



QK1912290



生态学报

ACTA ECOLOGICA SINICA

第39卷 第6期 Vol. 39 No. 6 2019

ISSN 1000-0933 CN 11-2031/Q



中国生态学会
中国科学院生态环境研究中心
万方数据

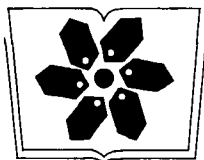
主办



科学出版社
Science Press

出版

万方知库
Eco-Environmental
Knowledge Web



中国科学院科学出版基金资助出版

生态学报

(SHENGTAI XUEBAO)

第 39 卷 第 6 期 2019 年 3 月 (半月刊)

目 次

南方低效人工林改造与特色生态产业技术研究专栏 *

近 25 年长江中游地区土地利用时空变化格局与驱动因素	胡昕利, 易 扬, 康宏樟, 等 (1877)
不同林龄油茶人工林土壤酶化学计量及其影响因素	乔 航, 莫小勤, 罗艳华, 等 (1887)
杉木人工林下原生与引入树种叶性状变异特征	熊 静, 邢文黎, 虞木奎, 等 (1897)
湖北省九华山林场不同树种配置杉阔混交林林分空间结构特征分析	李语晨, 程金花, 李明峰, 等 (1908)
模拟氮沉降对马尾松土壤微生物群落结构及温室气体释放的影响	张 雪, 梅 莉, 宋利豪, 等 (1917)
不同林龄杉木人工林菌根侵染特征研究	崔莉娜, 郭弘婷, 李维扬, 王等 (1926)
披针叶茴香对变化光环境的表型可塑性	成向荣, 邢文黎, 苑海静, 等 (1935)
油茶低产林养分需求和时间配置动态变化研究	罗 佳, 周小玲, 田育新, 等 (1945)
桐-药复合经营模式下泡桐丛枝菌根真菌群落结构特征	贾全全, 龚 斌, 李康琴, 等 (1954)
湖北省马尾松精准适宜性空间分布	李 莎, 史明昌, 刘晓宇, 等 (1960)

研究论文

赣南地区土地利用格局及生态系统服务价值的时空演变	徐媛银, 郭 烁, 薛达元, 等 (1969)
基于碳排放核算的中国区域旅游业生态效率测度及比较研究	刘 军, 问 鼎, 童 昀, 等 (1979)
基于 CA-Markov 模型的石羊河流域生态承载力时空格局预测	岳东霞, 杨 超, 江宝骅, 等 (1993)
增温对青藏高原高寒草原生态系统碳交换的影响	李 岩, 干珠扎布, 胡国铮, 等 (2004)
浑河流域大型底栖动物摄食功能群对栖息地环境的选择适应性	韩 洁, 宋蒙蒙, 张 杰, 等 (2013)
厦门后溪水质与流域景观特征沿城乡梯度的变化分析	朱珍香, 高肖飞, 彭 凤, 等 (2021)
长芒草 (<i>Stipa bungeana</i>) 种子萌发与出苗对关键环境因子的响应	孙清琳, 张瑞红, 易三桂, 等 (2034)
广西主要森林植被碳储量及其影响因素	兰 秀, 杜 虎, 宋同清, 等 (2043)
中国灌木生态系统的干旱化趋势及其对植被生长的影响	王亚林, 丁 忆, 胡 艳, 等 (2054)
践踏干扰对碧塔海高寒草甸植被茎叶性状、物种多样性和功能多样性的影响	何淑婧, 李 伟, 程希平, 等 (2063)
垂直方向磷素竞争对杉木根系生长及生物量分配的影响	许静静, 李 琦, 吴文景, 等 (2071)
长汀水土流失区侵蚀劣地马尾松种群动态	吴语嫣, 李守中, 孙畦涛, 等 (2082)
黄土丘陵沟壑区植被恢复演替过程中根系行为特征	常恩浩, 李 鹏, 肖 列, 等 (2090)
中亚热带常绿阔叶林凋落物分解过程中汞的动态变化及迁移机理	杨 光, 孙 涛, 安思危, 等 (2101)
近 10 年青海湖东沙地人工植被群落特征	吴汪洋, 张登山, 田丽慧, 等 (2109)
CO ₂ 加富对盐胁迫下黄瓜幼苗叶片光合特性及活性氧代谢的影响	厉书豪, 李 曼, 张文东, 等 (2122)
遮光对杉木幼苗树干表面 CO ₂ 通量的影响	贺同鑫, 赵国华, 刘兰兰, 等 (2131)
氮沉降和降雨变化对荒漠草原凋落物分解的影响	霍利霞, 红 梅, 赵巴音那木拉, 等 (2139)

