

中文核心期刊  
中国农业核心期刊  
美国化学文摘社（CAS）收录期刊

全国优秀农业期刊  
中国北方优秀期刊  
黑龙江省优秀期刊

ISSN 1001-0009  
CN 23-1247/S

# 北方园艺

NORTHERN HORTICULTURE

黑龙江省农业科学院  
黑龙江省园艺学会

主办

4  
2016

# 北方园艺

(1977 年创刊·半月刊)

BEIFANG YUANYI

总第 355 期 2016 年第 4 期 2 月(下)

## 目 次

### ◆试验研究◆

- 四种葱属植物野生和栽培农艺性状观察与分析 ..... 刘桂霞,王彬彬,吝亚杰,等(1)  
钩粟不同种源间苗期切根处理比较试验 ..... 王勇,刘晓蔚,刘雄盛,等(6)  
樱桃不同结果母枝直径与其果实品质变化的相关性 ..... 金方伦,岳宣,黎明,等(12)  
不同葡萄品种在西昌地区适应性研究 ..... 董华芳(19)  
不同产地酿酒葡萄“赤霞珠”果实中挥发性香气物质差异性研究 ..... 赵悦,孙玉霞,孙庆扬,等(23)  
枣自然实生后代酸枣类型主要性状调查 ..... 王瑶,申连英,毛永民,等(28)

### ◆研究简报◆

- 五个蜜梨品种叶形与果实品质特性的测定 ..... 赵杰,唐赵莲,梁晨浩,等(33)  
修剪时期对早实核桃枝条中淀粉含量的影响 ..... 陈利英,马华冰,强静莎,等(35)  
南高丛蓝莓引种栽培试验初报 ..... 宋祥兰,王兰英,谢再成,等(39)  
灰色关联度分析法在白菜品种耐热性品比试验中的应用 ..... 胡艳平,吴海云,伍壮生,等(42)

不同钙素肥料对大蒜农艺性状及产量的影响 ..... 王志坚, 刘金文, 王崇华, 等(45)

## ◆设施园艺◆

日光温室越冬长季节番茄多抗品种筛选及配套栽培技术 ..... 郭敬华, 董灵迪, 焦永刚, 等(48)

不同授粉方式对日光温室草莓产量、品质及效益的影响 ..... 彭佃亮, 刘永光, 夏海波, 等(52)

“京”系列葡萄品种在温室中的促成栽培表现 ..... 李 峰, 张会臣, 张仲新, 等(56)

宁夏盐碱地温室越冬番茄秸秆生物反应堆技术试验 ..... 赵金霞, 杨俊丽, 杨雨翠, 等(58)

## ◆栽培技术◆

### ☆菜园☆

菜豆新品种“丽芸2号”山地栽培技术 ..... 马瑞芳, 章根儿, 张典勇(62)

## ◆园林花卉◆

### ☆植物☆

种植国槐和刺槐对滨海盐碱地理化性质的影响 ..... 卢兴霞, 刘 艳, 杨静慧, 等(64)

不同处理方法对梧桐种子萌发和幼苗生长的影响 ..... 翟书华, 殷根深, 杨晓虹, 等(68)

叶面喷施水杨酸对崇明水仙生长的影响 ..... 张馨之, 刘晓敏, 张睿婧, 等(71)

湖南省株洲城市绿化树种调查与应用 ..... 谭焱文, 彭重华(75)

云南球花报春资源调查研究 ..... 卢红春, 解玮佳, 李世峰, 等(78)

溪荪鸢尾种苗繁育与工程苗栽培技术 ..... 才 燕, 董 然, 赵春莉, 等(81)

### ☆景观☆

贵州乡土木兰科植物园林观赏研究 ..... 田 凡, 陈志萍, 李 鹤, 等(83)

城市垃圾填埋场生态设计 ..... 王志磊,翟付顺,赵红霞(88)

### ◆生物技术◆

冬凌草转录组 SSR 位点分析及多态性初步评价 ..... 苏秀红,李庆磊,陈随清,等(93)

