

中文核心期刊  
中国农业核心期刊  
中国农林核心期刊  
美国化学文摘社 ( CAS ) 收录期刊

QK2234591  
ISSN 1001-0009  
CN 23-1247/S

# 北方園藝

NORTHERN HORTICULTURE

黑龙江省农业科学院 主办

2022/14



## 目 次

### 研究论文

- 云南省部分野生茄子农艺性状调查与分析 ..... 李信云, 蒋舒蕊, 李 静, 等(1)  
基于转录组测序红秋葵果实转色期花青素生物合成相关基因研究 ..... 王俊青, 张彦辉, 易婉莹, 等(9)  
不同品种酿酒葡萄果实发育期间营养物质动态变化及成熟期果实主成分分析  
..... 曹炜玉, 舒 楠, 温锦丽, 等(16)  
甜瓜不同发育阶段糖分积累与生理指标的相关分析 ..... 张凯莉, 张敏敏, 孔维萍, 等(24)  
'黄金芽' GST 基因在不同光照条件下的表达分析 ..... 牛占海, 王 锋, 宋来超, 等(31)

### 研究简报

- 外源硫化氢对温度胁迫下草莓开花进程和生理特性的影响 ..... 王爱国, 姜倩倩, 王淑子, 等(37)  
不同浓度氯吡脲处理对西瓜果实发育、品质和产量的影响 ..... 王林闯, 赵建锋, 刘 瑞, 等(43)

### 园林花卉

- 红叶石楠离体组培快繁技术体系研究 ..... 孙利忠, 陈 敬, 胡秀锦, 等(49)  
留园植物叶性状及其叶经济谱研究 ..... 张姗姗, 张 兴, 曲彦婷, 等(57)  
遮阴对云南紫三角梅生长生理特性的影响 ..... 胡龙胜, 汪沁林, 熊雪芬, 等(66)

### 资源·环境·生态

- 不同蓝莓根际微生物群落结构多样性及其差异 ..... 郑天骄, 王梦姣(76)

不同土壤改良剂对设施甘蓝土壤理化性质及产量的影响 ..... 陶加乐,李跃飞,李彬,等(86)

## 贮藏·加工·检测

甘草悬浮细胞生产总黄酮条件优化及抗氧化性研究 ..... 李伟,张东向,刘丽杰,等(93)

## 中草药

CO<sub>2</sub>浓度和温度升高对吉祥草生理生态特性的影响 ..... 黄兴敏,邓小红,彭海兰,等(101)

脱水速率对天冬种子发芽率和抗氧化酶活性的影响 ..... 朱艳霞,陈东亮,黄燕芬,等(109)

## 食用菌

香菇菌棒污染菌宛氏拟青霉的鉴定及其与香菇菌丝的相互作用 ..... 曹子健,王守现,郑素月,等(116)

## 产业论坛

乡村振兴战略背景下江西省蔬菜产业可持续发展困境与对策 ..... 魏建美,李庆,徐光耀,等(126)

## 农业经济

中国对欧盟食用菌出口贸易的影响因素分析 ..... 刘昱宏,杨旭,胡艳英,等(131)

## 农业经纬

黑龙江省地理标志农产品品牌培育策略探究 ..... 高荣伟,马书琴,李桃(139)

## 实用技术

酒泉戈壁蜜瓜有机基质穴栽关键技术 ..... 茹菊霞,张国森(146)

“辽葱 12 号”特征特性及配套栽培技术 ..... 贾俊香,杨国栋,李娜,等(149)

冀南地区露地辣椒节水减肥增效生产技术 ..... 李悦,李炎艳,程功,等(152)

油豆角反季节绿色生产栽培技术 ..... 刘思宇,王欣,李金龙,等(155)

## 新品种

大白菜新品种‘晋翠 1 号’的选育 ..... 张沛敏,李梅兰,赵建武,等(158)

## **Contents**

### **Research Papers**

- Investigation and Analysis of Agronomic Characters of Some Wild Eggplant in Yunnan Province ..... LI Xinyun,JIANG Shurui,Li Jing,et al(1)
- Study on Genes Related to Anthocyanin Biosynthesis at the Color Turning Stages in Red Okra Fruit Based on Transcriptome Sequencing ..... WANG Junqing,ZHANG Yanhui,YI Wanying,et al(9)
- Dynamic Changes of Nutrients in Different Varieties of Wine Grapes During Fruit Development Based on Principal Components ..... CAO Weiyu,SHU Nan,WEN Jinli,et al(16)
- Correlation Analysis of Sugar Accumulation and Physiological Indexes in Different Developmental Stages of Muskmelon ..... ZHANG Kaili,ZHANG Minmin,KONG Weiping,et al(24)
- Expression Analysis of *GST* Genes in ‘Huangjinya’ Under Different Light Conditions ..... NIU Zhanhai,WANG Zheng,SONG Laichao,et al(31)

### **Research Notes**

- Effects of Exogenous Hydrogen Sulfide on the Flowering Process and Physiological Characteristics of Strawberry Under Temperature Stress ..... WANG Aiguo,JIANG Qianqian,WANG Shuzi,et al(37)
- Effects of Different Concentrations of Forchlorfenuron on Fruit Development, Quality and Yield of Watermelon ..... WANG Linchuang,ZHAO Jianfeng,LIU Lu,et al(43)

### **Gardens and Flowers**

- Technical System of Rapid Propagation of Tissue Culture *in vitro* of *Photinia fraseri* ..... SUN Lizhong,CHEN Jing,HU Xiujin,et al(49)
- Study on Leaf Traits and Leaf Economic Spectrum of Lingering Garden ..... ZHANG Shanshan,ZHANG Xing,QU Yanting,et al(57)
- Effects of Shading on the Growth and Physiological Characteristics of Yunnan Purple *Bougainvillea spectabilis* ..... HU Longsheng,WANG Qinlin,XIONG Xuefen,et al(66)

