



中国科学院科学出版基金资助出版

# 生态学报

(SHENGTAI XUEBAO)

第 30 卷 第 23 期 2010 年 12 月 (半月刊)

## 目 次

|                                                |                         |
|------------------------------------------------|-------------------------|
| 1940—2002 年长江中下游平原乡村景观区域中耕地类型及其土壤氮磷储量的变化 ..... | 武俊喜, 程 序, 焦加国, 等 (6309) |
| 海洋生态资本概念与属性界定 .....                            | 陈 尚, 任大川, 李京梅, 等 (6323) |
| 海洋生态资本价值结构要素与评估指标体系 .....                      | 陈 尚, 任大川, 夏 涛, 等 (6331) |
| 黔中喀斯特山区退化生态系统生物量结构与 N、P 分布格局及其循环特征 .....       | 杜有新, 潘根兴, 李恋卿, 等 (6338) |
| 长白山阔叶红松林样地槭属树木木生真菌的群落组成和分布 .....               | 魏玉莲, 戴玉成, 袁海生, 等 (6348) |
| 内蒙古退化荒漠草原土壤细菌群落结构特征 .....                      | 吴永胜, 马万里, 李 浩, 等 (6355) |
| 盐度对尖瓣海莲幼苗生长及其生理生态特性的影响 .....                   | 廖宝文, 邱凤英, 张留恩, 等 (6363) |
| 基于树轮火疤塔河蒙克山樟子松林火灾的频度分析 .....                   | 胡海清, 赵致奎, 王晓春, 等 (6372) |
| 不同农业景观结构对麦蚜种群动态的影响 .....                       | 赵紫华, 石 云, 贺达汉, 等 (6380) |
| 黑河中游荒漠灌丛斑块地面甲虫群落分布与微生境的关系 .....                | 刘继亮, 李锋瑞, 刘七军, 等 (6389) |
| 刺槐树冠光合作用的空间异质性 .....                           | 郑 元, 赵 忠, 周 慧, 等 (6399) |
| 南海北部夏季基础生物生产力分布特征及影响因素 .....                   | 宋星宇, 刘华雪, 黄良民, 等 (6409) |
| 怒江三种裂腹鱼属鱼类种群遗传结构 .....                         | 岳兴建, 汪登强, 刘绍平, 等 (6418) |
| 大型水生植物对重金属的富集与转移 .....                         | 潘义宏, 王宏镛, 谷兆萍, 等 (6430) |
| 依据大规模捕捞统计资料分析东黄渤海白姑鱼种群划分和洄游路线 .....            | 徐兆礼, 陈佳杰 (6442)         |
| 正交试验法分析环境因子对苦荬生长的影响 .....                      | 朱丹婷, 李铭红, 乔宁宁 (6451)    |
| 基于中分辨率 TM 数据的湿地水生植被提取 .....                    | 林 川, 官兆宁, 赵文吉 (6460)    |
| 基于 CVM 的三江平原湿地非使用价值评价 .....                    | 敖长林, 李一军, 冯 磊, 等 (6470) |
| 耕地易地补充经济补偿的生态价值——以江阴市和兴化市为例 .....              | 方 斌, 杨 叶, 郑前进, 等 (6478) |
| 自然旅游地居民自然保护态度的影响因素——中国九寨沟和英国新森林国家公园的比较 .....   | 程绍文, 张 捷, 徐菲菲 (6487)    |
| 基于 PSR 方法的区域生态安全评价 .....                       | 李中才, 刘林德, 孙玉峰, 等 (6495) |
| 灌浆期高温对水稻光合特性、内源激素和稻米品质的影响 .....                | 滕中华, 智 丽, 吕 俊, 等 (6504) |
| 秦岭北坡不同生境栓皮栎实生苗生长及其影响因素 .....                   | 马莉薇, 张文辉, 薛瑶芹, 等 (6512) |
| 子午岭三种生境下辽东栎幼苗定居限制 .....                        | 郭 华, 王孝安, 朱志红 (6521)    |
| 温度、盐度对龟足胚胎发育和幼虫生长的联合影响 .....                   | 饶小珍, 林 岗, 张殿彩, 等 (6530) |
| 锡林郭勒盟气候干燥度的时空变化规律 .....                        | 王海梅, 李政海, 韩国栋, 等 (6538) |
| 北京市水足迹及农业用水结构变化特征 .....                        | 黄 晶, 宋振伟, 陈 阜 (6546)    |
| 延安北部丘陵沟壑区退耕还林(草)成效的遥感监测 .....                  | 孙智辉, 雷延鹏, 卓 静, 等 (6555) |
| 冰川前缘土壤微生物原生演替的生态特征——以乌鲁木齐河源 1 号冰川为例 .....      | 王晓霞, 张 涛, 孙 建, 等 (6563) |
| 储藏方式和时间对三峡水库消落区一年生植物种子萌发的影响 .....              | 申建红, 曾 波, 施美芬, 等 (6571) |
| 云南普洱季风常绿阔叶林演替系列植物和土壤 C、N、P 化学计量特征 .....        | 刘万德, 苏建荣, 李帅锋, 等 (6581) |
| 青藏高原高寒矮蒿草甸碳增汇潜力估测方法 .....                      | 曹广民, 龙瑞军, 张法伟, 等 (6591) |
| 基于 CEVSA2 模型的亚热带人工针叶林长期碳通量及碳储量模拟 .....         | 顾峰雪, 陶 波, 温学发, 等 (6598) |
| 太原盆地土壤呼吸的空间异质性 .....                           | 张义辉, 李洪建, 荣燕美, 等 (6606) |