秋子梨叶片高效再生体系的构建 ..... 王德芬,张 梅,李鼎立,等(97)

山杏愈伤组织诱导及植株再生 ..... 何炎红,吴高殷,白玉娥,等(101)

苹果矮化砧木组织培养及脱病毒技术 ..... 杨艳敏,魏永祥,刘 成,等(107)

### ◆植物保护◆

不同甜瓜材料白粉病抗性鉴定 ..... 王惠林,贾宋楠,郑 健(112)

蓝莓枝枯病枝剪口涂抹药剂效果试验 ..... 董克锋,岳清华,高 勇,等(118)

色板诱杀技术的防治对象和常用颜色谱 ..... 高 宇,韩 琪,刘 杰,等(120)

### ◆贮藏保鲜加工◆

“青大 1 号”紫花苜蓿黄酮类物质提取方法优化 ..... 尹 卫,杨国柱,张承胜,等(125)

不同处理对采后“南果梨”贮藏期间果皮钙形态及褐变的影响 ..... 李 磊,涂郑禹,宋 翔,等(128)

质地多方面分析三个桃品种果实采后质地的变化 ..... 李永红,张立莎,常瑞丰,等(133)

### ◆食用菌◆

新疆阿魏菇的干燥工艺优化及活性成分初步鉴定 ..... 王为兰,陈开旭,马 纪,等(137)

平泉县反季节香菇栽培模式研究 ..... 张宝军(143)

## ◆中草药◆

- 新疆主栽枸杞品种蛋白质与氨基酸含量及组分分析 ..... 刘凤兰,王建友,毛金梅,等(146)  
接种外生菌根菌对无籽刺梨生长和碳、氮、磷分布的影响 ..... 张珍明,贺红早,张家春,等(151)  
紫花补血草叶片诱导植株再生与快速繁殖 ..... 解卫海,曲晓杰,柏新富(155)

## ◆土壤与肥料◆

- 不同处理对设施根结线虫控制和土壤氮磷环境风险的影响 ..... 卢树昌,翁福军,王 瑞,等(160)  
不同栽培模式对生姜大田土壤酶活性及土壤养分的动态影响 ..... 韩春梅,李春龙,叶少平,等(163)  
石灰氮对老桃园土壤和再植桃苗生长的影响 ..... 顾燕芬,赵宝明,赵 杰(168)  
基于盆栽试验的地膜残留对土壤微生物的影响 ..... 宋世杰,赵晓光,聂文杰,等(172)

## ◆专题综述◆

- 植物抑菌剂抑菌机理的研究方法进展 ..... 李 婷,周 月,宋丽雅,等(179)  
我国果园土壤有机质研究进展 ..... 寇建村,杨文权,李尚玮,等(185)  
我国野生越橘资源多样性及其最新研究动态 ..... 王云生(191)

## ◆农业经纬◆

- 宁夏科技扶贫指导员“百人团”计划实施效果评估 ..... 刘艳华,赵功强,易静华(198)  
新型职业农民对子女继承农业意愿的影响因素研究 ..... 吕雅辉,周 瑾,张 亮,等(202)

## ◆经验交流◆

- 云南山地核桃提质增效关键技术示范与推广 ..... 熊新武,刘金凤,李俊南,等(207)

# NORTHERN HORTICULTURE

(Started in 1977, Half Monthly)

Total NO. 355, NO. 4(2016), The Second Half of February

## Contents

### ◆ Experimentation and Research ◆

- Analysis of Agronomic Characters of Four *Allium* Species Under Wild and Cultivated Conditions ..... LIU Guixia, WANG Binbin, LIN Yajie, et al(1)  
Comparison Experiment of Root Cutting at Seedling Stage in Different Provenances of *Castanopsis tibetana* Hance ..... WANG Yong, LIU Xiaowei, LIU Xiongsheng, et al(6)  
Correlation of the Cherry Fruit Bearing Stem Diameter and Fruit Quality Changes ..... JIN Fanglun, YUE Xuan, LI Ming, et al(12)  
Study on Adaptability of Different Grape Varieties in Xichang Area ..... DONG Huafang(19)  
Difference of Volatile Aroma Compounds in Ripe Berries of Wine Grape (Cabernet Sauvignon) Among Production Regions ..... ZHAO Yue, SUN Yuxia, SUN Qingyang, et al(23)  
Investigation of Main Characters of Wild Jujube Type Hybrids From Open Pollinated Chinese Jujube (*Ziziphus jujuba* Mill.) Progenies ..... WANG Yao, SHEN Lianying, MAO Yongmin, et al(28)

