

1977 年创刊 全国中文核心期刊

北方园艺

北方园艺

Northern Horticulture

总第 227 期

2010 年第 20 期(10 月下)

1977 年创刊

◆半月刊◆ 2010 年第 20 期(10 月下)

总第 227 期

CONTENTS

主管单位

黑龙江省农业科学院

主办单位

黑龙江省园艺学会

黑龙江省农业科学院

编辑出版中心

编辑出版

《北方园艺》编辑部

编辑出版中心

主 任 毕洪文

副 主 任 苗玉新 黄峰华

主 编 毕洪文

责任编辑 贾屹萍 黄峰华

编 辑 刘 博 曲红云

李晓晨 王 雪

王红蕾

美术编辑 许 真

广告发行 白晓琳 李佩英

地 址 哈尔滨市南岗区

学府路 368 号

邮 编 150086

电 话 0451-86674276

电子信箱 bfybjb@163.com

印 刷 哈尔滨博奇彩色印刷有限公司

国内发行 哈尔滨市邮局

邮发代号 14-150

订 阅 全国各地邮局

国外发行 中国国际图书贸易总公司

(北京 399 信箱)

国外代号 M 5011

ISSN 1001-0009

中国标准连续出版号 CN 23-1247/S

广告经营许可证号 2301070000009

出版日期 每月 15、30 日

定 价 6 元

试验研究

不同集雨方式对土壤含水量和苹果产量的影响

..... 赵 刚,樊廷录,王 勇,等(1)

不同葡萄品种膜质过氧化和保护酶活性对盐胁迫的响应

..... 秦红艳,沈育杰,李昌禹,等(4)

基于通径分析的枣树发芽率影响因子研究

..... 南 娟,汪有科,李晓彬,等(10)

红树莓色素提取及稳定性研究..... 王 丰,明 哲(14)

辣椒施用保水剂效果研究..... 黄 伟,朱 恒,张俊花,等(19)

自然高温条件下黄瓜耐热性成株期鉴定技术研究

..... 聂文娟,孟焕文,程智慧,等(22)

大棚春番茄器官发育与环境要素的关系分析

..... 赖琳玲,程智慧,滕 林,等(26)

红花继木花红色素提取及稳定性研究..... 蔡定建,熊以俊,吴华龙,等(30)

研究简报

栃乙女和维塔娜草莓品种的香味成分分析

..... 王桂霞,张运涛,董 静,等(34)

不同干燥及贮藏方法对猕猴桃花粉活力的影响

..... 姚春潮,龙周侠,刘旭峰,等(37)

秋锦苹果苦痘病与果实矿质元素含量和品质相关性初步研究

..... 贾晓辉,王文辉,王荣华,等(39)

专用膨大剂对红提葡萄光合特性影响的研究

..... 郭绍杰,李 铭,苏学德,等(42)

万方数据

目次

软枣猕猴桃对光强和二氧化碳浓度的响应	范书田,艾军,王振兴,等(44)
两个石榴品种结果期光合特性的比较	刘永碧,杨萑(46)
桃种质资源冻害情况调查报告	赵剑波,陈青华,郭继英,等(49)
苹果园沙打旺生草栽培试验	丛佩娥,宋海森,赵娜(51)
薄皮甜瓜抗冷性的苗期鉴定	徐永清,温玲,王光海,等(53)
复混肥对油白菜生长的影响	陈海梅(55)
不同萝卜品种营养成分比较	张丽,宋曙辉,王文琪,等(57)
外源一氧化氮对盐胁迫下白菜种子萌发和幼苗抗盐性的影响	马光(59)
催芽温度对油葵芽苗菜生长的影响	刘乃森,刘福霞(62)
低浓度 NaCl 对苋菜生长的影响	王宝增,姚冬琳,王桂香(64)
实苎葱种子成熟过程中物质含量变化和萌发能力研究	帕提曼·阿布都热合曼,林辰壹,阿依古丽·铁木儿,等(66)
极香罗勒芳香油成分 GC-MS 分析	王艳,周荣,任吉君,等(69)
膨大素对淮山内源激素变化的影响	吴建明,甘秀芹,韦本辉,等(71)

