



ISSN 1009-9980  
CN 41-1308/S

# 果树学报

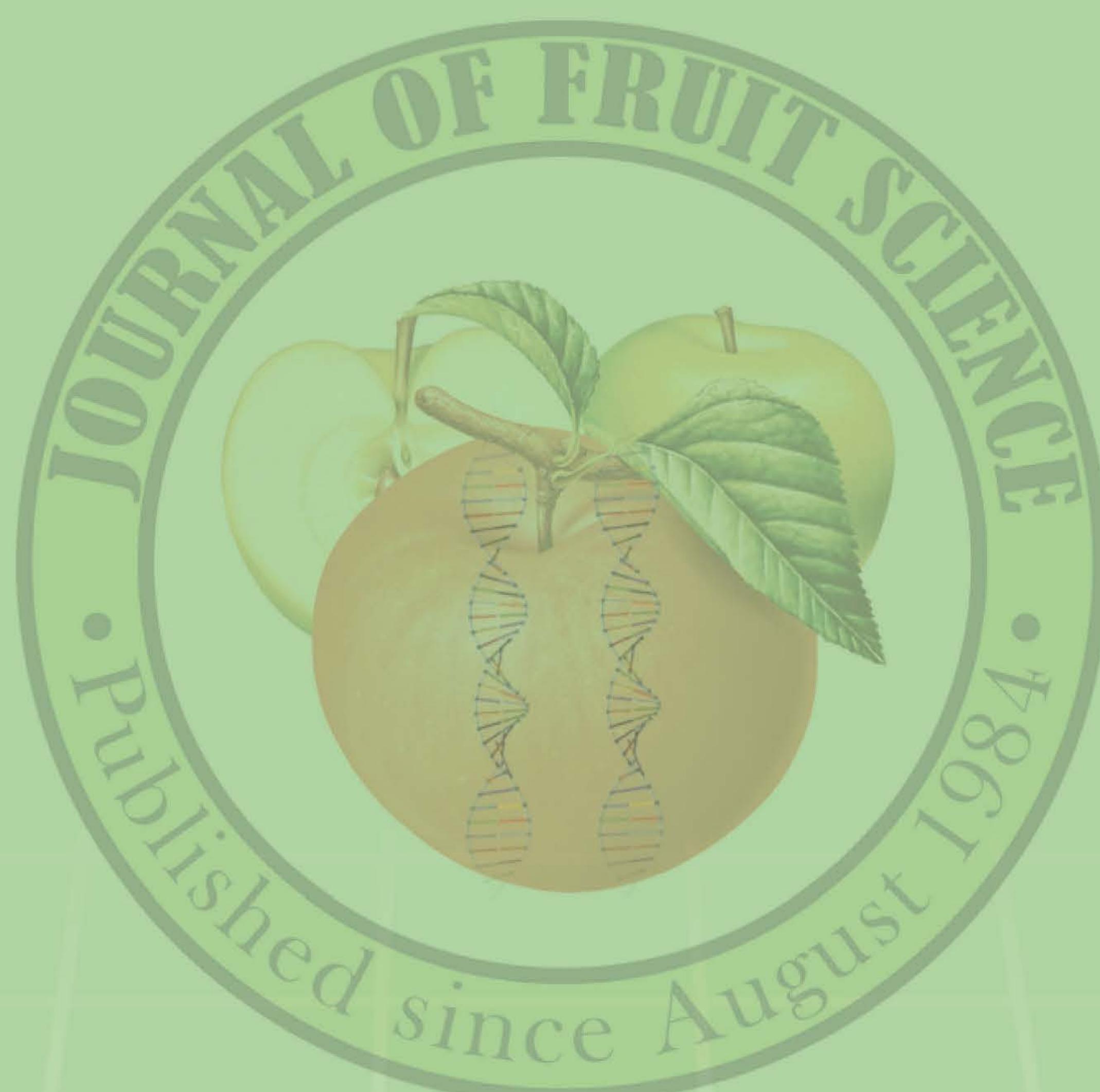
GUOSHU XUEBAO

JOURNAL OF FRUIT SCIENCE

第40卷 第1期

Vol.40 No.1

2023



ISSN 1009-9980

01>

9 771009 998230

中国农业科学院郑州果树研究所 主办



# 果 树 学 报

GUOSHU XUEBAO

2023年1月 第40卷 第1期

## 目 次

### 种质资源·遗传育种·分子生物学

- 基于广泛靶向代谢组学的桃芽抗寒代谢物的筛选与鉴定 ..... 刘苏宁,王力荣,方伟超,陈昌文,王新卫,李 勇,吴金龙,曹 珂 ( 1 )

- 葡萄 *PLATZ* 家族基因鉴定及其在种子发育过程中的表达分析 ..... 向 锐,孙艺萌,梁 晨,师校欣,杜国强,王 莉 ( 13 )