### ◆ Research Notes ◆

- Determination of Five Varieties of Pear for Leaf and Fruit Characteristics ..... ZHAO Jie, TANG Zhaolian, LIANG Chenhao, et al(33)  
Effect of Pruning Period on Branch Starch Contents of Precocious Walnut (*Juglans regia* L.) ..... CHEN Liying, MA Huabing, QIANG Jingsha, et al(35)  
Introduction and Cultivation Preliminary Report of Southern Highbush Blueberry ..... SONG Xianglan, WANG Lanying, XIE Zaicheng, et al(39)  
Application of Grey Relational Analysis in the Heat Resistance on Chinese Cabbage Comparative Test ..... HU Yanping, WU Haiyun, WU Zhuangsheng, et al(42)  
Effect of Different Calcium Fertilizers on Agronomic Characters and Yield of Garlic ..... WANG Zhijian, LIU Jinwen, WANG Chonghua, et al(45)

### ◆ Facilities Horticulture ◆

- Screening of Multi-resistant Variety and Corresponding Cultivation Techniques of Tomato During Winter Long Season in Solar Greenhouse ..... GUO Jinghua, DONG Lingdi, JIAO Yonggang, et al(48)  
Effect of Different Pollination Methods on Fruit Yield, Quality and Profit of Strawberry Fruit in Sunlight Greenhouse ..... PENG Dianliang, LIU Yongguang, XIA Haibo, et al(52)  
Performance of 'Jing' Series Grape Varieties for Forcing Cultivation in Greenhouse ..... LI Feng, ZHANG Huichen, ZHANG Zhongxin, et al(56)  
Study on the Straw Biological Reactor Cultural Practices for Greenhouse Melon During Autumn and Winter Planted of Ningxia Saline Land ..... ZHAO Jinxia, YANG Junli, YANG Yupei, et al(58)

### ◆ Cultivation Technique ◆

- Cultivation Techniques of New Kidney Bean Cultivar 'Liyun No. 2' on High Mountain ..... MA Ruifang, ZHANG Gen'er, ZHANG Dianyong(62)

### ◆ Garden Design and Garden Plants ◆

- Effect of the Plantations of *Sophora japonica* and *Robinia pseudoacacia* on Physical and Chemical Properties in Coastal Saline-alkali Soil ..... LU Xingxia, LIU Yan, YANG Jinghui, et al(64)  
Effect of Different Treatments on the Germination and Seedling Growth of *Firmiana simplex* ..... ZHAI Shuhua, YIN Genshen, YANG Xiaohong, et al(68)  
Effect of Salicylic Acid Treatment by Spraying on the Leaf of *Narcissus tazetta* var. *chinensis* ..... ZHANG Xinzheng, LIU Xiaomin, ZHANG Ruijing, et al(71)  
Investigation and Application of Tree Species in Zhuzhou City of Hunan Province ..... TAN Yanwen, PENG Chonghua(75)  
Plant Resources of *Primula Sect. denticulata* in Yunnan ..... LU Hongchun, XIE Weijia, LI Shifeng, et al(78)  
Cultivation Techniques of *Iris sanguinea* Donn ex Horn. Engineering Seedlings Production ..... CAI Yan, DONG Ran, ZHAO Chunli, et al(81)  
Study on the Ornamental of Native Magnoliaceae and Their Landscape in Guizhou Province ..... TIAN Fan, CHEN Zhiping, LI He, et al(83)  
The Ecological Design of Urban Landfill ..... WANG Zhilei, ZHAI Fushun, ZHAO Hongxia(88)