设施园艺

NaHSO ₃ 和 KHCO ₃ 复合处理对设施黄瓜幼苗生长的影响	李明,王怀栋,于翠玲,等(74)
温室葡萄光照分布与果实品质研究	翟秋喜,魏丽红,杜玉虎(76)
设施无土栽培蔬菜硝酸盐含量的控制方法	刘文科,杨其长(79)
电照补光在叶用紫苏日光温室栽培生产中应用效果	李贺年,张利英,张会永,等(83)
摘除花瓣防治日光温室番茄灰霉病试验	田溪(85)
青海西宁地区日光温室冬季环境测试分析	何芬,周长吉,齐飞,等(86)
北京地区温室茶树引种初探	王德芳,王颖,吕炯章(90)
温度对设施桃花器官发育的影响	欧阳汝欣(93)

栽培技术

☆果园☆

果药立体高效栽培模式	陈胜利(96)
陕西猕猴桃果锈形成原因及解决对策	张中海,王美丽,饶景萍(97)

☆菜园☆

西南地区大果型黄瓜杂交制种增产技术	李思武,杨长楷,李昌文,等(99)
-------------------------	-------------------

园林花卉

☆植物☆

- 有髯鸢尾品种引进及露地栽培技术研究 樊璐(100)
- 大丽花花朵数量性状遗传变异及相关性分析 刘芳,苑兆和,丰震,等(104)
- NaCl胁迫对枳根各器官 Na^+ 、 K^+ 吸收的影响 冯蕾(108)
- 朱顶红盆花花期调控技术研究 吕文涛,周玉珍,成海钟,等(110)
- 地被用龙柏的嫁接培育技术 迟名桂,尹锋,刘祥军(112)
- 沈阳地区水生植物资源的调查及其应用 薛晟岩,石晓艳,赵红波,等(114)

☆景观☆

- 马家沟滨水环境公共设施规划设计策略 许大为,张欣宇(117)
- 高速公路边坡生态防护施工技术研究 王蓬(120)
- 上海市嵌草型铺装的初步调研 阙彩霞,胡永红,秦俊,等(123)

生物技术

- 一种高质量枇杷基因组 DNA 提取方法 杨芩,付燕,邓群仙,等(126)
- 番茄“嘉宝”子叶再生体系的建立 王娟,程籍,李立芹(130)
- 甜瓜子叶组织培养与植株再生体系建立的研究 施先锋,孙玉宏,陈钢,等(133)
- 辣椒根尖细胞微核制片方法的探讨 王德慧,郭长虹,郭亚华,等(136)
- 东方百合 X 射线急性辐照后代的生长及 POD 同工酶特性研究 黄海涛,王丹,周丽娟(138)
- 火焰南天竹组织培养的研究 邓玉莹,吕秀立(141)
- 桉叶唐棣初代培养影响因素研究 杜保国,杨锋利,杨途熙,等(143)
- 路易斯安娜鸢尾组培工厂化生产技术研究 刘慧春,朱开元,周江华(146)
- 纤维素分解菌 ZJW-4 产酶条件研究 唐蕊,张雪辉(148)
- 羊肚菌菌丝体总 RNA 提取方法的比较 陈国梁,贺晓龙,高小鹏,等(150)
- 绿花重瓣铁线莲愈伤组织诱导研究 张丽琼,常权记,廖咸康,等(152)
- 白牛槭休眠芽苞的离体培养 顾德峰,赵和祥,王刚(154)
- 黑曲霉真菌诱导子对喜树培养细胞喜树碱积累的影响 潘学武,董妍玲,石亚亚(156)