### 专论与综述

|                         |                         |
|-------------------------|-------------------------|
| 热带森林碳汇或碳源之争 .....       | 祁承经, 曹福祥, 曹受金 (6613)    |
| 景观对河流生态系统的影响 .....      | 欧 洋, 王晓燕 (6624)         |
| 自由空气中臭氧浓度升高对大豆的影响 ..... | 杨连新, 王云霞, 赵秩鹏, 等 (6635) |

### 研究简报

|                                     |                              |
|-------------------------------------|------------------------------|
| 基于生态系统服务价值的区域生态补偿——以山东省为例 .....     | 王女杰, 刘 建, 吴大千, 等 (6646)      |
| 鹤伴山国家森林公园土壤甲螨群落结构 .....             | 许士国, 付荣恕 (6654)              |
| 栓皮栎人工林树干液流对不同时间尺度气象因子及水面蒸发的响应 ..... | 桑玉强, 张劲松, 孟 平, 党宏忠, 等 (6661) |
| 赤眼蜂发育速率对梯度恒温的响应 .....               | 陈洪凡, 岑冠军, 黄寿山 (6669)         |

### 学术信息与动态

|                                    |                 |
|------------------------------------|-----------------|
| GIS 和遥感技术在生态安全评价与生物多样性保护中的应用 ..... | 李文杰, 张时煌 (6674) |
|------------------------------------|-----------------|

期刊基本参数: CN 11-2031/Q \* 1981 \* m \* 16 \* 374 \* zh \* P \* ¥70.00 \* 1510 \* 42 \* 2010-12