## ◆ Biotechnology ◆

- Analysis of SSR Loci Information in Transcriptome of *Rabdodia rubescens* (Henmsl.) Hara and Its Polymorphism ..... SU Xiuhong, LI Qinglei, CHEN Suiqing, et al(93)  
Establishment of High Efficient Regeneration System of *Pyrus ussuriensis* Leaves ..... WANG Defen, ZHANG Mei, LI Dingli, et al(97)  
Callus Induction and Plant Regeneration of *Armeniaca sibirica* ..... HE Yanhong, WU Gaoyin, BAI Yu'e, et al(101)  
Tissue Culture and Virus Elimination Technique for Apple Dwarf Rootstock ..... YANG Yanmin, WEI Yongxiang, LIU Cheng, et al(107)

## ◆ Plant Protection ◆

- Identification of Resistance to Powdery Mildew Disease of Melon ..... WANG Huilin, JIA Songnan, ZHENG Jian(112)  
The Drug Efficiency Test of Painting on Pruning Wounds of Blueberry Twig Blight Branches ..... DONG Kefeng, YUE Qinghua, GAO Yong, et al(118)  
Review on the Control Objects and Phototaxis of Colored Sticky Trapping Technology ..... GAO Yu, HAN Qi, LIU Jie, et al(120)  
Study on the Extraction Technology of Flavonoid in *Medicago sativa* L. cv. 'Qingda No. 1' ..... YIN Wei, YANG Guozhu, ZHANG Chengsheng, et al(125)

## ◆ Storage and Processing ◆

- Effect of Different Postharvest Treatments on Peel Calcium Fractions and Browning of 'Nan Guo' Pear Fruit ..... LI Lei, TU Zhengyu, SONG Xiang, et al(128)  
Change of Texture Properties of Three Peach Varieties During Postharvest Storage by Texture Profile Analysis ..... LI Yonghong, ZHANG Lisha, CHANG Ruifeng, et al(133)

## ◆ Edible Fungi ◆

- Optimization of Drying Process and Characterization of Active Components of *Pleurotus ferulae* ..... WANG Weilan, CHEN Kaixu, MA Ji, et al(137)  
Anti-season Cultivation Pattern of *Lentinula edodes* in Pingquan County ..... ZHANG Baojun(143)

## ◆ Chinese Traditional Medicine ◆

- Analysis of Content and Composition About Proteins and Amino Acids of Xinjiang's Main Chinese Wolfberry Varieties ..... LIU Fenglan, WANG Jianyou, MAO Jinmei, et al(146)  
Effect of Ectomycorrhizal Fungi on the Seed Growth of *Rosa sterilis* and Carbon, Nitrogen, Phosphorus Distribution ..... ZHANG Zhenming, HE Hongzao, ZHANG Jiachun, et al(151)  
Rapid Propagation of *Limonium franchetii* Through Plant Regeneration of Leaves ..... XIE Weihai, QU Xiaojie, BAI Xinfu(155)

## ◆ Soil and Fertilizer ◆

- Effect of Different Practices on Controlling Soil Root-knot Nematode and Soil Nitrogen and Phosphorus Environmental Risks in Greenhouse ..... LU Shuchang, WENG Fujun, WANG Rui, et al(160)  
Dynamic Effect of Different Cultivation Patterns on Soil Enzyme Activities and Soil Nutrients in Ginger Field ..... HAN Chunmei, LI Chunlong, YE Shaoping, et al(163)  
Effect of Lime Nitrogen on the Growth of Old Orchard Soil and Replanted Peach Seedling ..... GU Yanfen, ZHAO Baoming, ZHAO Jie(168)  
Effect of Plastic Film Residue on Soil Microorganism Based on Pot Experiment ..... SONG Shijie, ZHAO Xiaoguang, NIE Wenjie, et al(172)

