



# 浙江农科学

JOURNAL OF ZHEJIANG AGRICULTURAL SCIENCES

10  
2021  
62卷

## 翠衫2号

早生，第一雌花发生于主蔓第10~18节；生长势强，连续坐果性好。翠绿色果，短棒状，果形正，果硬度好，果纵径36~40 cm，横径5~6 cm，单果重约350 g，品质脆甜可口。采收期长，每667 m<sup>2</sup>产量3 500 kg左右。



全国农作物种子质量认证试点单位  
中国种子协会企业信用等级AAA企业  
中国蔬菜种业信用骨干企业



宁波微萌种业有限公司

宁波市鄞州区邱隘镇沈家村镇南路

电话：0574-87135393

广告

主办 浙江省农业科学院 浙江大学



# 浙江农业科学

(月刊)

ZHEJIANG NONGYE KEXUE

2021年第62卷第10期  
2021年10月11日出版

## 目 次

### ■ 专题论述

- 1903 浙江发展铁皮石斛等食药物质产业的对策建议 ..... 何伯伟, 杨兵勋, 王松琳, 张岑容

- 1906 农村生活垃圾分类的金华模式 ..... 胡新民, 郑俊杰, 何婕

### ■ 粮食作物

- 1910 稻-菜轮作下长期施肥对作物产量和土壤理化性状的影响 ..... 张维玲, 徐静高, 葛芙蓉, 马嘉伟, 叶正钱

- 1913 舟山盐碱地耐盐碱水稻品种的筛选试验 ..... 朱家骝, 严中琪

- 1916 混合改良剂对土壤和水稻糙米镉积累的影响 ..... 王京文, 袁杭杰, 李丹, 杨文叶, 张奇春

- 1919 桐乡市水稻甬优1540肥料利用率探究 ..... 吴勇, 朱玉祥, 吴春艳, 陈昊煊

- 1921 水稻爱思Si/TE复合微生物肥料的研究与应用 ..... 唐毓杰, 王晖, 刘海涛, 瞿德民

- 1925 Cd低累积水稻品种筛选及其吸收积累特征 ..... 黄其颖, 傅丽青, 马婧妤, 刘双日, 叶楠, 卢忠诚

- 1928 2007—2017年盐城市测土配方施肥土壤的肥力变化 ..... 孙进, 周祥, 陈爱晶, 徐汉亿

- 1932 有机缓释水稻专用肥不同施肥模式的效果比较 ..... 汪东东, 王中秋, 赵人杰, 李路菲, 王涛, 潘建清

- 1935 播期与地力对藜麦品种红藜农艺性状的影响 ..... 陈奕浪, 范道付, 吴应齐, 何勇清, 吴俊, 姚理武, 余久华, 陈昊伟

- 1938 杂交稻浙优21在福建省引种的适应性表现 ..... 练进旺

- 1941 广亲和粳稻宁84的生物学特性及栽培要点 ..... 黄宣, 叶朝辉, 金林灿, 陈国, 施贤波

- 经济作物

- 1945 3个油菜品种晚直播试验初报 ..... 蒋琪, 陈少杰, 张建民, 吴龙根

- 1947 2020年浙江省粟展示品种比较 ..... 石益挺, 王苏杭, 俞懿洪

- 1950 香榧僵果调查与解剖学观察 ..... 王哲, 吴诗涵, 索金伟, 吴家胜

- 药用植物

- 1953 浙贝母产业现状及思考 ..... 阮洪生, 王翰华, 马舒伟, 崔明超, 程斌

- 果树与蔬菜

- 1956 鲜食枣浙鲜枣1号的选育和栽培要点 ..... 何丁生, 求盈盈, 何祯, 郑锡良, 戚行江, 任海英

- 1960 5个甜樱桃品种在舟山的引种试验 ..... 王呈阳, 任如红, 严中琪, 姚金晓, 吴国泉

- 1962 不同生境对歪头菜和鸭儿芹光合生理的影响 ..... 王盼, 王孝源, 周钰鸿, 潘德月, 陈子林, 康华靖

- 1968 花叶病毒对淮安红椒外观品质及产量的影响 ..... 王玮玮, 汪国莲, 孙玉东, 赵建锋, 王林闻, 罗德旭

- 1970 生物降解穴盘及喷洒对黄瓜幼苗质量的影响 ..... 周娟, 高登国, 刘星, 刘艳, 朱英, 叶林

- 1977 蓝莓bZIP转录因子基因预测及其在根中表达分析 ..... 安爽, 高玉迪, 占晓慧, 李永强, 宗宇

- 1984 化肥减施与有机肥替代对大蒜生长、产量及品质的影响 ..... 齐振宇, 蔡盼, 蔡溧聪, 张龙平, 任艳云, 周艳虹

- 1988 砧穗互作对嫁接西瓜高温耐性的影响 ..... 邢乃林, 张蕾琛, 黄芸萍, 王毓洪

- 1991 厨余垃圾沼泥对嫁接西瓜果实品质的影响 ..... 邢乃林, 严蕾艳, 王迎儿, 黄芸萍, 古斌权, 张华峰, 应泉盛

**《浙江农业科学》技术支持单位**

浙江勿忘农种业股份有限公司  
浙江农科种业有限公司  
浙江美之奥种业股份有限公司  
杭州种业集团有限公司  
宁波微萌种业有限公司  
浙江省农业农村生态与能源总站  
浙江省农业农村大数据发展中心  
宁波市农业科学研究院  
温州市农业科学研究院  
杭州市农业科学研究院  
浙江省农学会  
浙江省种子产业协会  
浙江省农产品质量安全学会  
浙江省植物保护学会  
浙江省水生蔬菜专业协会

