

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

11

2016

北方园艺

(1977年创刊·半月刊)

BEIFANG YUANYI

总第362期 2016年第11期 6月(上)

目 次

◆试验研究◆

- 草莓果实采后衰老过程中超微弱发光的变化及与活性氧的关系 郭金丽,朱冠宇,刘 艳,等(1)
- 结果母枝修剪长度对“金手指”葡萄萌芽结果特性的影响 于 咏,孟江飞,惠竹梅,等(5)
- 避雨栽培对“户太八号”葡萄生长及果实发育的影响 魏晓峰,鞠延仑,王 凯,等(9)
- 短截和普洛马林处理对不同砧木类型苹果苗木分枝特性的影响 孙淑敏,李高潮,檀 鸣,等(15)
- 光质和光强对红树莓组培苗叶绿素荧光参数的影响 郭 芳,王 超,刘海鹏,等(19)
- 生长调节剂对芦笋雄性两性花诱导效应的研究 刘 孟,王珊珊,卮兰春,等(24)

◆研究简报◆

- 树莓果实发育过程中细胞壁成分及相关酶活性变化 杨国慧,吕冰玉,韩德果,等(27)
- 胡颓子属五种落叶植物同地栽培果实性状观测分析 曹展波,雷小林,龚 春,等(31)
- 美味猕猴桃同日不同时间授粉效果研究 郭学雨,安成立,王逸珺,等(34)
- 青海地区“红地球”葡萄水肥一体化技术研究 魏廷珍,孔小平(38)

◆设施园艺◆

- 不同粒度积温算法对温室黄瓜生育期模拟的比较 陈跃浩,薛庆禹,黎贞发,等(41)

阿克苏地区日光温室的温光性能比较分析 刘琮琮,王合理,杜红斌(46)

建筑垃圾对基质栽培番茄和生菜移植苗生长的影响..... 李玉奇,章 茜,吴 英,等(50)

◆栽培技术◆

☆菜园☆

长白山区特色野菜合苞蕻蕹栽培技术..... 才 燕,董 然,赵春莉,等(54)

☆瓜园☆

“星研7号”西瓜栽培技术 祖秀颖(56)

◆园林花卉◆

☆植物☆

濒危植物秦岭石蝴蝶的叶插繁殖研究 杨 平,陆 婷,邱志敬(57)

五种黄色系菊科植物幼苗对干旱胁迫的生理响应及抗旱性评价..... 刘 敏,厉 悦,汲文宪,等(61)

去花对菊芋数量学性状的影响..... 单丽燕,刘 辉,回 飞,等(68)

绣球属品种资源收集及扦插生根能力比较 孙 强,虞秀明,姚红军(71)

⁶⁰Co γ 辐射对桂花种子发芽及幼苗生长的影响 廖美兰,周修任,王华新,等(74)

☆景观☆

寒地花展花卉种类及应用形式的调查研究..... 李 慧,车代弟(77)

人口老龄化背景下的养老社区室外景观设计..... 焦 红,曲修扬(83)

◆生物技术◆

基于 RACE 方法的草莓 *Faapx-c* 基因克隆、表达及其生物信息学分析 侯艳霞,汤浩茹,林源秀,等(88)

微扦插法保存茄子远缘杂交后代技术研究..... 张婷婷,罗双霞,王 星,等(92)

- 两种基因型黄瓜愈伤组织的诱导 都彦伶,赵新涛,宿 烽(96)
- 杨山牡丹花粉母细胞减数分裂时期快速捕获方法初探及过程观察 张林娟,袁军辉,于水燕,等(100)

◆植物保护◆

- 五种生物农药对阿克苏地区苹果叶螨室内毒力及田间药效试验 王 刚,汪凤娟,王 超,等(106)
- 不同黄瓜品种对黄瓜棒孢叶斑病的抗性鉴定 高 苇,王 勇,张春祥(110)
- 抗草莓灰霉病的芽孢杆菌 CM3 的分离与筛选 黄 静,赵 佳,陈 哲,等(113)
- 几种杀菌剂对月季白粉病的防治效果 孙 芹,王 斌,李志念(117)
- 新疆黄瓜品种对枯萎病的抗性鉴定评价 吴之涛,李 卓,张 莉(119)