## ◆ Summarize ◆

- Research Progress in Methods of Antibacterial Mechanism of Plant Bacteriostat ..... LI Ting, ZHOU Yue, SONG Liya, et al(179)  
Research Advance on Soil Organic Matter of Orchard in China ..... KOU Jiancun, YANG Wenquan, LI Shangwei, et al(185)  
Diversity of Wild *Vaccinium* Resources in China and Its Latest Research Dynamics ..... WANG Yunsheng(191)

## ◆ Agricultural Relevant Issues ◆

- Effect Assessment of the Program of Poverty-alleviation by Hundreds of Scientific and Technological Instructor in Ningxia ..... LIU Yanhua, ZHAO Gongqiang, YI Jinghua(198)  
Study on the Influence Factors of the New Type of Professional Farmers' Willings for Their Children to Inherit Agriculture ..... LYU Yahui, ZHOU Jin, ZHANG Liang, et al(202)

## ◆ Experience Exchange ◆

- Demonstration and Dissemination of Key Technology for Improving Quality and Efficiency of Yunnan Mountain Walnut ..... XIONG Xinwu, LIU Jinfeng, LI Junnan, et al(207)

# 《北方园艺》第五届编委会

**主任委员：**李文华

**副主任委员：**李景富 秦智伟 李天来 陈青云 杨文月 陶可全 刘德 耿月伟 闫文义  
**委员：**(以姓氏笔画为序)

于泽源 王秀峰 王清章 王傲雪 车代弟 冯国军 巩振辉 毕洪文 朱延明  
刘德 刘延杰 刘洪章 齐红岩 闫文义 许勇 许修宏 李敏 李文华  
李天来 李玉花 李景富 杨文月 吴凤芝 邹志荣 陈立新 陈青云 陈宗礼  
赵尊练 秦智伟 耿月伟 徐启江 栾非时 高庆玉 高智谋 陶可全 黄家风  
崔继哲 韩贵清

## 编辑出版中心

**主任：**毕洪文  
**主编：**毕洪文  
**编辑：**王冠 李晓晨 张海燕 李文枫  
田志革 王超 李想

**副主任：**苗玉新 黄峰华  
**责任编辑：**黄峰华  
**广告发行：**白晓琳

《北方园艺》

BEIFANG YUANYI

(半月刊, 1977年创刊)

2016年第4期(2月下), 总第355期

NORTHERN HORTICULTURE

(Half Monthly, Started in 1977)

No4, 2016 (The Second Half of February), Total No. 355

**主管单位** 黑龙江省农业科学院

**主办单位** 黑龙江省农业科学院

黑龙江省园艺学会

**编辑出版** 《北方园艺》编辑部

**地址** 哈尔滨市南岗区学府路368号

**邮政编码** 150086

**电 话** 0451-86674276

**电子信箱** bfyybjb@163.com

**网 址** www.haasep.cn

**印 刷** 天元铸成实业有限公司

**国内发行** 哈尔滨市邮局

**国外发行** 中国国际图书贸易总公司  
(北京399信箱)

**广告经营许可证号** 2301070000009

**出版日期** 每月15、30日

**Competent Authority** Heilongjiang Academy of Agricultural Sciences

**Sponsored by** Horticulture Society of Heilongjiang Province;  
Heilongjiang Academy of Agricultural Sciences

**Edited and Published by** Editorial Department of Northern Horticulture

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

**Postalcode** 150086

**Tel** 0451-86674276

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

**Web** www.haasep.cn

**Printed by** Tianyuan Zhucheng Industrial Co. Ltd.

**Domestic Distributed by** Harbin Post Office

**Domestic Distributing Code** 14-150

**Oversea Distributed by** International Book Trading Corporation P.O.  
Box 399 Beijing, P.R. of China

**Oversea Distributing Code** BM 5011

**Advertising Business Permit Number** 2301070000009

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

**Price** RBM 15 yuan

国内邮发代号:14-150

国内统一连续出版物号: CN 23-1247/S

ISSN 1001-0009

国外邮发代号:BM 5011

定 价:15.00元