- 1994 基质配方对猴头菇生长及活性成分的影响 ..... 李云涛,毛荣良,张作法,江伟琴,廖建东,吕国英
- 1996 浙江省萝卜种质资源表型多样性分析 ..... 林志寅,庄文雅,汪精磊,胡天华,包崇来
- 2000 不同甜橙品种胚性愈伤组织的诱导 ..... 欧阳欢,熊遂金,陈健美,钟八莲
- 观赏园艺
- 2005 海水胁迫对5种豆科植物种子萌发的影响 ..... 林加发
- 2008 红掌组培体系的比较与优化 ..... 朱强,周媛,田丹青,葛亚英,潘晓韵
- 2011 25个茶梅品种生物学特性及直立型筛选评析 ..... 章丹峰,齐鸣,楼晓明,翁振兴
- 2014 后疫情时代扬州世园会主题的构思与体现 ..... 王月瑶,陈波
- 2020 杭州草坪土壤养分及施肥策略 ..... 肖昆仑
- 植保技术
- 2023 梨种质资源对黑斑病的田间抗性鉴定 ..... 李庆余,于强,王义菊,牟红梅,姜福东,李元军
- 2027 野菊多糖诱抗剂对玄参白绢病的防效 ..... 周婧琪,陈磊,田薇
- 2030 寡糖·链蛋白浸种对菜豆根腐病的防控效果 ..... 陈利民,吴倩倩,何天骏,潘逸明,陈婷婷,吴全聪
- 2034 杭州地区葡萄炭疽菌的分离与生物学特性 ..... 肖文斐,柴伟国,忻雅,来文国,阮松林,裘勤人
- 2036 激素类除草剂2,4-D的降解及对作物与环境的影响 ..... 石颖,FAISAL Islam,周伟军,王尖
- 2044 4种药剂预防水稻恶苗病和立枯病的效果 ..... 宣国灿,周宇杰,骆琴,方少阳,何信富
- 2046 性诱剂在稻麦害虫测报上的应用 ..... 刘鸿恒,李猛,李秀钰
- 2049 不同药剂对荸荠秆枯病的防效及产量影响 ..... 赖小芳,李林,余山红,程序,陈伟强,唐兴国,陈孝赏,杨昌亮
- 2051 甜瓜嫁接对防治黑点根腐病和果实品质的效果 ..... 王迎儿,严蕾艳,邢乃林,古斌权,黄芸萍,王毓洪
- 食品技术
- 2054 烤烟叶片结构优化对烟叶产量及质量的影响 ..... 李成军,李娟,邱睿,刘东升,金江华,李小杰,白静科,李淑君
- 2059 四川地方晾晒烟致香前体物质分析 ..... 向欢,王俊,钟秋,雷云康,张华述,廖琅,陈勇,李成然,刘雷
- 2063 中黄1号鲜叶适制绿茶滋味特征及工艺优化 ..... 郭丽,潜卫东,李强,胡日上,胡兆华,叶伟胜,郑阿萍,林智
- 2067 菊花生产登记农药现状及展望 ..... 孟现刚,李美荣,陈文英,刘刚,柳燕丽
- 2070 升级后的密集式烤房性能特点 ..... 张炜,尹虎成,张学杰,冉锦翔,赵高坤,杨磊
- 蚕桑与特种养殖
- 2074 温度及光照对4种饵料微藻生长的影响 ..... 李腾腾,王紫薇,任鹏,蓝天一,邵艳卿,方军
- 2079 舟山市气象指数类水产养殖保险发展的探讨 ..... 陈鹏飞
- 畜牧兽医