- 基于全基因组信息的常山胡柚遗传鉴定 ..... 毛桑隐,汪丽霞,宋剑锋,刘胜军,王 沱,徐 强 ( 25 )

- 山核桃油体蛋白 *oleosin* 基因家族鉴定和表达模式分析 ..... 董茗秀,易 芳,胡 帅,高燕丽 ( 35 )

### 栽培·生理·生态

- 负载量对南疆矮化自根砧苹果树体生长、光合能力及果实发育和品质的影响 ..... 王 凯,李秀玲,张晓云,袁引燕,鲁晓燕,姜继元,张 东,杨伟伟 ( 48 )

- 硫酸铵对红富士苹果的疏花效应 ..... 孟海凤,张春香,韩雪平,薛晓敏 ( 60 )

- 温室栽培黄金梨种子败育初探 ..... 李 琛,王海静,姜 涛,边卫东 ( 67 )

- 阳光玫瑰葡萄生长期花芽分化形态进程及相关生理分子水平变化研究 ..... 罗惠格,朱 维,黄泳碧,陈 潘,林 玲,白 扬,曹雄军,白先进,张 唯,王 博 ( 74 )

- 肥料袋控缓释对葡萄细根生长和氮素利用的影响 ..... 张守仕,谢克英,常介田,徐明辉,韩 芳,柴梦颖,乔宝营 ( 88 )

- 西番莲自交和异交的花粉管荧光显微观察及授粉亲和性分析 ..... 田青兰,吴艳艳,张英俊,刘洁云,黄伟华,温 放,韦毅刚,牟海飞 ( 98 )

- 刺梨与无籽刺梨果实中药化学成分及抗氧化物质的比较分析 ..... 蒋兰兰,鲁 敏,安华明 ( 111 )

### 植物保护·果品质量与安全

- 贝莱斯芽孢杆菌菌株 P2-1 对草莓褐色叶斑病菌的抑制活性及其促生作用 ..... 袁洪波,王卓妮,袁梦佳,覃良红,史冰柯,周厚成,侯 琦,王 丽,涂洪涛 ( 126 )

### 专论与综述

- 中国桃产业经济分析与发展趋势 ..... 徐 磊,陈 超 ( 133 )

- GB 2763—2021 中果品农药最大残留限量标准解析 ..... 解 鑫,成 昕,姚好朵,郭琳琳,田发军,王彩霞,乔成奎,王瑞萍,谢汉忠,庞荣丽 ( 144 )

### 技术与方法

- FTIR 结合 DD-SIMCA 和二维相关光谱的核桃产地判别分析 ..... 王永波,李洪艳,张想芬,温卫华,杨 瑞 ( 155 )

- 基于形变距离和受压质量混合模式测定蓝莓果实硬度的方法建立和优化 ..... 沈朱俐,顾莉莉,李晓谊,李永强,宗 宇,徐丽珊,郭卫东 ( 169 )

### 新品种选育报告

- 优质中熟桃新品种七月肥的选育 ..... 董晓民,李桂祥,高晓兰,李 磊,刘 伟,宫庆涛,陈文玉,刘 敏,张安宁 ( 180 )

- 早熟耐低温杨梅新品种早鲜的选育 ..... 梁森苗,张淑文,王世福,郑锡良,戚行江 ( 183 )

- 优质早熟大果百香果新品种蜜语的选育 ..... 韦晓霞,梁党弟,赖瑞联,吴如健,陈发兴 ( 187 )

- 《果树学报》致谢全体审稿专家 ..... ( 191 )

- 《果树学报》投稿须知 ..... ( 192 )

本刊评选出 2022 年度优秀审稿专家(97)

社 长:张 莉 责任编辑:王 珂,和 静

编辑人员:王 珂,和 静,王小丽,陈新平,樊 辉

# JOURNAL OF FRUIT SCIENCE

Jan. 2023 Vol. 40 No. 1

## CONTENTS

### Germplasm resources · Genetics & Breeding · Biotechnology

Screening and identification of several metabolites associated with cold resistance in peach buds based on widely targeted metabolomics .....	LIU Suning, WANG Lirong, FANG Weichao, CHEN Changwen, WANG Xinwei, LI Yong, WU Jinlong, CAO Ke	( 1 )
Genome-wide identification of grape <i>PLATZ</i> family genes and expression analysis during seed development.....	..... XIANG Rui, SUN Yimeng, LIANG Chen, SHI Xiaoxin, DU Guoqiang, WANG Li	( 13 )
Genetic identification of Changshan Huyou based on whole genome information.....	..... MAO Sangyin, WANG Lixia, SONG Jianfeng, LIU Shengjun, WANG Lun, XU Qiang	( 25 )
Identification and expression profile analysis of <i>oleosin</i> gene family in Chinses hickory and pecan .....	..... DONG Mingxiu, YI Fang, HU Shuai, GAO Yanli	( 35 )

