周金忠	(79)
不同滤光膜袋对‘红地球’葡萄果实品质的影响	程建徽,魏灵珠,雷 鸣,郑 婷,吴 江	(87)
<i>Fusarium mangiferae</i> 对杧果顶芽内活性氧代谢的影响	柳 凤,欧雄常,詹儒林,常金梅,韦继光	(94)
2013年陕西苹果花期冻害气象条件分析及受冻指标研究	王景红,柏秦凤,梁 轶,屈振江,张 煦,张 勇	(100)
<b>植物保护·果品质量与安全</b>		
柑橘炭疽病菌的分离、鉴定及在果实上的潜伏侵染特性	李菲菲,龙超安	(108)
4种杀菌剂对连作苹果园土壤镰刀菌及土壤酶活性的影响	刘 勇,鲍 静,姜兴印,李 配,毛志泉	(115)
杧果新病害露水斑病病原菌对杀菌剂敏感性测定	杨永利,张 贺,刘晓妹,周碧杭,王赛格,蒲金基	(123)
<b>贮藏·加工</b>		
高渗CO <sub>2</sub> 和PE保鲜袋对冷藏及货架期‘砀山酥梨’果实品质的影响	王志华,姜云斌,王文辉,杜艳民,杭 博,姜修成,佟 伟,贾晓辉	(128)
<b>专论与综述</b>		
柑橘盐胁迫响应及耐盐机制研究进展	魏清江,冯芳芳,辜青青	(136)
板栗花芽性别调控研究进展	邱文明,何秀娟,徐育海	(142)
<b>技术与方法</b>		
苹果锈果类病毒实时荧光PCR检测方法的建立	吴 然,李君英,邵建柱,孙建设,张 鹤	(150)
菠萝凋萎相关病毒-3实时荧光定量PCR检测方法的建立	胡加谊,李向宏,罗志文,范鸿雁,张治礼,刘志昕,何 凡	(156)
<b>新品种选育报告</b>		
葡萄新品种——‘小辣椒’的选育	徐卫东,刘玉凤,耿 浩,黄晓德,赵伯涛	(163)
毛葡萄杂交后代——‘桂葡2号’的选育	黄凤珠,彭宏祥,陆贵锋,李冬波,李鸿莉	(166)
鲜食观赏兼用李新品种——‘一品丹枫’的选育	陆致成,李 峰,张静茹,张艳波,宋宏伟,孙海龙	(169)
《果树学报》投稿须知		(171)
《果树学报》参考文献著录格式(18) 新书推介(36,56,68,78) 《果树学报》编辑部论文著作权转让书(50)		
会讯(141)		

# JOURNAL OF FRUIT SCIENCE

(Bimonthly)

Vol. 32 No. 1 2015

## CONTENTS

### Germplasm resources·Genetics & Breeding·Biotechnology

Analysis on life table of wild Ichang Papeda population in Longsheng of the Guangxi Zhuang Autonomus Rejion .....	DENG Chongling, LIU Binghao, CHEN Chuanwu, TANG Yan, DING Ping, FU Huimin, CHEN Rendian, SHI Jianquan	( 1 )
Genetic diversity of <i>Pyrus pyrifolia</i> resources distributed in Guizhou province revealed by ISSR markers .....	ZHANG Qi, AN Huaming	( 6 )
Exploitation of polyploids from open-pollinated triploid grapefruit progenies and their genetic identification by SSR molecular markers .....	LIANG Wujun, XIE Kaidong, XIE Zongzhou, XU Qiang, YI Hualin, GUO Wenwu	( 13 )
Effect of root restriction on transcriptional expression of genes related to anthocyanin biosynthesis in 'Kyoho' grape .....	WANG Bo, HE Jianjun, LI Jiefa, YU Xiuming, BAI Yang, XIE Zhaosen, ZHANG Caixi, BAI Xianjin, ZHAO Liping, WANG Shiping	( 19 )
Cloning and expression analysis of <i>Ran</i> gene in different tissues and under low temperature stress in Sanming yesheng jiao ( <i>Musa itinerans</i> ) .....	ZHANG Yaling, FANG Zhizhen, LAI Zhongxiong	( 26 )
Identification of S-genotypes of four cultivars and sequence analyses of <i>S<sub>31</sub>-RNase</i> in <i>Eriobotrya</i> Lindl. YANG Qin, FU Yan, WANG Yongqing, TAO Lian, DENG Qunxian, FAN Jianxin, DENG Renju	( 37 )	
Cloning and expression analysis of sulfite oxidase ( <i>DlSO</i> ) gene in <i>Dimocarpus longan</i> .....	SHUAI Liang, LI Jing, HAN Dongmei, WU Zhenxian	( 43 )
Estimation of genome size in six wild strawberry species .....	CHEN Bingyi, LI Jinfeng, HUO Hengzhi, WAN Chunyan, ZHANG Zhen, QIAO Yushan, MI Lin	( 51 )
Fruit characterization of hybrid progenies derived from natural pollination cross between <i>Ziziphus jujuba</i> 'Dongzao' and 'Linyilizao' .....	ZHANG Zhong, HUANG Jian, YIN Xiao, LI Xingang, LIU Tingjun	( 57 )