植物保护

- 10%吡虫啉 WP 防治苹果黄蚜试验研究 刘花粉,李俊霞,单文荣(159)
- 甜瓜炭疽病的发生与防治 张丽凤,石佩君,孙静,等(161)
- 宁夏贺兰山农牧场温室蔬菜根际土壤线虫的初步鉴定 马爱瑛,张靠稳,任玉锋,等(162)

贮藏保鲜加工

- 利用 RP-HPLC 法研究罗汉果采后贮藏期甜苷 V 的含量变化趋势 梁成钦,周先丽,刘林文,等(164)

简易差压预冷在兰州大接杏贮藏保鲜上的应用 张文利,吴步梅,彭志云,等(167)

采前处理对牛奶葡萄贮藏过程中生理生化特征的影响 何 扩,孙丰梅,兰凤英,等(169)

食用菌

沼渣沼液在双孢蘑菇生产中的应用 刘德源(171)

高寒地区夏季利用金针菇等废料栽培鸡腿菇试验 高淑敏,刘海林(174)

黑木耳菌糠粗纤维素酶和木聚糖酶浸提条件研究 马怀良,龚振杰,陈 欢,等(176)

中 草 药

猪苓多糖提取工艺的优化 王晶晶,杨春文,张莹莹,等(178)

光照、温度和 NaCl 对益母草种子萌发的影响 芦站根,周文杰,孙世卫,等(181)

鸡血藤扦插育苗技术 吕惠珍,黄雪彦,梁定展,等(183)

枸杞园间作绿肥作物栽培技术研究 张宏亮,郭石生,陈占全,等(185)

黄檗的种质资源学研究 限 颖,王立军(189)

产业论坛

辽宁省果树生产发展的优势条件 张秉宇(192)

专题综述

1-甲基环丙烯在苹果贮藏保鲜中的应用研究进展 朱金薇,冯江涛,延 卫(195)

植物多糖抗炎活性的研究进展 张丽娇,费 瑞,高立宏,等(199)

金钱松研究进展与展望 崔青云,王小德(202)

DREB 类转录因子及其在植物抗逆基因工程改良中的应用进展 李志亮,吴忠义,叶 嘉,等(206)

刺山柑综合价值及繁殖技术研究概况 杨 恒,赵惠恩(210)

天然色素的萃取与纯化 张蓝月,刘 念,叶向斌(216)

拮抗酵母菌控制果蔬采后病害的研究进展 耿 鹏,杨 柳,郝卫宁,等(220)

经验交流

京欣西瓜早春“双棚三膜”栽培技术 李 新(226)

农业经纬

山东产业结构的演进特征与效益评价研究 郭 宁,李 新(228)

Northern Horticulture

Main Contents

Experimentation and Research

- Effect of Different Rainfall Collection Technology to Soil Water Content and Apples Yield ZHAO Gang, FAN Ting-lu, WANG Yong, et al(1)
- Response of Leaf Lipid Peroxidation and Protective Enzyme Activity of Different Grape Varieties to Salt Stress QIN Hong-yan, SHEN Yu-jie, LI Chang-yu, et al(4)
- Study on Factors of Jujube Germination Rate Based on Path Anlysis NAN Juan, WANG You-ke, LI Xiao-bin, et al(10)
- Research on Extraction and Stability of Pigment of Raspberry WANG Feng, MING Zhe(14)
- Effect of Applying Water Absorbent on Red Pepper HUANG Wei, ZHU Huan, ZHANG Jun-hua, et al(19)
- Research on Technique of Heat Tolerance Identification in Seedling Stage of Cucumber under Natural High Temperature NIE Wen-juan, MENG Huan-wen, CHENG Zhi-hui, et al(22)
- Dynamic Relationship Between the Development of Tomato Organ and Environmental Element in the Greenhouse LAI Lin-ling, CHENG Zhi-hui, TENG Lin, et al(26)
- Study of Red Flower Pigment Extraction and its stability of China Lotopopetal CAI Ding-jian, XIONG Yi-jun, WU Hua-long, et al(30)