- 2084 动物福利对养殖效益的影响 ..... 程焕杰,王磊
- 2087 桃园养殖模式下芦花鸡和青脚麻鸡体尺和屠宰性能测定 ..... 高磊燕,操勇清,曾涛,田勇,杨速,卢立志
- 2091 绍兴鸭小群保种效果的分子生物学监测 ..... 刘莉君,章晓炜,马敏彪,陆建定,王珍珍,卢立志,刘雅丽
- 资源与环境
- 2095 易腐垃圾的特点及资源化利用技术 ..... 李鹏昊,姜铭北,姚燕来,王卫平,朱凤香,朱为静,洪磊东,洪春来
- 2099 衢州市衢江区农村生活垃圾分类的实践与启示 ..... 周晶,毛维青,郑晓云,吴蓉
- 2103 绍兴地区梅汛期暴雨过程分析及其对农业的影响 ..... 严佩文,左骏,王雪阳
- 2107 基于农户视角的临洮县农村环境污染状况调查 ..... 南喜梅,张飞云
- 农业经济与信息
- 2111 职业教育与城乡融合耦合协调发展的时空演化差异分析 ..... 陈香蝶,尹盼盼
- 2115 基于义渡口镇的数字乡村赋能乡村振兴模式与路径 ..... 季承润
- 2120 直播背景下品牌忠诚的影响因素 ..... 孔欢欢,张月莉



**Vol. 62**  
**No. 10 2021**  
**Publishing Date**  
**Oct. 11, 2021**

**Competent Authority**  
Zhejiang Academy of Agricultural Sciences  
**Sponsored by**  
Zhejiang Academy of Agricultural Sciences & Zhejiang University  
**Edited & Published by**  
Editorial Department of JZAS  
**Editor-in-Chief**  
QI Xingjiang  
**Associate Editor-in-Chief**  
WU Yiwei  
**Responsible Director**  
ZHANG Yun  
**Address**  
198 Shiqiao Road, Hangzhou 310021  
**Tel**  
0571-86404055  
88923181  
88923631  
**E-mail**  
zjnykx@126.com  
**URL**  
[Http://www.zjnykx.cn](http://www.zjnykx.cn)  
**Printed by**  
Shaoxing Branch, Guangdong Hucais Cloud Printing Co., Ltd.  
**Overseas Distributed by**  
China Publish Foreign Trading Corporation