雷州半岛尾叶桉和湿加松人工林的蒸腾耗水规律..... 王志超,许宇星,竹万宽,等 (2147)

玉米叶片水分利用效率的保守性..... 周怀林,周广胜 (2156)

微地形对大西沟新疆野杏萌发层土壤因子的影响..... 翟朝阳,邱 娟,司洪章,等 (2168)

中亚热带植被恢复过程中崩岗土壤性质分异特征..... 区晓琳,陈志彪,陈志强,等 (2180)

基于同化数据的标准化土壤湿度指数监测农业干旱的适宜性研究..... 周洪奎,武建军,李小涵,等 (2191)

秸秆还田配施有机无机肥料对冬小麦土壤水氮变化及其微生物群落和活性的影响.....
..... 公华锐,李 静,马军花,等 (2203)

海拔梯度变化对中亚热带黄山松土壤微生物生物量和群落结构的影响.....
..... 赵盼盼,周嘉聪,林开森,等 (2215)

千岛湖片段化景观中蜘蛛群落物种多样性和功能群结构及其影响因素.....
..... 周文婕,仲 磊,黄杰灵,等 (2226)

模拟增温和丛枝菌根对门源草原毛虫幼虫生长发育的影响..... 陈珂璐,石国玺,张中华,等 (2237)

专论与综述

雾霾空气中细菌特征及对健康的潜在影响..... 甄 泉,方治国,王雅晴,等 (2244)

海洋生态系统服务价值评估研究综述..... 沈满洪,毛 狄 (2255)

期刊基本参数:CN 11-2031/Q * 1981 * m * 16 * 390 * zh * P * ¥90.00 * 1510 * 39 * 2019-03



封面彩图提供: 王圖东 E-mail: 411237@qq.com

* 本栏目由中国林业科学研究院亚热带林业研究所 虞木奎研究员协助组稿

ACTA ECOLOGICA SINICA Vol.39, No.6 March, 2019 (Semimonthly)

CONTENTS

Improvement of Low-efficiency Plantations and the Technology of Featured Ecological Industry in Southern China