Research Notes

- Analysis of Aroma Components of Strawberry Cultivars in Akihime and Ventana WANG Gui-xia, ZHANG Yun-tao, DONG Jing, et al(34)
- Effects of Different Dryness and Storage Methods on Pollen Viability in *Actinidia deliciosa* YAO Chun-chao, LONG Zhou-xia, LIU Xu-feng, et al(37)
- Preliminary Study on Correlation Between Mineral Element Content and Quality in Bitter Pit Apple JIA Xiao-hui, WANG Wen-hui, WANG Rong-hua, et al(39)
- Study of Leavening Agent of Grape on Photosynthetic Characteristics of the Red Globe Grape GUO Shao-jie, LI Ming, SU Xue-de, et al(42)
- Responses of Net Photosynthetic Rate to Light Intensity and CO₂ Concentration in *Actinidia arguta* (Seib, et Zucc,) Planch, ex Miq. FAN Shu-tian, AI Jun, WANG Zhen-xing, et al(44)
- Comparison of the Photosynthetic Characteristics of Pomegranate with Two Strains LIU Yong-bi, YANG Huan (46)
- Investigation of Cold Damage to Peach Cultivars in Germplasm Plot ZHAO Jian-bo, CHEN Qing-hua, GUO Ji-ying, et al(49)
- Cultivation Test of Adsurgens Grass in Apple Orchard CONG Pei-e, SONG Hai-Shen, ZHAO Na(51)
- Identification on Chilling Ristance of Muskmelon Seedling XU Yong-qing, WEN Ling, WANG Guang-hai, et al(53)
- Effect of the Compound Fertilizers on Growth of *Brassica campestris* L. CHEN Hai-mei(55)
- Comparison of Nutrition Components in Different Radish Cultivars ZHNAG Li, SONG Shu-hui, WANG Wen-qi, et al(57)
- Effects of Exogenous Nitric Oxide on Seed Germination and Seedling Resistance of Chinese Cabbage under Salt Stress MA Guang(59)
- Effects of Germination Temperature on Growth of Oil Sunflower Sprout Seedling LIU Nai-sen, LIU Fu-xia(62)
- Effects of Low Concentration of NaCl on the Growth of *Amaranthus tricolor* WANG Bao-zeng, YAO Dong-lin, WANG Gui-xiang(64)
- Study on the Seed Substances Content and Germination Ability during the Ripening Process of *Allium galanthum* L. PATIMAN Abdurahiman, LIN Chen-yi, AYGUL Tumor, et al(66)
- Analysis of the Chemical Constituents of Volatile Oil in Basil "*Jixiang*" WANG Yan, ZHOU Rong, REN Ji-jun, et al(69)
- Effect of Expansin on Endogenous Hormones of Yam WU Jian-ming, GAN Xiu-qin, WEI Ben-hui, et al(71)

Facilities Horticulture

- Effect of NaHSO₃ and KHCO₃ Combined Treatment on Cucumber Seeding Growth in Greenhouse LI Ming, WANG Huai-dong, YU Cui-ling, et al(74)
- Light Distribution and Fruit Quality of Grape in Greenhouse ZHAI Qiu-xi, WEI Li-hong, DU Yu-hu(76)
- Control Methods on Nitrate Content of Facilities Vegetables under Soilless Cultivation LIU Wen-ke, YANG Qi-chang(79)
- Study on the Effects of Electric Light on *Perilla* Leaf Planting in Sunlight Greenhouse LI He-nian, ZHANG Li-ying, ZHANG Hui-yong, et al(83)
- Solar Greenhouse Environment Test and Analysis in Winter of Qinghai HE Fen, ZHOU Chang-ji, QI Fei, et al(86)
- Study on Tea Plant Introduction in Greenhouse in Beijing Area WANG De-fang, WANG Ying, LV Jiong-zhang(90)
- Effect of Temperature on Greenhouse Peach Floral Organ Growth OUYANG Ru-xin(93)

