



生态学报

ACTA ECOLOGICA SINICA

第37卷 第6期 Vol. 37 No. 6 2017

ISSN 1000-0933 CN 11-2031/Q

中国生态学学会
中国科学院生态环境研究中心

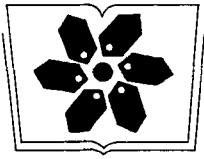
万方数据

主办



科学出版社
Science Press

出版



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 6 期 2017 年 3 月 (半月刊)

目 次

专论与综述

- 土壤病毒生态学研究方法 韩丽丽,于丹婷,贺纪正 (1749)
- 花蜜微生物及其生态功能研究进展 荀二娜,赵骥民,郭继勋,等 (1757)
- 沉水植物茎叶微界面特性研究进展 董 彬,韩睿明,王国祥 (1769)

研究论文

- 鄱阳湖 4 种鹤类集群特征与成幼组成的时空变化 邵明勤,蒋剑虹,戴年华,等 (1777)
- 基于成本收益分析的生境网络优化——以苏锡常地区白鹭为例 吴 未,范诗薇,胡余挺,等 (1786)
- 基于稳定同位素技术的辽宁双台河口保护区黑嘴鸥(*Larus saundersi*)食性研究
..... 王 玄,江红星,张亚楠,等 (1796)
- 北京西山静福寺地区鸟类多度分布格局 陈卓琳,贾丽丽,关文彬 (1805)
- 黄河下游农业景观中景观结构和生境特征对林表生蜘蛛多样性的影响
..... 赵 爽,宋 博,丁圣彦,等 (1816)
- 三种瓢虫集团内捕食卵对初龄幼虫生长发育的影响 郭佳妮,李保平,孟 玲 (1826)
- 四川地区白背飞虱虫源地分析及迁入路径 毕建春,陈星燎,蒋春先,等 (1832)
- 闽东北海域中华管鞭虾种群聚集特性 蔡建堤,徐春燕,马 超,等 (1844)
- 三环泡湿地浮游动物功能群季节变化及其影响因子 安 睿,王凤友,于洪贤,等 (1851)
- 香溪河水生昆虫功能性状及功能多样性空间格局 蒋万祥,何逢志,蔡庆华 (1861)
- 金乌贼繁殖行为与交配策略 王 亮,张秀梅,丁鹏伟,等 (1871)
- 不同生境盐地碱蓬对氮饥饿的响应 刘冉冉,时伟伟,张晓东,等 (1881)
- 2001—2010 年疏勒河流域植被净初级生产力时空变化及其与气候因子的关系
..... 潘竞虎,黄克军,李 真 (1888)
- 近 308 年来大兴安岭北部森林植被气候生产潜力及其对气候变化的响应
..... 赵慧颖,田宝星,官丽娟,等 (1900)
- 物种多样性及生物量与地下水位的关系——以海流兔河流域为例 朱 丽,徐贵青,李 彦,等 (1912)
- 吉林蛟河针阔混交林树木生长的空间关联格局 郝珉辉,张忠辉,赵珊珊,等 (1922)
- 红薯叶片浸提液对 5 种主要农田杂草种子萌发及幼苗生长的化感作用
..... 申时才,徐高峰,张付斗,等 (1931)
- 不同郁闭度控制下马尾松(*Pinus massoniana*)人工林土壤动物群落特征
..... 周泓杨,张 健,张丹桔,等 (1939)
- 模拟氮沉降对温带森林土壤酶活性的影响 张 艺,王春梅,许 可,等 (1956)

毛乌素沙地参考作物蒸散量变化特征与成因分析..... 钱 多,查天山,吴 斌,等 (1966)

帽儿山红松人工林鞘翅目成虫群落小尺度空间异质性变化特征..... 朱纪元,李景科,高梅香,等 (1975)

USLE/RUSLE 模型中植被因子变化特征及其影响因素..... 廖义善,卓慕宁,谢金波,等 (1987)

科尔沁沙地两种植被类型土壤呼吸动态变化及其影响因子..... 韩春雪,刘廷玺,段利民,等 (1994)

桃江县毛竹林生态系统碳储量及其空间分布..... 曹福明,闫文德,田大伦,等 (2005)

黄土高原典型草原优势植物凋落物分解及养分释放对氮添加的响应 文海燕,傅 华,郭 丁 (2014)

不同干扰程度下沙生植物异翅独尾草的种群结构与动态特征..... 安 静,吴 玲,王海娟,等 (2023)