# ACTA ECOLOGICA SINICA Vol. 30, No. 23 December, 2010 (Semimonthly)

## CONTENTS

|                                                                                                                                                                                                           |                                                                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| Long-term changes in area and soil total nitrogen and total phosphorus storage in croplands of the densely populated village landscapes of China's Yangtze Plain .....                                    | WU Junxi, CHENG Xu, JIAO Jianguo, <i>et al</i> (6309)           |
| Marine ecological capital: concept and attributes .....                                                                                                                                                   | CHEN Shang, REN Dachuan, LI Jingmei, <i>et al</i> (6323)        |
| Marine ecological capital: its value's constituent and assessment indicators .....                                                                                                                        | CHEN Shang, REN Dachuan, XIA Tao, <i>et al</i> (6331)           |
| Partitioning of vegetation biomass, nutrient storage and cycling of degraded ecosystems from mountainous Karst region, central Guizhou, China .....                                                       | DU Youxin, PAN Genxing, LI Lianqing, <i>et al</i> (6338)        |
| Community composition and distribution character of wood-inhabiting fungi on maple in broad-leaved Korean pine mixed forest plot in Changbaishan of China .....                                           | WEI Yulian, DAI Yucheng, YUAN Haisheng, <i>et al</i> (6348)     |
| Characteristics of bacterial community structure in degraded desert steppe of Inner Mongolia .....                                                                                                        | WU Yongsheng, MA Wanli, LI Hao, <i>et al</i> (6355)             |
| Effect of salinity on the growth and eco-physiological characteristics of <i>Bruguiera Sexangula</i> var. <i>rhynchoptala</i> seedlings .....                                                             | LIAO Baowen, QIU Fengying, ZHANG Luen, <i>et al</i> (6363)      |
| Fire history of Mongolian pine ( <i>Pinus sylvestris</i> var. <i>mongolica</i> ) forests in Mengkeshan of Tahe, China .....                                                                               | HU Haiqing, ZHAO Zhikui, WANG Xiaochun, <i>et al</i> (6372)     |
| Population dynamics of wheat aphids in different agricultural landscapes .....                                                                                                                            | ZHAO Zihua, SHI Yun, HE Dahan, HANG Jia, <i>et al</i> (6380)    |
| Relationships between ground beetle community distribution and microhabitats in an arid desert shrubland of the middle Heihe River basin .....                                                            | LIU Jiliang, LI Fengrui, LIU Qijun, <i>et al</i> (6389)         |
| Spatial heterogeneity of canopy photosynthesis in black locust plantations .....                                                                                                                          | ZHENG Yuan, ZHAO Zhong, ZHOU Hui, <i>et al</i> (6399)           |
| Distribution characteristics of basic biological production and its influencing factors in the northern South China Sea in summer .....                                                                   | SONG Xingyu, LIU Huaxue, HUANG Liangmin, <i>et al</i> (6409)    |
| Population genetic structure of three schizothoracins from Nujiang River in Southwestern China .....                                                                                                      | YUE Xingjian, WANG Dengqiang, LIU Shaoping, <i>et al</i> (6418) |
| Accumulation and translocation of heavy metals by macrophytes .....                                                                                                                                       | PAN Yihong, WANG Hongbin, GU Zhaoping, <i>et al</i> (6430)      |
| Analysis to population division and migratory routine of Populations and migratory routines of <i>Argyrosomus argenteus</i> in the north China waters .....                                               | XU Zhaoli, CHEN Jiajie (6442)                                   |
| Effects of environmental factors and their interaction on <i>Vallisneria spiralis</i> by orthogonal test .....                                                                                            | ZHU Danting, LI Minghong, QIAO Ningning (6451)                  |
| The extraction of wetland hydrophytes types based on medium resolution TM data .....                                                                                                                      | LIN Chuan, GONG Zhaoxing, ZHAO Wenji (6460)                     |
| Evaluating the non-use value of sanjiang wetland based on contingent valuation method .....                                                                                                               | AO Changlin, LI Yijun, FENG Lei, <i>et al</i> (6470)            |
| Evaluation of ecological value compensation using exchange of farmland: a case study with data from Jiangyin and Xinghua, China .....                                                                     | FANG Bin, YANG Ye, ZHENG Qianjin, <i>et al</i> (6478)           |
| Factors influencing local residents' attitude towards nature conservation in natural tourism destination: a comparative study on China's Jiuzhaigou National Park and UK's New Forest National Park ..... | CHENG Shaowen, ZHANG Jie, XU Feifei (6487)                      |
| Assessment method of regional ecological security based on Pressure-State-Response model .....                                                                                                            | LI Zhongcai, LIU Linde, SUN Yufeng, <i>et al</i> (6495)         |