## JOURNAL OF ZHEJIANG AGRICULTURAL SCIENCES (Monthly)

### CONTENTS

- 1903 Countermeasures and suggestions for the development of edible and medicinal materials in Zhejiang Province ..... HE Bowei, et al.
- 1906 Study on rural household garbage classification in Jinhua ..... HU Xinmin, et al.
- 1910 Effect of long-term fertilization on crop yield and soil physical and chemical properties in rice-vegetable rotation system ..... ZHANG Weiling, et al.
- 1913 Screening experiment of salt-tolerant rice varieties/lines for saline-alkali soil in Zhoushan ..... ZHU Jiali, et al.
- 1916 Effect of combination amendments on cadmium accumulation in soil and brown rice ..... WANG Jingwen, et al.
- 1919 Fertilizer utilization efficiency of rice variety Yongyou 1540 in Tongxiang ..... WU Yong, et al.
- 1921 Research and application of compound microbial fertilizer Aisi Si/TE in rice ..... TANG Yujie, et al.
- 1925 Screening of low Cd-accumulation rice varieties and their absorption and accumulation characteristics ..... HUANG Qiying, et al.
- 1928 Soil fertility analysis after soil testing and formula fertilization in Yancheng from 2007 to 2017 ..... SUN Jin, et al.
- 1932 Comparison of different fertilization patterns for slow-release organic fertilizer ..... WANG Dongdong, et al.
- 1935 Effect of sowing date and soil fertility on agronomic traits of quinoa variety Hongli ..... CHEN Yilang, et al.
- 1938 Adaptability of *indica-japonica* hybrid rice variety Zheyou 21 in Fujian Province ..... LIAN Jinwang
- 1941 Biological characteristics and cultivation techniques of a *japonica* variety Ning 84 ..... HUANG Xuan, et al.
- 1945 Late direct-seeding test of three rape varieties ..... JIANG Qi, et al.
- 1947 Comparison of millet display varieties in Zhejiang in 2020 ..... SHI Yiting, et al.
- 1950 Investigation and anatomic observation of *Torreya grandis* aborted seeds ..... WANG Zhe, et al.
- 1953 Current situation and consideration of *Fritillaria thunbergii* industry ..... RUAN Hongsheng, et al.
- 1956 Breeding and cultivation techniques of fresh jujube Xianzao No. 1 ..... HE Dingsheng, et al.
- 1960 Introduction experiment of five sweet cherry varieties in Zhoushan ..... WANG Chengyang, et al.
- 1962 Effect of habitat on photosynthetic physiology of *Vicia unijuga* and *Cryptotaenia japonica* ..... WANG Pan, et al.
- 1968 Effect of mosaic virus on appearance quality and yield of Huai'an red pepper ..... WANG Weiwei, et al.
- 1970 Effect of biodegradable seeding tray and spraying selenium on cucumber seedlings quality ..... ZHOU Juan, et al.
- 1977 Prediction of bZIP and its expression pattern analysis in blueberry ..... AN Shuang, et al.
- 1984 Effect of fertilizer reduction and substitution of chemical fertilizer by organic fertilizer on growth, yield and quality of garlic ..... QI Zhenyu, et al.
- 1988 Effect of rootstock and scion interaction on high temperature tolerance of grafted watermelon ..... XING Nailin, et al.
- 1991 Effect of kitchen waste biogas sludge on fruit quality of grafted watermelon ..... XING Nailin, et al.
- 1994 Effect of substrate formulation on growth and bioactive substance of *Hericium erinaceus* ..... LI Yuntao, et al.

