



QK1719701



生态学报

ACTA ECOLOGICA SINICA

第37卷 第14期 Vol. 37 No. 14 2017

ISSN 1000-0933 CN 11-2031/Q



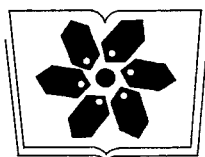
中国生态学会
中国科学院生态环境研究中心

主办



科学出版社
Science Press

出版



中国科学院科学出版基金资助出版

生态学报

(SHENGTAI XUEBAO)

第 37 卷 第 14 期 2017 年 7 月 (半月刊)

目 次

研究论文

- 高寒干旱草原披针叶黄华植物群落土壤种子库与地上植被的关系..... 张起鹏,王 建,赵成章,等 (4619)
- 水分梯度下黑河流域荒漠植物群落多样性特征..... 张晓龙,周继华,蔡文涛,等 (4627)
- 黑河天涝池流域典型林分生态水文化学特征..... 赵宇豪,高俊红,高婵婵,等 (4636)
- 大青沟自然保护区主要森林群落优势种的叶性状..... 刘贵峰,刘玉平,达福白乙拉,等 (4646)
- 滨海盐渍土壤中不同类型盐生植物富集镉的效应..... 弋良朋,王祖伟 (4656)
- 筑坝河流磷素的迁移转化及其富营养化特征 鲍林林,李叙勇,苏静君 (4663)
- 苦草对砷的富集作用..... 陈国梁,冯 涛,李志贤,等 (4671)
- 土地利用变化对花岗岩红壤底土溶解性有机质数量和光谱特征的影响.....
..... 盛 浩,宋迪思,周 萍,等 (4676)
- 模拟氮沉降和降雨量改变对华西雨屏区常绿阔叶林土壤有机碳的影响.....
..... 向元彬,周世兴,肖永翔,等 (4686)
- 川西卧龙岷江冷杉林土壤有机碳组分与氮素关系随海拔梯度的变化特征.....
..... 官 立,刘国华,李宗善,等 (4696)
- 狭叶红景天幼苗对水分及遮阴的生长及生理生化响应..... 杨 柳,何正军,赵文吉,等 (4706)
- UV-B 增强下施硅对稻田 CH_4 和 N_2O 排放及其增温潜势的影响 肇思迪,娄运生,张祎玮,等 (4715)
- 模拟气候变化背景下铁输入对小兴凯湖狭叶甜茅生理生态的影响 贾雪莹,邹元春,姜 明 (4725)
- 降雨量改变对常绿阔叶林干旱和湿润季节土壤呼吸的影响..... 向元彬,周世兴,肖永翔,等 (4734)
- 不同年龄巴山木竹种群克隆结构..... 余 鸽,龙凤来,刘建军,等 (4743)
- 生物炭对菜园土壤微生物功能多样性的影响..... 赵兰凤,张新明,程 根,等 (4754)
- 微生物菌剂对草坪植物高羊茅生长与土壤酶活性的影响..... 张美存,程 田,多立安,等 (4763)
- 吉林蛟河阔叶红松林样地种-面积关系 陈桂莲,谭凌照,范春雨,等 (4770)
- 棘胸蛙 (*Quasipaa spinosa*) 对重复急性冷暴露的生理应激与适应耐受..... 颌志刚,王永鹏,王 娜,等 (4778)
- 旅游区游憩活动对鸟类扩散种子的影响 刘炳亮,苏金豹,马建章 (4786)
- 基于结构方程模型分析荒漠啮齿动物优势种对不同放牧干扰的响应..... 袁 帅,付和平,武晓东,等 (4795)
- 鳊幼鱼能量代谢和个性行为的个体变异及表型关联..... 曾令清,付 成,奚 露,等 (4807)
- 胶州湾夏秋季大气湿沉降中的营养盐及其入海的生态效应..... 邢建伟,宋金明,袁华茂,等 (4817)

洱海蓝藻爆发的时空特征及影响因子..... 王教元,陈光杰,黄林培,等 (4831)

海水中藻菌共培养体系对碳氮磷的吸收转化 张艳敏,王江涛,谭丽菊 (4843)

基于 Maxent 模型的不同气候变化情景下我国草地螟越冬区预测 唐继洪,程云霞,罗礼智,等 (4852)

基于元胞自动机的城市空间动态模拟 詹云军,朱捷缘,严 岩 (4864)

城市产业生态网络特征与演进规律——以北京市为例..... 赵秋叶,施晓清 (4873)

基于遥感和图论的绿地空间演变和连通性研究——以郑州为例.....