### Cultivation·Physiology·Ecology

Effect of magnesium (Mg) application in Satsuma Mandarin orchard with Mg nutrient deficiency .....	WEN Mingxia, WU Shaohui, WANG Peng, JIN Guoqiang, ZHU Xiaoting, SHI Xuegen	( 63 )
Study on distribution of available copper content in soil of navel orange orchards in Southern Jiangxi Province .....	FAN Yulan, LU Yingqiong, LI Feng, XUE Jun, LI Xun, ZHONG Balian, PENG Liangzhi	( 69 )
Microscopic observation on adventitious root development of micropagation and cutting propagation on peach rootstocks .....	BAI Xiaoyan, WANG Lirong, WANG Xinwei, ZHU Gengrui, FANG Weichao, CAO Ke, CHEN Changwen, LI Yong	( 74 )
Effect of boron deficiency stress on boron efficiency, accumulation and distribution in different <i>Vitis</i> genotypes .....	HUANG Mei, PAN Xuejun, ZHANG Wen'e, ZHOU Jinzhong	( 79 )
Influences of different light filter film bags on berry quality in 'Red Globe' .....		

- ..... CHENG Jianhui, WEI Lingzhu, LEI Ming, ZHENG Ting, WU Jiang ( 87 )  
Effects of *Fusarium mangiferae* on active oxygen metabolism in apical bud of mango ..... LIU Feng, OU Xiongchang, ZHAN Rulin, CHANG Jinmei, WEI Jiguang ( 94 )  
Study on freezing index and weather conditions causing shaanxi apple florescence freezing injury in 2013 ..... WANG Jinghong, BAI Qinfeng, LIANG Yi, QU Zhenjiang, ZHANG Tao, ZHANG Yong (100)

### **Plant protection · Fruit quality & Safety**

- Isolation, identification and latent infection characteristics of citrus anthracnose pathogens ..... LI Feifei, LONG Chao'an (108)  
Effects of four fungicides on soil fusarium oxysporum population and enzymes activity in successive cropping apple orchard ..... LIU Yong, BAO Jing, JIANG Xingyin, LI Pei, MAO Zhiquan (115)  
Sensitivity of *Cladosporium cladosporioides* causing mango new disease sooty blotch to fungicides ..... YANG Yongli, ZHANG He, LIU Xiaomei, ZHOU Bihang, WANG Saige, PU Jinji (123)

### **Storage · Processing**

- Effects of high carbon dioxide permeability and PE film bags on quality of 'Dangshansu' pear after cold storage ..... WANG Zhihua, JIANG Yunbin, WANG Wenhui, DU Yanmin, HANG Bo, JIANG Xiucheng, TONG Wei, JIA Xiaohui (128)

### **Special focus · Reviews**

- Advances on salinity responses and tolerance in citrus ... WEI Qingjiang, FENG Fangfang, GU Qingqing (136)  
Research progress on sex control of chestnut flower buds ..... QIU Wenming, HE Xiujuan, XU Yuhai (142)