◆贮藏保鲜加工◆

- 葡萄皮渣原花青素微波辅助提取工艺的优化及其抗氧化活性研究 陈月英,王彦平,孙瑞琳,等(123)
- 龙牙百合叶总黄酮提取工艺及抗氧化性研究 薛 梅,李晓英,周卫平(127)
- 连翘精油的提取及其抗菌保鲜效果的研究 吴子龙,赵 昕,叶 嘉,等(131)
- 大蒜乙醇提取液对生菜贮藏效果的影响 张林青,朱露露(135)
- 喷钙及不同贮藏处理对‘金冠’苹果保鲜效果的影响 王晓佳,贾永华,李晓龙,等(138)

◆食用菌◆

- 茶树菇液体发酵条件研究 刘 敏,卢 红,黄媛媛,等(142)
- 适宜冀中南地区栽培的灵芝优良菌株筛选 邢志伟,朱优优,郑素月,等(145)
- 精制山杏壳木醋液防治平菇细菌性褐斑病药效试验 徐岩岩,刘晓光,彭艳芳,等(148)

◆中 草 药◆

- 干旱及盐胁迫对酸浆种子萌发特性的影响 童家赞,蓝 天,任肖湘(151)

- 外源 NO 供体硝普钠对 NaCl 胁迫下夏枯草种子萌发的影响 常青山,张利霞,黄青哲,等(155)
- 氮素用量对叶用枸杞氮磷钾养分积累及产量的影响 王 蓉,王 伟,王娅丽,等(160)

◆新品种选育◆

- 加工专用型辣椒新品种“新椒 29 号”的选育 张建文,董 洁,阿依夏木·托乎提,等(164)

◆资源与环境◆

- 土地利用方式对土壤微生物生物量碳和土壤养分的影响 郭月峰,祁 伟,姚云峰,等(166)
- 绿肥间作模式对苹果园土壤养分含量的影响 秦景逸,张 云,王秀梅,等(169)

◆产业论坛◆

- 中国苹果生产布局变迁的影响:结构效应还是竞争效应 董子铭,刘天军(173)
- 庆阳黄花菜的优势分析及产业化建议 张 博,石国玺,李东波(178)
- 北京市蔬菜产业供需分析及发展战略建议 刘丽红,李 瑾,张丹丹,等(182)
- 中国郁金香科研现状与存在的问题及发展策略 屈连伟,雷家军,张艳秋,等(188)

◆专题综述◆

- 辣椒实蝇国内研究进展 龚秀泽,钟 勇,黄江奇,等(195)
- 辣椒疫霉菌全球传播与危害及生物学特性研究进展 席亚东,陈国华,谢丙炎,等(199)

◆经验交流◆

- 大葱病虫害绿色防控技术 王柱宽(204)
- 西瓜套种早甘蓝复种秋白菜高效栽培技术 戴兴玉(206)
- 设施韭菜基质栽培技术规程 吴晓蕾,李敬蕊,官彬彬,等(207)
- 水芹北方高效种植技术 李法君(210)

NORTHERN HORTICULTURE

(Started in 1977, Half Monthly)

Total NO. 362, NO. 11(2016), The First Half of June

Contents

◆ Experimentation and Research ◆

- The Dynamic Variation of UWL and Reactive Oxygen During the Ageing Process of Strawberry Fruit GUO Jinli, ZHU Guanyu, LIU Yan, et al(1)
- Effect of the Length of the Parent Shoot Pruning on the Germination and Bear Fruit of the 'Gold Finger' Grape
..... YU Yong, MENG Jiangfei, XI Zhumei, et al(5)
- Effect of Rain-shelter Cultivation on Growth and Fruit Quality of 'Hutai No. 8' Grape WEI Xiaofeng, JU Yanlun, WANG Kai, et al(9)
- Influence of Promalin and Cutting Back Treatment on the Branching Characters of Different Rootstocks Apple Seedling
..... SUN Shumin, LI Gaochao, TAN Ming, et al(15)
- Effect of Light Quality and Light Intensity on the Chlorophyll Fluorescence Parameters of Red Raspberry Tissue Culture Plantlets
..... GUO Fang, WANG Chao, LIU Haipeng, et al(19)
- Effect of Growth Regulators on Hermaphroditic Flower Development on Male Asparagus Plants LIU Meng, WANG Shanshan, NIE Lanchun, et al(24)