..... 穆 博,李华威,Audrey L. Mayer,等 (4883)

专论与综述

生态环境大数据面临的机遇与挑战..... 刘丽香,张丽云,赵 芬,等 (4896)

植被格局对侵蚀产沙影响的研究评述..... 秦 伟,曹文洪,郭乾坤,等 (4905)

学术信息与动态

植物共生信号的文献计量分析..... 杨红玉,王明元,游晓朝,等 (4913)

连接景观异质性与社会环境系统——2017 年美国景观生态学年会(The US-IALE 2017 Annual Meeting)

会议述评 范 昊,赵文武,丁婧祎 (4919)

期刊基本参数:CN 11-2031/Q * 1981 * m * 16 * 304 * zh * P * ¥90.00 * 1510 * 33 * 2017-07



封面彩图提供:严 岩 中国科学院生态环境研究中心 E-mail: yyan@rcees.ac.cn

ACTA ECOLOGICA SINICA Vol.37, No.14 July, 2017 (Semimonthly)

CONTENTS

Research Paper

- Relationships between the soil seed bank and above-ground vegetation of a *Thermopsis lanceolata* community in degraded alpine arid grasslands ZHANG Qipeng, WANG Jian, ZHAO Chengzhang, et al (4619)
- Diversity characteristics of plant communities in the arid desert of the Heihe basin under different moisture gradients ZHANG Xiaolong, ZHOU Jihua, CAI Wentao, et al (4627)
- Ecohydrology and chemical characteristics of typical forests in the Tianlaochi catchment of the Heihe River Basin ZHAO Yuhao, GAO Junhong, GAO Chanchan, et al (4636)
- Leaf traits of dominant plants of main forest communities in Daqinggou Nature Reserve LIU Guifeng, LIU Yuping, BAIYILA Dafu, et al (4646)
- Effects of different types of halophytes on the concentration of cadmium in coastal saline soil YI Liangpeng, WANG Zuwei (4656)
- Phosphorus cycling and the associated ecological effects of eutrophication in dam-regulated rivers BAO Linlin, LI Xuyong, SU Jingjun (4663)
- Characterization of arsenic accumulation by *Vallisneria natans* CHEN Guoliang, FENG Tao, LI Zhixian, et al (4671)
- Effects of land-use change on dissolved organic matter in subsoil derived from granite: quantity and spectrum characteristics SHENG Hao, SONG Disi, ZHOU Ping, et al (4676)
- Effects of simulated nitrogen deposition and precipitation changes on soil organic carbon in an evergreen broad-leaved forest that is part of the Rainy Area of Western China XIANG Yuanbin, ZHOU Shixing, XIAO Yongxiang, et al (4686)
- Altitudinal changes in nitrogen, organic carbon, and its labile fractions in different soil layers in an *Abies faxoniana* forest in Wolong GONG Li, LIU Guohua, LI Zongshan, et al (4696)
- Growth, physiological, and biochemical responses of *Rhodiola kirilowii* seedlings to water and shading YANG Liu, HE Zhengjun, ZHAO Wenji, et al (4706)
- Effect of silicate supply on CH₄ and N₂O emissions and their global warming potentials in a Chinese paddy soil under enhanced UV-B radiation ZHAO Sidi, LOU Yunsheng, ZHANG Yiwei, et al (4715)
- Effects of iron input on the performance of *Glyceria spiculosa* from the Xiaoxingkai Lake under simulated climate change JIA Xueying, ZOU Yuanchun, JIANG Ming (4725)
- Effects of precipitation variations on soil respiration in an evergreen broad-leaved forest during dry and wet seasons XIANG Yuanbin, ZHOU Shixing, XIAO Yongxiang, et al (4734)
- Clonal structure of *Bashania fargesii* populations at different ages YU Ge, LONG Fenglai, LIU Jianjun, et al (4743)
- Effects of biochar on microbial functional diversity of vegetable garden soil ZHAO Lanfeng, ZHANG Xinming, CHENG Gen, et al (4754)
- Effects of microbial agents on the growth of turfgrass *Festuca arundinacea* and soil enzyme activity ZHANG Meicun, CHENG Tian, DUO Li'an, et al (4763)
- Species-area relationships within sample plot in a broad-leaved Korean pine forest at Jiaohe, Jilin Province CHEN Guilian, TAN Lingzhao, FAN Chunyu, et al (4770)
- Stress response and adaptive tolerance of the giant spiny frog (*Quasipaa spinosa*) to repeated acute cold exposure XIE Zhigang, WANG Yongpeng, WANG Na, et al (4778)
- Effects of recreational activities on bird-mediated seed dispersal in tourism areas ... LIU Bingliang, SU Jinbao, MA Jianzhang (4786)
- Response of dominant desert rodent species to grazing disturbances: A structural equation modeling analysis YUAN Shuai, FU Heping, WU Xiaodong, et al (4795)
- Phenotypic correlations and individual variation of energy metabolism and personality in juvenile Chinese bream (*Parabramis pekinensis*) ZENG Lingqing, FU Cheng, XI Lu, et al (4807)

