

ISSN 1000-0933

CN 11-2031/Q

生态学报

Acta Ecologica Sinica



第33卷 第7期 Vol.33 No.7 **2013**

中国生态学学会
中国科学院生态环境研究中心
科学出版社

主办
出版

ACTA ECOLOGICA SINICA Vol. 33, No. 7 April, 2013 (Semimonthly)
CONTENTS

Frontiers and Comprehensive Review

Research progress on chemical communication of development and host-finding of nematodes ZHANG Bin, HU Chunxiang, SHI Jin, et al (2003)

Principles, indicators and sampling methods for species monitoring XU Haigen, DING Hui, WU Jun, et al (2013)

Autecology & Fundamentals

Spatial distribution pattern of human-caused fires in Hulunbeir grassland ZHANG Zhengxiang, ZHANG Hongyan, LI Dongxue, et al (2023)

Belowground biomass in Tibetan grasslands and its environmental control factors YANG Xiuqing, HUANG Mei, WANG Junbang, et al (2032)

Analysis on variation characteristics of air temperature and ground temperature in Guilin from 1961 to 2010 CHEN Chao, ZHOU Guangsheng (2043)

Winter bed-site selection by roe deer (*Capreolus capreolus*) in Huangnihe Nature Reserve ZHU Hongqiang, GE Zhiyong, LIU Geng, et al (2054)

Leaf anatomical characteristics of the plants of grasslands in the Tibetan Plateau LI Quanfa, WANG Baojuan, AN Lihua, et al (2062)

A research on summer vegetation characteristics & short-time responses to experimental warming of alpine meadow in the Qinghai-Tibetan Plateau XU Manhou, XUE Xian (2071)

Cytological study on microsporogenesis of *Solanum lycopersicum* var. Micro-Tom under high temperature stress PENG Zhen, CHENG Lin, HE Yanjun, et al (2084)

A new plant height growth process model of *Caragana* forest in semi-arid loess hilly region ZHAO Long, WANG Zhenfeng, GUO Zhongsheng, et al (2093)

Germination inhibitory substances extracted from the seed of seven species of *Quercus* LI Qingmei, LIU Yan, LIU Guangquan, et al (2104)

Effects of water stress and fungicide on the growth and drought resistance of *Flaveria bidentis* CHEN Dongqing, HUANGFU Chaohe, LIU Hongmei, et al (2113)

Characters of soil seed bank in copper tailings and its adjacent habitat SHEN Zhangjun, OU Zulan, TIAN Shengni, et al (2121)

Changes of soil chemical properties after different burning years in typical steppe of Yunwun Mountains LI Yuan, CHENG Jimin, WEI Lin, et al (2131)

Effects of water and fertilizers on nitrate content in tomato fruits under alternate partial root-zone irrigation ZHOU Zhenjiang, NIU Xiaoli, LI Rui, et al (2139)

Effect of land use on the characteristics of organic carbon and labile organic carbon in soil aggregates in Karst mountain areas LI Juan, LIAO Hongkai, LONG Jian, et al (2147)

Mobilization of inorganic phosphorus from soils by five azotobacters ZHANG Liang, YANG Yuhong, LI Qian, et al (2157)

Physiological-ecological responses of *Iris germanica* L. to Cd stress and its accumulation of Cd ZHANG Chengxiang, CHEN Weifeng (2165)

The available forms and bioavailability of heavy metals in soil amended with sewage sludge TIE Mei, SONG Linlin, HUI Xiujuan, et al (2173)

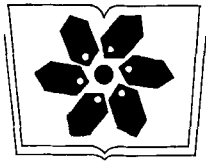
LAI-based photosynthetic light response model and its application in a rainfed maize ecosystem SUN Jingsong, ZHOU Guangsheng (2182)

The dominant species of predatory natural enemies of three kinds of planthoppers and impact of pesticides on natural enemies in paddy field LIN Yuan, ZHOU Xiazhi, BI Shoudong, et al (2189)

Population, Community and Ecosystem

Spatial and temporal variation of picophytoplankton in the Pearl River Estuary ZHANG Xia, HUANG Xiaoping, SHI Zhen, et al (2200)