◆ Research Notes ◆

- Change of Cell Wall Components and Related Enzyme Activities During the Development Process of Raspberry Fruit
..... YANG Guohui, LYU Bingyu, HAN Deguo, et al(27)
- Observation and Analysis on Fruits Characteristics of Five Deciduous Species of *Elaeagnus* Linn. in the Same Place as the Cultivation
..... CAO Zhanbo, LEI Xiaolin, GONG Chun, et al(31)
- Study on Pollination Effect of Different Time on the Same Day for Delicious Kiwifruit GUO Xueyu, AN Chengli, WANG Yijun, et al(34)
- Research on Fertigation of 'Red Globe' Grape in Qinghai Province WEI Tingzhen, KONG Xiaoping(38)

◆ Facilities Horticulture ◆

- Comparison of Effective Accumulated Temperature of Different Granularities in Simulating Development Stage of Cucumber in Greenhouse
..... CHEN Yuehao, XUE Qingyu, LI Zhenfa, et al(41)
- Compared and Analyzed Solar Greenhouse Performance of Insulation and Solar Transmission in Aksu Area ... LIU Congcong, WANG Heli, DU Hongbin(46)
- Effect of Construction Waste on Growth of Tomato and Lettuce Transplants in Substrate Culture LI Yuqi, ZHANG Xi, WU Ying, et al(50)

◆ Cultivation Technique ◆

- Cultivation Techniques of *Ligularia schmidtii* (Maxim.) Makino Seedlings Production CAI Yan, DONG Ran, ZHAO Chunli, et al(54)

◆ Garden Design and Garden Plants ◆

- Study on Propagation of the Endangered Species *Petrosimoesia qinlingensis* by Leaf Cutting YANG Ping, LU Ting, QIU Zhijing(57)
- Physiological Response of Seedlings of Five Yellow Compositae Species to Drought Stress and Their Drought Resistance
..... LIU Min, LI Yue, JI Wenxian, et al(61)
- Effect of Deflorate on Quantitative Trait of *Helianthus tuberosus* L. SHAN Liyan, LIU Hui, HUI Fei, et al(68)
- Resource Collection and Comparison of Cuttings Rooting Ability for *Hydrangea* L. SUN Qiang, YU Xiuming, YAO Hongjun(71)
- Effect of ⁶⁰Co-γ-ray Irradiation on Germination Rate of Seed and Seedling Growth of *Osmanthus fragrans*
..... LIAO Meilan, ZHOU Xiuren, WANG Huaxin, et al(74)
- Investigation Study on Flower Species and Application Form of Flower Show in Cold Region LI Hui, CHE Daidi(77)
- Research on Landscape Design of Outdoor Space for Retirement Community Under the Background of Population Aging JIAO Hong, QU Youyang(83)

◆ Biotechnology ◆

- Cloning and Expression of *Faapx-c* Gene and Bioinformatics Analysis in *Fragaria* × *Ananassa* Based on RACE
..... HOU Yanxia, TANG Haoru, LIN Yuanxiu, et al(88)

Technology Research on Reserving Descendants From Distant Hybridization of Eggplant by Micro-cutting

..... ZHANG Tingting, LUO Shuangxia, WANG Xing, et al(92)

Induction of Two Genotypes Cucumber Callus DU Yanling, ZHAO Xintao, SU Feng(96)

The Initial Research on Approach of Quickly Capture Meiosis Period and Observation of Meiosis Process in Pollen Mother Cell in *Paemnia ostii*

..... ZHANG Linjuan, YUAN Junhui, YU Shuiyan, et al(100)

◆ Plant Protection ◆

Toxicology and Field Efficacy Test of Five Biological Pesticides for Controlling Apple Spiders in Akesu Area

..... WANG Gang, WANG Fengjuan, WANG Chao, et al(106)

Resistance Identification of Different Cucumber Varieties to *Corynespora* Leaf Spot GAO Wei, WANG Yong, ZHANG Chunxiang(110)

Isolation and Identification of *Bacillus amylolique faciens* CM3 Against Strawberry Gray Mold HUANG Jing, ZHAO Jia, CHEN Zhe, et al(113)

Effect of Several Fungicides Against Chinese Rose Powdery Mildew SUN Qin, WANG Bin, LI Zhinian(117)