### **Resource · Environment · Ecology**

- Diversity and Differences of Rhizosphere Microbial Community Structure in Different Blueberries ..... ZHENG Tianjiao,WANG Mengjiao(76)

Effects of Different Soil Amendments on Soil Physicochemical Properties and Yield of Greenhouse Cabbage

..... TAO Jiale, LI Yuefei, LI Bin, et al(86)

## Storage · Processing · Detection

Optimization of Production Conditions and Antioxidant Activity of Total Flavonoids From *Glycyrrhiza uralensis* Fisch. Suspension Cells

..... LI Wei, ZHANG Dongxiang, LIU Lijie, et al(93)

## Chinese Herbal Medicine

Effects of Elevated CO<sub>2</sub> Concentration and Temperature on Ecophysiological Characteristics of *Reineckia carnea* (Andr.) Kunth

..... HUANG Xingmin, DENG Xiaohong, PENG Hailan, et al(101)

Effects of Drying Rates on Germination Rate and Antioxidant Enzyme Activities of *Asparagus cochinchinensis* Seeds

..... ZHU Yanxia, CHEN Dongliang, HUANG Yanfen, et al(109)

## Edible Fungi

Identification of *Paecilomyces variotii* on Contaminated Artificial Bed-logs of *Lentinula edodes* and Their Interactions

..... CAO Zijian, WANG Shouxian, ZHENG Suyue, et al(116)

## Industry Forum

Dilemma and Countermeasures of Sustainable Development of Jiangxi Vegetable Industry Under the Background of Rural Revitalization Strategy

..... WEI Jianmei, LI Qing, XU Guangyao, et al(126)

## Agricultural Economy

Research on the Influencing Factors of China's Export Trade of Edible Fungi to EU ..... LIU Yuhong, YANG Xu, HU Yanying, et al(131)

## Agricultural Relevant Issues

Research on the Brand Cultivation Path of Geographical Indication of Agricultural Products in Heilongjiang Province

..... GAO Rongwei, MA Shuqin, LI Tao(139)

## Practical Technique

Key Technologies for Hole Planting With Organic Substrate of Honeydew Melon in Gobi Desert of Jiuquan ..... RU Juxia, ZHANG Guosen(146)

Characteristics and Cultivation Techniques of 'Liaocong 12' ..... JIA Junxiang, YANG Guodong, LI Na, et al(149)

Green Production Technology of Snap Bean in Anti-season Cultivation ..... LIU Siyu, WANG Xin, LI Jinlong, et al(155)

## New Variety

Breeding of a New Chinese Cabbage Cultivar 'Jincui 1' ..... ZHANG Peimin, LI Meialn, ZHAO Jianwu, et al(158)

# 《北方园艺》第六届编委会

**顾    问:** 李天来

**主任委员:** 刘  娣

**副主任委员:** 李景富  来永才  耿月伟  秦智伟  陈青云  李建设  孙素芬  闫文义  陶可全

**委员:** (以姓氏笔画为序)

王秀峰  王清章  王傲雪  冯国军  孙日飞  孙振元  孙素芬  毕洪文  巩振辉  
来永才  刘延杰  刘洪章  朴钟云  齐红岩  许  勇  许修宏  闫文义  陈青云  
陈宗礼  陈立新  李文华  李天来  李  敏  李建设  李景富  吴凤芝  张振文  
张启翔  罗言云  杨柳青  郭太君  秦智伟  徐启江  耿月伟  崔继哲  韩贵清

## 黑龙江农业科技杂志社

**社    长:** 张必弦

**副社长:** 牛佩海  王家军

**主编:** 陶可全

**执行主编:** 王  冠

**责任编辑:** 贺雨青

**编    辑:** 王  超  王昕奕  吴  迪  张  欢  王美璇  李  想  闫  雨

**美术编辑:** 龙江雨

## 《北方园艺》

BEIFANG YUANYI

(半月刊, 1977 年创刊)

2022 年第 14 期 (7 月下), 总第 509 期

## NORTHERN HORTICULTURE

(Half Monthly, Started in 1977)

No.17, 2022 (The Second Half of July), Sum No. 509

**主管单位** 黑龙江省农业科学院

**Responsible Institution** Heilongjiang Academy of Agricultural Sciences

**主办单位** 黑龙江省农业科学院

**Sponsored by** Heilongjiang Academy of Agricultural Sciences

**编辑出版** 黑龙江农业科技杂志社

**Edited and Published by** Heilongjiang Journal Press of Agricultural Science and Technology

**地    址** 哈尔滨市南岗区学府路 368 号

**Address** 368 Xuefu Road, Nangang District, Harbin, P.R. of China

**邮政编码** 150086

**Postalcode** 150086

**电    话** 0451- 51522860

**Tel** 0451-51522860

**电子信箱** bfyybjb@vip.163.com

**E-mail** bfyybjb@vip.163.com

**网    址** http://bfyy.haasep.cn

**Web** http://bfyy.haasep.cn

**印    刷** 哈尔滨博奇印刷有限公司

**Printed by** Harbin Boqi Printing Co. Ltd.

**国内发行** 哈尔滨市邮局

**Domestic Distributed by** Harbin Post Office

**国外发行** 中国国际图书贸易总公司

**Oversea Distributed by** China International Book Trading Group Co. Ltd.

**出版日期** 每月 15、30 日

**Publishing Date** Monthly 15th, 30th

国内邮发代号: 14-150

ISSN 1001-0009

ISSN 1001-0009

国外邮发代号: BM-5011

CN 23-1247/S

定  价: 35.00 元

广告经营许可证: 哈南市监广变字 [2019] 第 10 号