### Cultivation · Physiology · Ecology

Impacts of fruit load on tree growth, leaf gas exchange and fruit development and quality in apple trees grafted on a dwarfing rootstock in southern Xinjiang .....	WANG Kai, LI Xiuling, ZHANG Xiaoyun, YUAN Yinyan, LU Xiaoyan, JIANG Jiyuan, ZHANG Dong, YANG Weiwei	( 48 )
Flower thinning effect of ammonium thiosulfate in Red Fuji apple .....	..... MENG Haifeng, ZHANG Chunxiang, HAN Xueping, XUE Xiaomin	( 60 )
Preliminary study on seed abortion of Whangkeumbae pear cultivated in the greenhouse.....	..... LI Chen, WANG Haijing, JIANG Tao, BIAN Weidong	( 67 )
A study on the morphological process and physiological and molecular changes of flower bud differentiation in Shine Muscat grape during fruit growing season .....	..... LUO Huige, ZHU Wei, HUANG Yongbi, CHEN Xiao, LIN Ling, BAI Yang, CAO Xiongjun, BAI Xianjin, ZHANG Wei, WANG Bo	( 74 )
Effects of bagged controlled-release fertilizer on grape fine root growth and nitrogen absorption .....	..... ZHANG Shoushi, XIE Keying, CHANG Jietian, XU Minghui, HAN Fang, CHAI Mengying, QIAO Baoying	( 88 )

Pollen tube fluorescence microscopic observation and pollination compatibility analysis of self and cross-pollination in passion fruit ( <i>Passiflora edulis</i> ) .....	..... TIAN Qinglan, WU Yanyan, ZHANG Yingjun, LIU Jieyun, HUANG Weihua, WEN Fang, WEI Yigang, MOU Haifei	( 98 )
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------	--------

Comparative analysis of chemical components of traditional Chinese medicine and antioxidants between <i>Rosa roxburghii</i> and <i>R. sterilis</i> fruits .....	..... JIANG Lanlan, LU Min, AN Huaming	( 111 )
-----------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------	---------

### Plant protection · Fruit quality & Safety

Antagonistic activity of <i>Bacillus velezensis</i> strain P2-1 against tan-brown leaf spot of strawberry and its growth-promoting effect .....	..... YUAN Hongbo, WANG Zhuoni, YUAN Mengjia, QIN Genhong, SHI Bingke, ZHOU Houcheng, HOU Hui, WANG Li, TU Hongtao	( 126 )
-------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------	---------

### Special Focus · Proceeding

Economic situation and development countermeasures of Chinese peach industry .....	..... XU Lei, CHEN Chao	( 133 )
Analysis of the maximum residue limits of pesticides in fruits according to GB 2763—2021 .....	..... XIE Xin, CHENG Xin, YAO Haoduo, GUO Linlin, TIAN Fajun, WANG Caixia, QIAO Chengkui, WANG Ruiping, XIE Hanzhong, PANG Rongli	( 144 )

### Techniques · Methods

FTIR spectroscopy combined with DD-SIMCA and Two-dimensional correlation spectroscopy (2DCoS) for judgement about walnut origins .....	..... WANG Yongbo, LI Hongyan, ZHANG Xiangfen, WEN Weihua, YANG Rui	( 155 )
----------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------	---------

Foundation and optimization of protocol for blueberry fruit firmness measurement under mix mode of deflection distance and pressure weight .....	..... SHEN Zhuli, GU Lili, LI Xiaoyi, LI Yongqiang, ZONG Yu, XU Lishan, GUO Weidong	( 169 )
--------------------------------------------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------	---------

### Breeding Reports

Breeding report on a high-quality mid-ripening peach cultivar Qiyuefei.....	..... DONG Xiaomin, LI Guixiang, GAO Xiaolan, LI Miao, LIU Wei, GONG Qingtao, CHEN Wenyu, LIU Min, ZHANG Anning	( 180 )
-----------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------	---------

A new early-ripening and low temperature resistant Chinese bayberry cultivar Zaoxian .....	..... LIANG Senmiao, ZHANG Shuwen, WANG Shifu, ZHENG Xiliang, QI Xingjiang	( 183 )
--------------------------------------------------------------------------------------------	----------------------------------------------------------------------------	---------

A new early-maturing and high-yielding passion fruit cultivar Miyu.....	..... WEI Xiaoxia, LIANG Dangdi, LAI Ruilian, WU Rujian, CHEN Faxing	( 187 )
-------------------------------------------------------------------------	----------------------------------------------------------------------	---------