Resistance Evaluation of Cucumber Varieties Cultivated in Xinjiang to *Fusarium* Wilt WU Zhitao, LI Zhuo, ZHANG Li(119)

◆ Storage and Processing ◆

Study on Optimization of Microwave-assisted Extraction of Proanthocyanidins From Grape Residues and Its Antioxidant Activity

..... CHEN Yueying, WANG Yanping, SUN Ruilin, et al(123)

Study on Extraction Technology and Antioxidant Property of Total Flavonoids From *Lilium brownii* var. *viridulum* Leaves

..... XUE Mei, LI Xiaoying, ZHOU Weiping(127)

Extraction of Essential Oil and Its Effect on Antibacterial Preservation of *Forsythia suspensa* WU Zilong, ZHAO Xin, YE Jia, et al(131)

Effect of Garlic Alcohol Extract on Lettuce Storage ZHANG Linqing, ZHU Lulu(135)

Effect of Calcium Sprays and Different Storage Treatment on the Preservation of *Malus pumila* Mill. cv. 'Jinguan'

..... WANG Xiaojia, JIA Yonghua, LI Xiaolong, et al(138)

◆ Edible Fungi ◆

Study on the Liquid Fermentation Condition of *Agrocybe aegerita* (Brig.) Sing LIU Min, LU Hong, HUANG Yuanyuan, et al(142)

Screening Fine Strains of *Ganoderma lucidum* in the Middle and South Area of Hebei Province XING Zhiwei, ZHU Youyou, ZHENG Suyue, et al(145)

Effect of Refined Bitter Almond Shell Pyrolytic Acid on Brown Blotch Disease of *Pleurotus ostreatus*

..... XU Yanyan, LIU Xiaoguang, PENG Yanfang, et al(148)

◆ Chinese Traditional Medicine ◆

Effect of Drought or Salt Stress on the Germination Characteristics of *Physalis alkekengi* Seed TONG Jiayun, LAN Tian, REN Xiaoxiang(151)

Effect of Exogenous NO on *Prunella vulgaris* Seed Germination Under NaCl Stress CHANG Qingshan, ZHANG Lixia, HUANG Qingzhe, et al(155)

Effect of Nitrogen Fertilizer Application on the Accumulation of NPK and Yield for Leaf Wolfberry WANG Rong, WANG Wei, WANG Yali, et al(160)

◆ New Variety Breeding ◆

Breeding of a New Processing-Purpose Hot Pepper Variety 'Xinjiao 29' ZHANG Jianwen, DONG Jie, Ayixiamu • TUOHUTI, et al(164)

◆ Resource and Environment ◆

Effect of Land Use Changes on Soil Microbial Biomass Carbon and Soil Nutrients GUO Yuefeng, QI Wei, YAO Yunfeng, et al(166)

Effect of Interplanting Green Manure on Soil Nutrient Content of Apple Orchard QIN Jingyi, ZHANG Yun, WANG Xiumei, et al(169)

◆ Industry Forum ◆

The Main Cause for the Change of Apple's Production Layout in China; Spatial Structure Effect or Competitive Effect DONG Ziming, LIU Tianjun(173)

The Preponderant Analysis and Industrialized Suggestions of *Hemerocallis citrina* Baroni. in Qingyang City ZHANG Bo, SHI Guoxi, LI Dongbo(178)

The Supply-demand Analysis and Development Strategies of Vegetable Industry in Beijing LIU Lihong, LI Jin, ZHANG Dandan, et al(182)

The Present Situation, Existing Problems and Development Strategies of Chinese Tulip Research QU Lianwei, LEI Jiajun, ZHANG Yanqiu, et al(188)

◆ Summarize ◆

Research Progress of *Bactrocera latifrons* in China GONG Xiuze, ZHONG Yong, HUANG Jiangqi, et al(195)

Research Progress of Global Spread, Damage and Biological Characteristics of *Phytophthora capsici* XI Yadong, CHEN Guohua, XIE Bingyan, et al(199)

《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11期(6月上), 总第362期

NORTHERN HORTICULTURE

(Half Monthly, Started in 1977)

No 11, 2016 (The First Half of June), Total No. 362

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 bfybjb@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 bfybjb@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

国外邮发代号:BM 5011

定 价:15.00元

ISSN 1001-0009