Garden Design and Garden Plants

- Introduction and Outdoor Growing Techniques of Cultivars of *Bearded irises* in Xi'an FAN Lu(100)
- Genetic Variation and Correlation Analysis of Quantitative Traits of *Dahlia* Flowers LIU Fang, YUAN Zhao-he, FENG Zhen, et al(104)
- Effect of NaCl Stress on Na⁺ and K⁺ Uptakes by Different Organs of *Hovenia dulcis* FENG Lei (108)
- Study on Flowering Time Regulators of *Hippeastrum hybridum* LV Wen-tao, ZHOU Yu-zhen, CHENG Hai-zhong, et al(110)
- Aquatic Resources Investigation and Application in Shenyang Area XUE Sheng-yan, SHI Xiao-yan, ZHAO Hong-bo, et al(114)
- Majiajou Public Facilities Along the Waterfront Environment Planning and Design Strategy XU Da-wei, ZHANG Xin-yu(117)
- Research on Sideslope Ecological Protection of the Express Highway WANG Peng(120)

Responsible Institution

Heilongjiang Academy of Agricultural Sciences

Sponsored by

Horticultural Insititute of Heilongjiang

Heilongjiang Academy of Agricultural Sciences

Edited & Published by

Editorial Department of NORTHERN HORTICULTURE

Editing and Publishing Center

Director BI Hong-wen

Vice-director MIAO Yu-xin HUANG Feng-hua

Address

368 Xuefu Road, Nangang District, Harbin, 150086, China

Tel 0451-86674276

Principium Investigation of Glass Planting Pavement in Shanghai QUE Cai-xia, HU Yong-hong, QIN Jun, et al(123)

Biotechnology

- A Method for Excellent Quality DNA Extraction of Loquat YANG Qin, FU Yan, DENG Qun-xian, et al(126)
- Study on Regenerative System of Tomato 'Jiabao' WANG Juan, CHENG Ji, LI Li-qin (130)
- Study on Tissue Culture and Plantlet Regeneration from the Cotyledon of Melon SHI Xian-feng, SUN Yu-hong, CHEN Gang, et al(133)
- A Method for Micronucleus Preparation Using Pepper Root Tips WANG De-hui, GUO Chang-hong, GUO Ya-hua, et al(136)
- Study on Growth and POD Isozymes Activities of Offspring of Oriental Lily Irradiated by X-ray Acute Irradiation HUANG Hai-tao, WANG Dan, ZHOU Li-juan(138)
- Study on Tissue Culuture of *Nandina domestica* 'Fire power' DENG Yu-ying, LV Xiu-li (141)
- Study on the Influencing Factors of Initial Culture of *Amelanchier alni folia* Nutt DU Bao-guo, YANG Feng-li, YANG Tu-xi, et al(143)
- Mericlone Production of *Louisiana Iris* LIU Hui-chun, ZHU Kai-yuan, ZHOU Jiang-hua(146)
- Study on the Optimum Cellulase-producing Conditions of Cellulase-decomposing Microorganism ZJW-4 TANG Rui, ZHANG Xue-hui(148)
- Comparison of Several Methods for Extracting of Total RNA from *Marchella Mycelium* CHEN Guo-liang, HE Xiao-long, GAO Xiao-peng, et al(150)
- Inducement of *Clematis florida* var. *plena* Callus ZHANG Li-qiong, CHANG Quan-ji, LIAO Xian-kang, et al(152)
- In Vitro Culture of Resting Bud of *Acer mandshuricum* Maxim GU De-feng, ZHAO He-xiang, WANG Gang(154)
- Effects of *Aspergillus niger* as a Fungal Elicitor on *Camptothecin* Accumulation with Cell Cultures of *Camptotheca acuminata* Decaisne PAN Xue-wu, DONG Yan-ling, SHI Ya-ya(156)