### **Techniques · Methods**

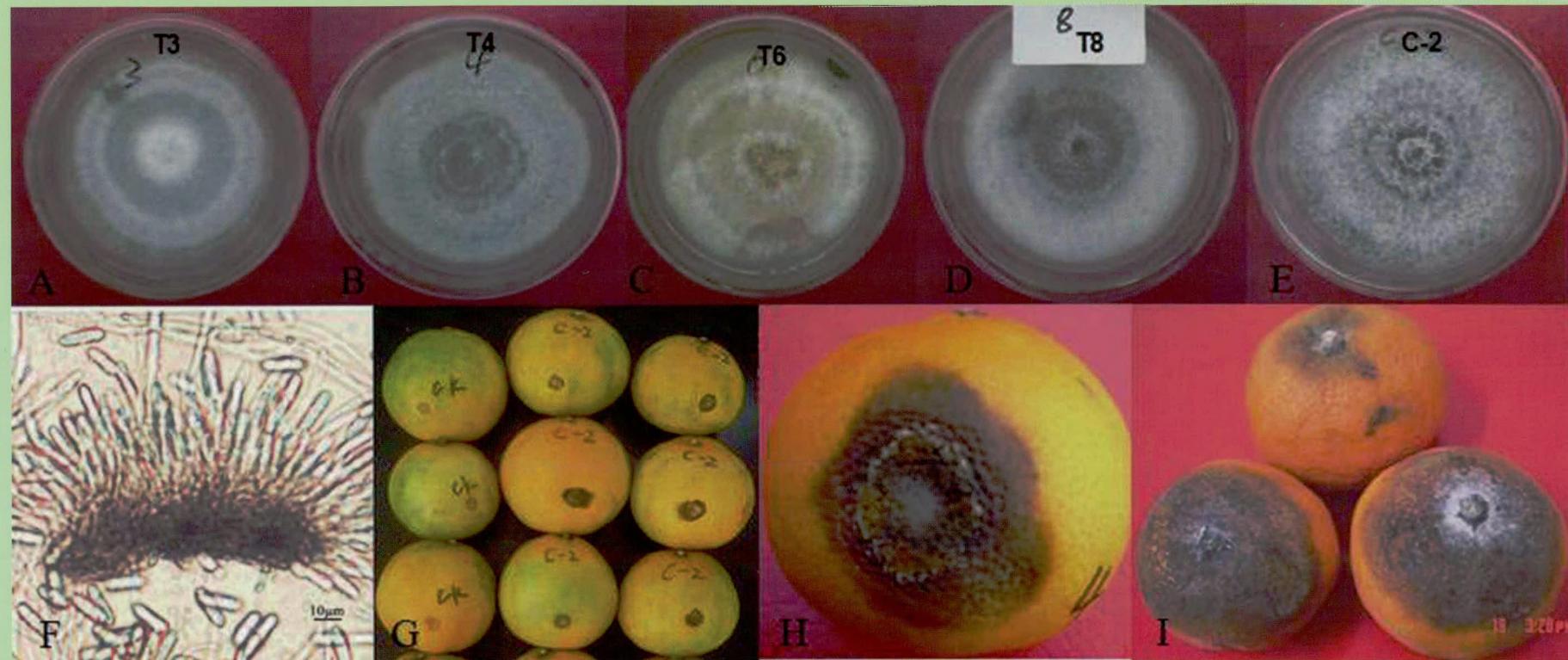
- Establishment of detection method for *Apple scar skin viroid* (ASSVd) by Real-Time PCR ..... WU Ran, LI Junying, SHAO Jianzhu, SUN Janshe, ZHANG He (150)  
Detection of *Pineapple mealybug wilt associated virus-3* by Real-Time Fluorescent Quantitative RT-PCR ..... HU Jiayi, LI Xianghong, LUO Zhiwen, FAN Hongyan, ZHANG Zhili, LIU Zhixin, HE Fan (156)

### **Breeding Reports**

- A new grape cultivar 'Xiaolajiao' ..... XU Weidong, LIU Yufeng, GENG Hao, HUANG Xiaode, ZHAO Botao (163)  
Breeding of 'Gui Pu No. 2'——a new hybrids of downy grape ..... HUANG Fengzhu, PENG Hongxiang, LYU Guifeng, LI Dongbo, LI Hongli (166)  
'Yipindanfeng', a new edible and ornamental plum cultivar ..... LU Zhicheng, LI feng, ZHANG Jingru, ZHANG Yanbo, SONG Hongwei, SUN Hailong (169)

(正文见108—114页)

LI Feifei, et al: Isolation, identification and latent infection characteristics of citrus anthracnose pathogens Plates



#### 图 版 说 明

A~E.部分柑橘炭疽病菌在PDA上的菌落形态; F. T4菌株在PDA上的分生孢子盘和分生孢子,  $\times 400$ ; G、H. 清水对照和C-2、T4菌株在温州蜜柑果实上的致病性状; I. 采后温州蜜柑炭疽病的自然发病症状

#### Explanation of plates

A to E. The colony characteristics of parts of Citrus Anthracnose Pathogens (T3, T4, T6, T8, C-2) on PDA; F. Acervulus and conidia of T4 strain on PDA,  $\times 400$ ; G,H. Symptoms inoculated with sterile water and *C. gleosporioides* (C-2, T4) on the fruit of Satsuma mandarin; I. The naturally infection symptom with anthracnose on the fruit of Satsuma mandarin during post-harvest