Temporal and spatial variations of land use and the driving factors in the middle reaches of the Yangtze River in the past 25 years	···
·····	HU Xinli, YI Yang, KANG Hongzhang, et al (1877)
Patterns of soil ecoenzymatic stoichiometry and its influencing factors during stand development in <i>Camellia oleifera</i> plantations	·····
·····	QIAO Hang, MO Xiaoqin, LUO Yanhua, et al (1887)
Variations in leaf traits of native and introduced tree species in <i>Cunninghamia lanceolata</i> plantations	·····
·····	XIONG Jing, XING Wenli, YU Mukui, et al (1897)
Analysis of the stand spatial structure of <i>Cunninghamia lanceolata</i> -broadleaved mixed plantation on a Jiuhua Mountain farm, Hubei Province	·····
·····	LI Yuchen, CHENG Jinhua, LI Mingfeng, et al (1908)
Effects of simulated nitrogen deposition on microbial community and greenhouse gases emission of <i>Pinus massoniana</i> soil	·····
·····	ZHANG Xue, MEI Li, SONG Lihao, et al (1917)
Study on the characteristics of mycorrhizal colonization in Chinese fir plantations at different ages	·····
·····	CUI Lina, GUO Hongting, LI Weiyang, et al (1926)
Phenotypic plasticity of <i>Illicium lanceolatum</i> in response to varied light environments	·····
·····	CHENG Xiangrong, XING Wenli, YU Haijing, et al (1935)
Study on the dynamic variation of nutrients in a <i>Camellia oleifera</i> low-yield forest	·····
·····	LUO Jia, ZHOU Xiaoling, TIAN Yuxin, et al (1945)
Shift in arbuscular mycorrhizal fungal communities in <i>Paulownia fortunei</i> plantations with different medicinal plant species	·····
·····	JIA Quanquan, GONG Bin, LI Kangqin, et al (1954)
Precise spatial distribution of suitability of masson pine in Hubei Province	·····
·····	LI Sha, SHI Mingchang, LIU Xiaoyu, et al (1960)
Research Paper	
Land use structure and the dynamic evolution of ecosystem service value in Gannan region, China	·····
·····	XU Nuanyin, GUO Luo, XUE Dayuan, et al (1969)
Measuring of tourism eco-efficiency and its comparative research based on carbon emissions	·····
·····	LIU Jun, WEN Ding, TONG Yun, et al (1979)
Spatio-temporal pattern prediction of the biocapacity in the Shiyang River Basin on the basis of the CA-Markov model	·····
·····	YUE Dongxia, YANG Chao, JIANG Baohua, et al (1993)
Effects of warming on carbon exchange in an alpine steppe in the Tibetan Plateau	·····
·····	LI Yan, HASBAGAN Ganjurjav, HU Guozheng, et al (2004)
Selective adaptations of macrobenthic functional feeding groups in the Hunhe River basin	·····
·····	HAN Jie, SONG Mengmeng, ZHANG Jie, et al (2013)
Relationship between water quality and landscape characteristics of the Houxi River watershed in Xiamen City along a rural-urban gradient	·····
·····	ZHU Zhenxiang, GAO Xiaofei, PENG Feng, et al (2021)
Responses of germination and seedling emergence of <i>Stipa bungeana</i> to key environmental factors	·····
·····	SUN Qinglin, ZHANG Ruihong, YI Sangui, et al (2034)
Vegetation carbon storage in the main forest types in Guangxi and the related influencing factors	·····
·····	LAN Xiu, DU Hu, SONG Tongqing, et al (2043)
The study of shrubland drought dynamics in China and its impacts on vegetation growth	·····
·····	WANG Yalin, DING Yi, HU Yan, et al (2054)
The effect of trampling disturbance on functional traits, species diversity, and functional diversity of alpine meadows in Bitahai Nature Reserve	·····
·····	HE Shuqiang, LI Wei, CHENG Xiping, et al (2063)
Effects of vertical phosphorus competition on root growth and biomass distribution of Chinese fir seedlings	·····
·····	XU Jingjing, LI Qi, WU Wenjing, et al (2071)

Population dynamics of <i>Pinus massoniana</i> on eroded land in the soil erosion area of Changting County	WU Yuyan, LI Shouzhong, SUN Suitao, et al (2082)
The characteristics of root system behavior in vegetation succession in Loess Hilly and Gully Region	CHANG Enhao, LI Peng, XIAO Lie, et al (2090)
The migration and fate of mercury during litter decomposition in a subtropical evergreen broad-leaf forest	YANG Guang, SUN Tao, AN Siwei, et al (2101)
Features of artificial plant communities from the east sand region of the Qinghai Lake over the last 10 years	WU Wangyang, ZHANG Dengshan, TIAN Lihui, et al (2109)
Effects of CO ₂ enrichment on photosynthetic characteristics and reactive oxygen species metabolism in leaves of cucumber seedlings under salt stress	LI Shuhao, LI Man, ZHANG Wendong, et al (2122)
Effects of shading on stem surface CO ₂ effluxes of Chinese fir seedlings	HE Tongxin, ZHAO Guohua, LIU Lanlan, et al (2131)
Effects of increased nitrogen deposition and changing rainfall patterns on litter decomposition in a desert grassland	HUO Lixia, HONG Mei, ZHAO Bayinnamula, et al (2139)
The transpiration water consumption of two common fast-growing forests in Leizhou Peninsula	WANG Zhichao, XU Yuxing, ZHU Wankuan, et al (2147)
Water conservation in terms of leaf water use efficiency of maize (<i>Zea mays</i> L.)	ZHOU Huailin, ZHOU Guangsheng (2156)
Effects of microtopography on germination layer soil factors in <i>Armeniaca vulgaris</i> Lam. in Daxigou	ZHAI Zhaoyang, QIU Juan, SI Hongzhang, et al (2168)
Variation in soil property and its response to vegetation restoration in areas of collapse mounds in mid-subtropical China	OU Xiaolin, CHEN Zhibiao, CHEN Zhiqiang, et al (2180)
Suitability of assimilated data-based standardized soil moisture index for agricultural drought monitoring	ZHOU Hongkui, WU Jianjun, LI Xiaohan, et al (2191)
Effects of straw incorporation combined with inorganic-organic fertilization on soil water and nitrogen changes and microbial community structure in winter wheat	GONG Huarui, LI Jing, MA Junhua, et al (2203)
Effect of different altitudes on soil microbial biomass and community structure of <i>Pinus taiwanensis</i> forest in mid-subtropical zone	ZHAO Panpan, ZHOU Jiacong, LIN Kaimiao, et al (2215)
Species diversity, functional group structure, and influencing factors of spider community in fragmented landscape of Thousand Island Lake	ZHOU Wenjie, ZHONG Lei, HUANG Jieling, et al (2226)
Effect of simulated warming and arbuscular mycorrhiza fungi on the growth and development of <i>Gynaephora menyuanensis</i> larvae	CHEN Kelu, SHI Guoxi, ZHANG Zhonghua, et al (2237)
Review and Monograph	
Bacterial characteristics in atmospheric haze and potential impacts on human health	ZHEN Quan, FANG Zhiguo, WANG Yaqing, et al (2244)
Review of the evaluation of marine ecosystem services value	SHEN Manhong, MAO Di (2255)