高 CO₂ 浓度对杂交水稻光合作用日变化的影响——FACE 研究 景立权,赵新勇,周 宁,等 (2033)

黄土高原不同土地利用类型土壤含水量的地带性与影响因素..... 索立柱,黄明斌,段良霞,等 (2045)

基于 SPEI-PM 指数的黄淮海平原干旱特征分析 李翔翔,居 辉,刘 勤,等 (2054)

喀斯特裸坡产流产沙过程试验研究..... 严友进,戴全厚,伏文兵,等 (2067)

农户生计资本与沙漠化逆转趋势的关系——以宁夏盐池县为例..... 王 娅,周立华,陈 勇,等 (2080)

基于树轮 δ¹³C 值的北京山区油松水分利用效率 路伟伟,余新晓,贾国栋,等 (2093)

社区水平森林景观格局动态特征与驱动因素..... 唐 利,邵景安,郭 跃,等 (2101)

基于梯度分析的武汉市生态系统服务价值时空分异特征..... 李 全,李 腾,杨明正,等 (2118)

城乡交错带景感生态规划的基本思路与实现..... 石龙宇,赵会兵,郑拴宁,等 (2126)

学术信息与动态

2016 年第二届国际城市生态学大会会议评述 张征恺,屠星月,姜亚琼,等 (2134)

中国古典园林中的景感生态学思想刍议 张学玲,闫 荣,赵 鸣 (2140)

期刊基本参数:CN 11-2031/Q * 1981 * m * 16 * 398 * zh * P * ¥90.00 * 1510 * 40 * 2017-03



封面彩图提供:胡 煜 《中国科学》杂志社有限责任公司 E-mail: huyu@scichina.org

ACTA ECOLOGICA SINICA Vol.37, No.6 March, 2017 (Semimonthly)
CONTENTS

Review and Monograph

Research methods for soil viral ecology HAN Lili, YU Danting, HE Jizheng (1749)

Nectar-dwelling microorganisms and their ecological functions XUN Erna, ZHAO Jimin, GUO Jixun, et al (1757)

Research advances in and perspectives on characteristics of the micro-boundary layer around leaves and stems of submerged
macrophytes DONG Bin, HAN Ruiming, WANG Guoxiang (1769)

Research Paper

Temporal and spatial variations in the group characteristics and adult-juvenile composition of four crane species in Poyang Lake,
China SHAO Mingqin, JIANG Jianhong, DAI Nianhua, et al (1777)

A cost-benefit analysis approach to habitat network optimization; a case study of the little egret (*Egretta garzetta*) in the Su-Xi-
Chang area WU Wei, FAN Shiwei, HU Yuting, et al (1786)

Diet composition of Saunders's Gull (*Larus saundersi*) determined using stable isotope analysis at the Shuangtaihekou National
Nature Reserve, China WANG Xuan, JIANG Hongxing, ZHANG Yanan, et al (1796)

Bird abundance distribution patterns of Jing Fu Temple in Beijing Xishan CHEN Zhuolin, JIA Lili, GUAN Wenbin (1805)

Effects of landscape structure and habitat characteristics on spider diversity in the agro-landscape along the lower reaches of the
Yellow River ZHAO Shuang, SONG Bo, DING Shengyan, et al (1816)

Effects of intra-guild egg predation on neonate larva development in three ladybird beetles (Coleoptera: Coccinellidae)
..... GUO Jiani, LI Baoping, MENG Ling (1826)

Origins and migration pathways of white-backed planthopper *Sogatella furcifera* (Horváth) in Sichuan
..... BI Jianchun, CHEN Xingliao, JIANG Chunxian, et al (1832)

Aggregations of the *Solenocera crassicornis* in the sea area northeast of Fujian CAI Jiandi, XU Chunyan, MA Chao, et al (1844)

Seasonal dynamics of zooplankton functional groups and their relationships with environmental factors in the sanhuanpao wetland
reserve AN Rui, WANG Fengyou, YU Hongxian, et al (1851)

Spatial distribution patterns of trait composition and functional diversity of aquatic insects in the Xiangxi River system
..... JIANG Wanxiang, HE Fengzhi, CAI Qinghua (1861)

Reproductive behavior and mating strategy of *Sepia esculenta* WANG Liang, ZHANG Xiumei, DING Pengwei, et al (1871)

Effects of nitrogen starvation on *Suaeda salsa* from different habitats LIU Ranran, SHI Weiwei, ZHANG Xiaodong, et al (1881)

Spatio-temporal variation in vegetation net primary productivity and its relationship with climatic factors in the Shule River
basin from 2001 to 2010 PAN Jinghu, HUANG Kejun, LI Zhen (1888)

