

## 目 次

- 蒙古栎次生林林木竞争对不同抚育间伐方式的响应 ..... 胡雪凡, 段光爽, 张会儒, 等(1)
- 不同栽植代数杉木人工林土壤磷素特征研究 ..... 张 虹, 于姣姣, 李海洋, 等(10)
- 基于频谱分析用针刺仪测定树木年龄的算法 ..... 潘 虹, 卢 军, 郭旭展, 等(19)
- ‘84K’杨组氨基酸激酶基因 *PaHK3b* 的克隆及功能分析 ..... 鲁俊倩, 武 舒, 钟姍辰, 等(26)
- 珍稀濒危植物金丝李种子休眠解除的转录组分析 ..... 张俊杰, 张灵芝, 夏 科, 等(35)
- 绒毛白蜡 (*Fraxinus velutina* Torr) 韧皮部响应白蜡窄吉丁 (*Agrilus planipennis* Fairmaire) 危害的转录组变化 ..... 封润霞, 赵 婕, 张苏芳, 等(47)
- 楸树种子发育过程中内源激素含量的动态变化 ..... 韩东花, 杨桂娟, 肖 遥, 等(56)
- 杉木幼龄林分断面积生长的良种与密度效应研究 ..... 李晓燕, 段爱国, 张建国, 等(65)
- 2 种花楸果实类胡萝卜素成分与果色关系 ..... 于雪丹, 张川红, 郑勇奇, 等(71)
- 赤松宜林地昆崙山腮扁叶蜂虫基指数的评估 ..... 胡瑞瑞, 梁 军, 谢 宪, 等(80)
- 土壤理化性质对红锥人工林生长及心材形成的影响 ..... 刘光金, 贾宏炎, 徐建民, 等(88)
- 基于面向对象多特征变化向量分析法的森林资源变化检测 ..... 王晓慧, 谭炳香, 李世明, 等(98)
- 杉木林下套种阔叶树对土壤生态酶活性及其化学计量比的影响 ..... 孙思怡, 卢胜旭, 陆宇明, 等(106)
- 不同种源华重楼主要生物活性成分地理变异及其相关性分析 ..... 曾平生, 厉月桥, 周新华, 等(114)
- 不同栓皮栎家系对重金属的耐性和富集特性 ..... 施 翔, 王树凤, 陈益泰, 等(121)
- 格氏栲天然林凋落物对马尾松种子萌发的影响 ..... 贾梅花, 王 哲, 刘金福, 等(128)
- 福建柏实时荧光定量 PCR 内参基因的选择 ..... 周成城, 荣俊冬, 谢德金, 等(137)
- 三峡库区消落带水桦 (*Betula nigra*) 周期性水淹后的生理与结构响应 ..... 甘丽萍, 任 立, 李 豪, 等(146)
- 研究简报**
- 8 种杀菌剂对 9 种薄壳山核桃炭疽病病原菌的毒力测定 ..... 孟 珂, 张亚波, 常 君, 等(153)
- 油茶叶片氮磷钾含量与经济性状的关联分析 ..... 曹永庆, 任华东, 王开良, 等(165)
- 苹小吉丁林间扩散行为的初步研究 ..... 马志龙, 姚艳霞, 阿地力·沙塔尔(173)
- 桐花树根部一株内生固氮菌的筛选及其培养特性研究 ..... 蔺红苹, 谢呈媛, 王 芸, 等(181)