《生态学报》2019 年征订启事

《生态学报》是由中国科学技术协会主管,中国生态学学会、中国科学院生态环境研究中心共同主办的生态学高级专业学术期刊,创刊于 1981 年,报道生态学领域前沿理论和原始创新性研究成果。坚持“百花齐放,百家争鸣”的方针,依靠和团结广大生态学科工作者,探索生态学奥秘,为生态学基础理论研究搭建交流平台,促进生态学研究发展,为我国培养和造就生态学科人才和知识创新服务、为国民经济建设和发展服务。

《生态学报》主要报道生态学重要基础理论和应用研究的原始创新性科研成果。主要刊载文章类型有:研究综述;研究论文;学术信息与动态,生态学新理论、新方法、新技术介绍;新书评介及开放实验室介绍等。欢迎广大科技工作者、科研单位、高等院校、图书馆等订阅。

《生态学报》半月刊,大 16 开本,280 页,国内定价 90 元/册,全年定价 2160 元。

办公电话: 010-62941099, 010-62843362 E-mail: shengtaixuebao@rcees.ac.cn

投稿网址: www.ecologica.cn

执行副主编 孔红梅 责任编辑 刘 昕 全 元 编辑 朱晶莹 宗 静 彭小琼

生态学报
(SHENGTAI XUEBAO)
(半月刊 1981 年 3 月创刊)
第 39 卷 第 6 期 (2019 年 3 月)

ACTA ECOLOGICA SINICA
(Semimonthly, Started in 1981)
Vol. 39 No. 6 (March, 2019)

编 辑	《生态学报》编辑部 地址:北京海淀区双清路 18 号 邮政编码:100085 电话:(010)62941099 www.ecologica.cn shengtaixuebao@rcees.ac.cn	Edited by	Editorial board of ACTA ECOLOGICA SINICA Add:18, Shuangqing Street, Haidian, Beijing 100085, China Tel:(010)62941099 www.ecologica.cn shengtaixuebao@rcees.ac.cn
主 编	傅伯杰	Editor-in-chief	FU Bojie
主 管	中国科学技术协会	Supervised by	China Association for Science and Technology
主 办	中国生态学学会 中国科学院生态环境研究中心 地址:北京海淀区双清路 18 号 邮政编码:100085	Sponsored by	Ecological Society of China Research Center for Eco-environmental Sciences, CAS Add:18, Shuangqing Street, Haidian, Beijing 100085, China
出 版	科 学 出 版 社	Published by	Science Press Add:16 Donghuangchenggen North Street, Beijing 100717, China
印 刷	北京宝昌彩色印刷有限公司	Printed by	Beijing Baochang Color Printing Co., Ltd, Beijing 100094, China
国内发行	全国各地邮局	Subscribe by	Science Press Tel:010-64017032, 010-64017539 E-mail: journal@cspg.net
发行代号	82-7	Domestic issue	All Local Post Offices in China 82-7
国外发行	中国国际图书贸易总公司	Foreign issue	China International Book Trading Corporation Add:P.O.Box 399 Beijing 100044, China
发行代号	M670		
订 阅	科学出版社期刊发行部 010-64017032, 010-64017539 或扫描封底二维码		
广告经营	京海工商广字第 8013 号		



ISSN 1000-0933 CN 11-2031/Q 定价 90.00 元