Nutrients in atmospheric wet deposition and their ecological effects on Jiaozhou Bay in summer and autumn 2015 XING Jianwei, SONG Jinming, YUAN Huamao, et al (4817)

Spatio-temporal patterns and drivers of cyanobacteria blooms in Erhai Lake, Southwest China WANG Jiaoyuan, CHEN Guangjie, HUANG Linpei, et al (4831)

Uptake and transformation of carbon, nitrogen and phosphorus in the co-culture system of algae and bacteria in seawater ZHANG Yanmin, WANG Jiangtao, TAN Liju (4843)

Maxent-based prediction of overwintering areas of *Loxostege sticticalis* in China under different climate change scenarios TANG Jihong, CHENG Yunxia, LUO Lizhi, et al (4852)

Dynamic simulation of urban space based on the cellular automata model ZHAN Yunjun, ZHU Jieyuan, YAN Yan (4864)

Characteristics and evolution of an urban industrial ecological network;a case study of Beijing ZHAO Qiuye,SHI Xiaoqing (4873)

Dynamic changes of green-space connectivity based on remote sensing and graph theory: a case study in Zhengzhou, China MU Bo, LI Huawei, Audrey L. Mayer, et al (4883)

Review and Monograph

The opportunities and challenges presented by ecological environment big data LIU Lixiang, ZHANG Liyun, ZHAO Fen, et al (4896)

Review of the effects of vegetation patterns on soil erosion and sediment yield QIN Wei, CAO Wenhong, GUO Qiankun, et al (4905)

《生态学报》2017 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,促进生态学研究深入发展,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,同时也刊登生态学新理论、新方法、新技术介绍;新书评介及开放实验室介绍等。

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

国内邮发代号:82-7,国外邮发代号:M670

标准刊号:ISSN 1000-0933 CN 11-2031/Q

全国各地邮局均可订阅,也可直接与编辑部联系购买。欢迎广大科技工作者、科研单位、高等院校、图书馆等订阅。

通讯地址:100085 北京海淀区双清路 18 号 电 话:(010)62941099; 62843362

E-mail: shengtaixuebao@ rcees.ac.cn 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 37 卷 第 14 期 (2017 年 7 月)

ACTA ECOLOGICA SINICA
(Semimonthly, Started in 1981)
Vol. 37 No. 14 (July, 2017)

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 地址:北京东黄城根北街 16 号 邮政编码:100717	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
发 行	科 学 出 版 社 地址:东黄城根北街 16 号 邮政编码:100717 电话:(010)64034563 E-mail: journal@ cspg.net	Distributed by	Science Press Add: 16 Donghuangchenggen North Street, Beijing 100717, China Tel: (010) 64034563 E-mail: journal@ cspg.net
订 购	全国各地邮局	Domestic	All Local Post Offices in China
国外发行	中国国际图书贸易总公司 地址:北京 399 信箱 邮政编码:100044	Foreign	China International Book Trading Corporation Add: P.O.Box 399 Beijing 100044, China
广告经营 许 可 证	京海工商广字第 8013 号		