| Effects of high temperature on photosynthesis characteristics, phytohormones and grain quality during filling-periods in rice .....                                                                       | TENG Zhonghua, ZHI Li, LÜ Jun, <i>et al</i> (6504)              |
| Growth characteristics and influencing factors of <i>Quercus variabilis</i> seedlings on the north slope of Qingling Mountains .....                                                                      | MA Liwei, ZHANG Wenhui, XUE Yaoqin, <i>et al</i> (6512)         |
| Recruitment limitations of <i>Quercus wutaishanica</i> seedlings in three habitats in Mt. Ziwuling .....                                                                                                  | GUO Hua, WANG Xiaohan, ZHU Zhihong (6521)                       |
| Combined effects of temperature and salinity on embryonic development and larval growth of <i>Capitulum mitella</i> .....                                                                                 | RAO Xiaozhen, LIN Gang, ZHANG Diancai, <i>et al</i> (6530)      |
| The analysis on the spatial-temporal change of climate aridity in Xilinguole Steppe .....                                                                                                                 | WANG Haimei, LI Zhenghai, HAN Guodong, <i>et al</i> (6538)      |
| Characteristics of water footprint and agricultural water structure in Beijing .....                                                                                                                      | HUANG Jing, SONG Zhenwei, CHEN Fu (6546)                        |
| Remote sensing analysis of the effectiveness of converting farmland into forest or grass in the hilly gully region of Northern Yanan .....                                                                | SUN Zhihui, LEI Yanpeng, ZHUO Jing, <i>et al</i> (6555)         |
| Ecological characterization of soil microflora in primary succession across glacier forefield: a case study of Glacier No. 1 at the Headwaters of Urumqi River .....                                      | WANG Xiaoxia, ZHANG Tao, SUN Jian, <i>et al</i> (6563)          |
| Effects of storage condition and duration on seed germination of four annual species growing in water-level-fluctuation zone of Three Gorges Reservoir .....                                              | SHEN Jianhong, ZENG Ba, SHI Meifen, <i>et al</i> (6571)         |
| Stoichiometry study of C, N and P in plant and soil at different successional stages of monsoon evergreen broad-leaved forest in Pu'er, Yunnan Province .....                                             | LIU Wande, SU Jianrong, LI Shuaifeng, <i>et al</i> (6581)       |
| A method to estimate carbon storage potential in alpine <i>Kobresia</i> meadows on the Qinghai-Tibetan Plateau .....                                                                                      | CAO Guangmin, LONG Ruijun, ZHANG Fawei, <i>et al</i> (6591)     |
| Modeling Long-term changes in carbon fluxes and storage in a subtropical coniferous plantation based on CEVSA2 model .....                                                                                | GU Fengxue, TAO Bo, WEN Xuefa, <i>et al</i> (6598)              |
| Study on spatial heterogeneity of soil respiration in Taiyuan Basin .....                                                                                                                                 | ZHANG Yihui, LI Hongjian, RONG Yanmei, <i>et al</i> (6606)      |
| <b>Review and Monograph</b>                                                                                                                                                                               |                                                                 |
| Debate around tropical forests: carbon sink or carbon source? .....                                                                                                                                       | QI Chengjing, CAO Fuxiang, CAO Shoujin (6613)                   |
| Review of the influence of landscapes on stream ecosystems .....                                                                                                                                          | OU Yang, WANG Xiaoyan (6624)                                    |
| Responses of soybean to free-air ozone concentration enrichment: a research review .....                                                                                                                  | YANG Lianxin, WANG Yunxia, ZHAO Yipeng, <i>et al</i> (6635)     |
| <b>Scientific Note</b>                                                                                                                                                                                    |                                                                 |
| Regional eco-compensation based on ecosystem service assessment: a case study of Shandong Province .....                                                                                                  | WANG Nijie, LIU Jian, WU Daqian, <i>et al</i> (6646)            |
| The structure of soil oribatida communities in the Hebanshan National Forestry Park .....                                                                                                                 | XU Shiguo, FU Rongshu (6654)                                    |
| Responses of stem sap flow to meteorological factors and water evaporation at different time scales over <i>Quercus variabilis</i> plantation .....                                                       | SANG Yuqiang, ZHANG Jinsong, MENG Ping, <i>et al</i> (6661)     |
| Effect of temperature on the development of <i>Trichogramma</i> species .....                                                                                                                             | CHEN Hongfan, CEN Guanjun, HUANG Shoushan (6669)                |
| Research progress on GIS and remote sensing's application in ecological security assessment and Biodiversity conservation .....                                                                           | LI Wenjie, ZHANG Shihuang (6674)                                |