## 《浙江农业科学》

### 委员

戚行江 李西明

孙国昌 张国平

徐建华 喻景权

吕晓男 吕仲贤

陶冠军 吴益伟

叶兴乾 成灿土

王岳钧 张志恒

蒋永清 郑可锋

董越勇 袁醉敏

### 特约栏目专家

胡锦平 张小明

张才德 陈俊伟

陈建明 王汉荣

吴 伟

- 1996 Phenotypic diversity analysis of radish germplasm resources in Zhejiang Province ..... LIN Zhiyin, et al.  
2000 Study on embryogenic callus induction in different sweet orange varieties ..... OUYANG Huan, et al.  
2005 Effect of seawater stress on seed germination of five Leguminosae plant ..... LIN Jiafa  
2008 Comparison and optimization of tissue culture system *Anthurium andraeanum* ..... ZHU Qiang, et al.  
2011 Evaluation of biological characteristics and erect-type for 25 *Camellia sasanqua* varieties ..... ZHANG Danfeng, et al.  
2014 Design and embodiment of Yangzhou Horticultural Exposition theme in post-epidemic era ..... WANG Yueyao, et al.  
2020 Analysis on soil nutrient and fertilization strategy of lawn in Hangzhou ..... XIAO Kunlun  
2023 Disease assay of pear germplasm resources to black spot ..... LI Qingyu, et al.  
2027 Control efficacy of polysaccharide resistance inducer against southern blight in *Scrophularia ningpoensis* Hemsl ..... ZHOU Jingqi, et al.  
2030 Effect of induced resistance of oligosaccharins plant activator protein on *Phaseolus vulgaris* Linn to root rot ..... CHEN Limin, et al.  
2034 Identification and biological characteristics of grape anthracnose in Hangzhou ..... XIAO Wenfei, et al.  
2036 Degradation of auxin herbicide 2, 4-D and its impact on crops and ecological environment ..... SHI Ying, et al.  
2044 Control efficacy of four chemical against rice bakanae and blight diseases ..... XUAN Guocan, et al.  
2046 Application of sexual attractants on cereal insects forecast ..... LIU Hongheng, et al.  
2049 Control efficacy of different fungicides against stem blight in water chestnut ..... LAI Xiaofang, et al.  
2051 Effect of grafting on melon resistance to *Monosporascus cannonballus* and its fruit quality ..... WANG Yinger, et al.  
2054 Effect of leaf structure optimization on yield and quality of flue-cured tobacco ..... LI Chengjun, et al.  
2059 Analysis of aroma precursors in Sichuan local air-cured tobacco ..... XIANG Huan, et al.  
2063 Flavor characteristics of green tea made by fresh leaves of Zhonghuang No. 1 and optimization of its manufacture techniques ..... GUO Li, et al.  
2067 Current situation and prospect of registered pesticides in chrysanthemum production ..... MENG Xiangang, et al.  
2070 Functional characteristics of upgraded bulk curing barn ..... ZAHNG Wei, et al.  
2074 Effect of temperature and light intensity on growth of four species of microalgae ..... LI Tengteng, et al.  
2079 Discussion on the development of aquaculture insurance based on meteorological index in Zhoushan ..... CHEN Pengfei  
2084 Effect of animal welfare on breeding benefit ..... CHENG Huanjie, et al.  
2087 Evaluation of body size and slaughter performance of Luhua chicken and cyan-shank partridge chickens in peach orchard feeding model ..... GAO Leiyuan, et al.  
2091 Molecular biological analysis of conserved effect of small closed Shaoxing duck population ..... LIU Lijun, et al.  
2095 Characteristics and utilization of perishable waste ..... LI Penghao, et al.  
2099 Practice and enlightenment of rural domestic waste classification in Qujiang district of Quzhou City ..... ZHOU Jing, et al.  
2103 Analysis of rainstorm process during Meiyu season and its impact on agriculture in Shaoxing ..... YAN Peiwen, et al.  
2107 Survey on the rural environmental pollution in Lintao County from the perspective of farmers ..... NAN Ximei, et al.  
2111 Spatio-temporal evolution difference analysis of vocational education and urban-rural integrated development ..... CHEN Xiangdie, et al.  
2115 Case study of digital technology empowering the revitalization of rural industry based on Yidukou Town ..... JI Chengrun  
2120 Impact factors of brand loyalty under the background of live broadcasting ..... KONG Huanhuan, et al.