Climate-induced potential productivity of forest vegetation during the past 308 years in northern Da Hinggan Mountain region,
China ZHAO Huiying, TIAN Baoxing, GONG Lijuan, et al (1900)

Relationships among plant species diversity, biomass, and the groundwater table in the Hailiutu River basin
..... ZHU Li, XU Guiqing, LI Yan, et al (1912)

Spatial autocorrelation patterns of tree growth in a coniferous and broad-leaved mixed forest in Jiaohe of Jilin province
..... HAO Minhui, ZHANG Zhonghui, ZHAO Shanshan, et al (1922)

Allelopathic effects of water extracts from sweet potato (*Ipomoea batatas*) leaves on five major farming weeds
..... SHEN Shicai, XU Gaofeng, ZHANG Fudou, et al (1931)

Community characteristics of soil fauna for different canopy density of a *Pinus massoniana* plantation
..... ZHOU Hongyang, ZHANG Jian, ZHANG Danju, et al (1939)

Effect of simulated nitrogen deposition on soil enzyme activities in a temperate forest
..... ZHANG Yi, WANG Chunmei, XU Ke, et al (1956)

Spatio-temporal distribution characteristics of reference crop evapotranspiration in the Mu Us desert
..... QIAN Duo, ZHA Tianshan, WU Bin, et al (1966)

Spatially heterogeneous dynamics of adult Coleoptera communities at a small scale in a <i>Pinus koraiensis</i> plantation on Maoer Mountain	ZHU Jiyuan,LI Jingke,GAO Meixiang,et al (1975)
Variations in vegetation cover factors and their influence on USLE and RUSLE	 LIAO Yishan,ZHUO Muning, XIE Jinbo, et al (1987)
Dynamic changes in soil respiration of two vegetation types and their influencing factors in Horqin Sandy Land	 HAN Chunxue, LIU Tingxi, DUAN Limin,et al (1994)
Distribution of biomass and carbon storage in different aged stands of Moso Bamboo plantations in Taojiang, Hunan	 CAO Fuming, YAN Wende, TIAN Dalun, et al (2005)
Influence of nitrogen addition on <i>Stipa bungeana</i> and <i>Heteropappus altaicus</i> litter decomposition and nutrient release in a steppe located on the Loess Plateau	 WEN Haiyan, FU Hua, GUO Ding (2014)
Structural and dynamic characteristics of <i>Eremurus anisopterus</i> populations in areas with different levels of disturbance	 AN Jing, WU Ling, WANG Haijuan, et al (2023)
Effect of increasing atmospheric CO ₂ concentration on photosynthetic diurnal variation characteristics of hybrid rice: a FACE study ...	 JING Liquan, ZHAO Xinyong, Zhou Ning, et al (2033)
Zonal pattern of soil moisture and its influencing factors under different land use types on the Loess Plateau	 SUO Lizhu, HUANG Mingbin, DUAN Liangxia,et al (2045)
Analysis of drought characters based on the SPEI-PM index in Huang-Huai-Hai Plain	 LI Xiangxiang, JU Hui, LIU Qin, et al (2054)
Runoff and sediment production processes on a Karst bare slope	 YAN Youjin,DAI Quanhou,FU Wenbing,et al (2067)
Relationship between the farmers' livelihoods capital and the desertification reversion trend: a case study in Yanchi County, Ningxia	 WANG Ya,ZHOU Lihua,CHEN Yong,et al (2080)
Variation characteristics of long-term water use efficiency based on tree-ring carbon isotope discrimination	 LU Weiwei, YU Xinxiao, JIA Guodong, et al (2093)
Forest landscape pattern dynamic and its driving factors at the community level	 TANG Li, SHAO Jing'an, GUO Yue, et al (2101)
Spatiotemporal variation of ecosystem services value based on gradient analysis in Wuhan;2000—2010	 LI Quan, LI Teng, YANG Mingzheng, YING Wei (2118)
“Landsenses” ecological planning for urban-rural ecotones	 SHI Longyu, ZHAO Huibing, ZHENG Shuanning, et al (2126)

《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。所刊文章类型有: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。

《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 段靖 刘昕 全元

生 态 学 报
(SHENGTAI XUEBAO)
(半月刊 1981 年 3 月创刊)
第 37 卷 第 6 期 (2017 年 3 月)

ACTA ECOLOGICA SINICA
(Semimonthly, Started in 1981)
Vol. 37 No. 6 (March, 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		