## Contents

Response of Tree Competition in Natural Secondary <i>Quercus mongolica</i> Forest to Thinning Treatment .....	HU Xue-fan, DUAN Guang-shuang, ZHANG Hui-ru, <i>et al</i> (9)
Characteristics of Soil Phosphorus in <i>Cunninghamia lanceolata</i> Plantations with Different Planting Rotations .....	ZHANG Hong, YU Jiao-da, LI Hai-yang, <i>et al</i> (18)
Tree Age Estimation Algorithm Based on Spectrum Analysis by Resistograph .....	PAN Hong, LU Jun, GUO Xu-zhan, <i>et al</i> (25)
Cloning and Functional Analysis of Histidine Kinase Gene <i>PaHK3b</i> in Poplar '84K' .....	LU Jun-qian, WU Shu, ZHONG Shan-chen, <i>et al</i> (34)
Transcriptomic Analysis of the Seed of <i>Garcinia paucinervis</i> , a Rare and Endangered Plant Species, During Dormancy Releasing .....	ZHANG Jun-jie, ZHANG Ling-yi, XIA Ke, <i>et al</i> (46)
Transcriptome Changes in the Phloem of <i>Fraxinus velutina</i> Torr Response to Infection of <i>Agrilus planipennis</i> Fairmaire .....	FENG Run-xia, ZHAO Jie, ZHANG Su-fang, <i>et al</i> (55)
Dynamic Changes of Endogenous Hormone Content in <i>Catalpa bungei</i> Seeds During Their Developmental Periods .....	HAN Dong-hua, YANG Gui-juan, XIAO Yao, <i>et al</i> (64)
Effects of Improved Varieties and Densities on Stand Basal Area Growth of Young Chinese Fir ( <i>Cunninghamia lanceolata</i> ) Plantation .....	LI Xiao-yan, DUAN Ai-guo, ZHANG Jian-guo, <i>et al</i> (70)
Relationship between Carotenoid Component and Fruit Color of Two <i>Sorbus</i> Species .....	YU Xue-dan, ZHANG Chuan-hong, ZHENG Yong-qi, <i>et al</i> (79)
Evaluate the Pest Based Index of <i>Cephalcia kunyushanica</i> .....	HU Rui-rui, LIANG Jun, XIE Xian, <i>et al</i> (87)
Effects of Soil Physicochemical Properties on Growth and Heartwood Formation of <i>Castanopsis hystrix</i> Plantation .....	LIU Guang-jin, JIA Hong-yan, XU Jian-min, <i>et al</i> (97)
Object-oriented Forest Change Detection Based on Multi-feature Change Vector Analysis .....	WANG Xiao-hui, TAN Bing-xiang, LI Shi-ming, <i>et al</i> (105)
Effects of Chinese Fir Interplanted with Broadleaved Trees on Soil Ecological Enzyme Activity and Stoichiometry .....	SUN Si-yi, LU Sheng-xu, LU Yu-ming, <i>et al</i> (113)
Geographical Variation and Correlation Analysis of the Main Bioactive Components of <i>Paris polyphylla</i> from Different Provenances .....	ZENG Ping-sheng, LI Yue-qiao, ZHOU Xin-hua, <i>et al</i> (120)
Tolerance and Enrichment Characteristics of Different Families of <i>Quercus variabilis</i> to Heavy Metal .....	SHI Xiang, WANG Shu-feng, CHEN Yi-tai, <i>et al</i> (127)
Effects of <i>Castanopsis kawakamii</i> Forest Litter on Seed Germination of <i>Pinus massoniana</i> .....	JIA Mei-hua, WANG Zhe, LIU Jin-fu, <i>et al</i> (136)
Quantitative Real-time PCR Analysis of <i>Fokienia hodginsii</i> During Selection of Reference Genes .....	ZHOU Cheng-cheng, RONG Jun-dong, XIE De-jin, <i>et al</i> (145)
Physiological and Structural Responses of <i>Betula nigra</i> to Periodic Flooding in Three Gorges Reservoir Fluctuating Zone .....	GAN Li-ping, REN Li, LI Hao, <i>et al</i> (152)
<b>Scientific Notes</b>	
Toxicity Test with 8 Fungicides Against 9 Pathogens of Pecan Anthracnose ( <i>Colletotrichum</i> spp.) .....	MENG Ke, ZHANG Ya-bo, CHANG Jun, <i>et al</i> (164)
Analysis on the Correlations between Nitrogen, Phosphorus, Potassium Content in Leaves and the Economic Characters of <i>Camellia oleifera</i> .....	CAO Yong-qing, REN Hua-dong, WANG Kai-liang, <i>et al</i> (172)
A Preliminary Study on the Field-Diffusion Behavior of <i>Agrilus mali</i> Matsumura (Coleoptera: Bupresidea) .....	MA Zhi-long, YAO Yan-xia, Adili Sattar(180)
Screening of Endophytic Nitrogen Fixation Bacteria from Roots of <i>Aegiceras corniculatum</i> and Optimization of Their Culture Conditions .....	LIN Hong-ping, XIE Cheng-yuan, WANG Yun, <i>et al</i> (186)