Plant Protection

- Research on Rhizosphere Soil Nematode on Vegetable in Greenhouses of Helanshan Farm in Ningxia MA Ai-ying, ZHANG Kao-wen, REN Yu-feng, et al(162)

Storage and Processing

- Study on the Change of Mogroside V Concentration in *Siraitia Grosvenorii* Fruits During Postharvest Storage by Using RP-HPLC LIANG Chen-qin, ZHOU Xian-li, LIU Lin-wen, et al(164)
- Effect of Preharvest Treatment on Milk Grape of Physiological and Biochemical Character in Store HE Kuo, SUN Feng-mei, LAN Feng-ying, et al(169)

Edible Fungi

- Utilization of Biogas Residue and Liquid in *Agaricus bisporus* Production LIU De-yuan(171)
- Study on Conditions of Extracting Crude CMCase and Xylanase from *Auricularia auricula-judae* Residue MA Huai-liang, GONG Zhen-jie, CHEN Huan, et al(176)

Chinese Traditional Medicine

- Optimize and Search on Process for Extraction of *Polyporus umbellatus* Polysaccharides WANG Jing-jing, YANG Chun-wen, ZHANG Ying-ying, et al(178)
- Effects of Light and Temperature and NaCl on Germination of *Leonurus artemisia* S. Y. Hu Seeds LU Zhan-gen, ZHOU Wen-jie, SUN Shi-wei, et al(181)
- Cultivation Techniques of Intercrop between *Matrimony vine* and Green Manure Crop ZHANG Hong-liang, GUO Shi-sheng, CHEN Zhan-quan, et al(185)
- The Researching of Germplasm Resource on Amur Corktree XIAN Ying, WANG Li-jun (189)

Industry Forum

- Advantage of Development of Fruit Tree Production in Liaoning Province ZHANG Bing-yu(192)

Summarize

- Progress on the Application of 1-MCP for the Apple Storage ZHU Jin-wei, FENG Jiang-tao, YAN Wei(195)
- Research Progress on Anti-inflammatory Activities of Polysaccharides from Plant ZHANG Li-jiao, FEI Rui, GAO Li-hong, et al(199)
- Research Progress and Outlook of *Pseudolarix kamepferei* CUI Qing-yun, WANG Xiao-de(202)
- Study Advancements of DREB Transcription Factors and its Application in Plant Stress Tolerance Genetic Engineering LI Zhi-liang, WU Zhong-yi, YE Jia, et al(206)
- A Review of Study on the Values and Propagation Techniques of *Capparis spinosa* YANG Heng, ZHAO Hui-en(210)
- Research on Extracting and Purifying Methods of Natural Pigments ZHANG Lan-yue, LIU Nian, YE Xiang-bin(216)
- Research Advances on the Biological Control of Postharvest Diseases of Fruits and Vegetables with Antagonistic Yeasts GENG Peng, YANG Liu, HAO Wei-ning, et al(220)

Agricultural Relavant Issues

- Study on Characteristics and Efficiency Evaluation of Industrial Structure in Shandong Province GUO Ning, LI Xin(228)

Editor-in-chief BI Hong-wen

Chief Editor JIA Dan-ping HUANG Feng-hua

Editor LIU Bo QU Hong-yun

LI Xiao-chen WANG Xue

WANG Hong-lei

Artistic Editor XU Zhen

Advertising BAI Xiao-lin LI Pei-ying

E-mail bfybjb@163.com

Printed by

Harbin Boqi Colour Printing Company Limited

Domestic Distributed by

Harbin Post Office

Oversea Distributed by

China International Book Trading Corporation(P.O.Box 399)

Publishing Date Monthly 15th, 30th

Price 6 Yuan