Analysis of the relationship between species diversity and hydrologic factors during an interval of intermittent water delivery at the Lower Reaches of Tarim River, China	CHEN Yongjin, LIU Jiazhen, CHEN Yanning, et al (2212)
Fish species composition and community pattern in the continental shelf of northwestern South China Sea	WANG Xuehui, LIN Zhaojin, DU Feiyan, et al (2225)
Distribution and succession of plant communities in Lake Bita coastal swamp on the plateau region, northwestern Yunnan	HAN Dayong, YANG Yongxing, YANG Yang (2236)
Analysis on community structure and quantitative characteristics of <i>Nitraria tangutorum</i> nebkhas at different succession stage in lower reaches of Shiyang River	JIN Hujia, MA Quanlin, HE Mingzhu, et al (2248)
Resource and Industrial Ecology	
Effects of subsoiling and supplemental irrigation on dry matter production and water use efficiency in wheat	ZHENG Chengyan, YU Zhenwen, ZHANG Yongli, et al (2260)
Effects of two years' incorporation of leguminous green manure on soil properties of a wheat field in dryland conditions	ZHANG Dabin, YAO Pengwei, LI Jing, et al (2272)
Effects of planting with ridge and furrow mulching on maize growth, yield and water use efficiency in dryland farming	LI Rong, HOU Xianqing, JIA Zhikuan, et al (2282)
Urban, Rural and Social Ecology	
Effects of riparian buffers of North Mort of Beijing on air temperature and relative humidity	WU Fangfang, ZHANG Na, CHEN Xiaoyan (2292)
Characteristics of spatial and temporal variations of global solar radiation in Xi'an and relevant response in urban development	ZHANG Hongli, ZHANG Naweirui, LIU Minru, et al (2304)
Research Notes	
A analysis of macrofungal flora diversity in Langyashan Nature Reserve, Anhui Province, China	CHAI Xinyi, XU Xuefeng, WANG Meiyong, et al (2314)



中国科学院科学出版基金资助出版

生态学报

(SHENGTAI XUEBAO)

第 33 卷 第 7 期 2013 年 4 月 (半月刊)

目 次

前沿理论与学科综述

- 线虫转型发育和寄主识别的化学通讯研究进展····· 张 宾,胡春祥,石 进,等 (2003)
- 生物物种资源监测原则与指标及抽样设计方法····· 徐海根,丁 晖,吴 军,等 (2013)

个体与基础生态

- 呼伦贝尔草原人为火空间分布格局····· 张正祥,张洪岩,李冬雪,等 (2023)
- 青藏高原草地地下生物量与环境因子的关系····· 杨秀静,黄 玫,王军邦,等 (2032)
- 1961—2010 年桂林气温和地温的变化特征 ····· 陈 超,周广胜 (2043)
- 黄泥河自然保护区狍冬季卧息地选择····· 朱洪强,葛志勇,刘 庚,等 (2054)
- 青藏高原草地植物叶解剖特征····· 李全发,王宝娟,安丽华,等 (2062)
- 青藏高原高寒草甸夏季植被特征及对模拟增温的短期响应····· 徐满厚,薛 娴 (2071)
- 高温影响番茄小孢子发育的细胞学研究····· 彭 真,程 琳,何艳军,等 (2084)
- 黄土丘陵半干旱区柠条林株高生长过程新模型····· 赵 龙,王振凤,郭忠升,等 (2093)
- 栎属 7 种植物种子的发芽抑制物质研究····· 李庆梅,刘 艳,刘广全,等 (2104)
- 水分胁迫和杀真菌剂对黄顶菊生长和抗旱性的影响····· 陈冬青,皇甫超河,刘红梅,等 (2113)
- 铜尾矿废弃地与相邻生境土壤种子库特征的比较····· 沈章军,欧祖兰,田胜尼,等 (2121)
- 云雾山典型草原火烧不同恢复年限土壤化学性质变化····· 李 媛,程积民,魏 琳,等 (2131)
- 根系分区交替灌溉条件下水肥供应对番茄果实硝酸盐含量的影响····· 周振江,牛晓丽,李 瑞,等 (2139)
- 喀斯特山区土地利用对土壤团聚体有机碳和活性有机碳特征的影响····· 李 娟,廖洪凯,龙 健,等 (2147)
- 自生固氮菌活化土壤无机磷研究····· 张 亮,杨宇虹,李 倩,等 (2157)
- 德国鳶尾对 Cd 胁迫的生理生态响应及积累特性 ····· 张呈祥,陈为峰 (2165)
- 施污土壤重金属有效态分布及生物有效性····· 铁 梅,宋琳琳,惠秀娟,等 (2173)
- 基于叶面积指数改进的直角双曲线模型在玉米农田生态系统中的应用····· 孙敬松,周广胜 (2182)
- 中稻田三种飞虱的捕食性天敌优势种及农药对天敌的影响····· 林 源,周夏芝,毕守东,等 (2189)

种群、群落和生态系统

- 珠江口超微型浮游植物时空分布及其与环境因子的关系····· 张 霞,黄小平,施 震,等 (2200)
- 输水前后塔里木河下游物种多样性与水因子的关系····· 陈永金,刘加珍,陈亚宁,等 (2212)
- 南海西北部陆架区鱼类的种类组成与群落格局····· 王雪辉,林昭进,杜飞雁,等 (2225)
- 滇西北高原碧塔湖滨沼泽植物群落分布与演替 ····· 韩大勇,杨永兴,杨 杨 (2236)
- 石羊河下游白刺灌丛演替过程中群落结构及数量特征····· 靳虎甲,马全林,何明珠,等 (2248)

资源与产业生态

- 土壤深松和补灌对小麦干物质生产及水分利用率的影响····· 郑成岩,于振文,张永丽,等 (2260)

豆科绿肥及施氮量对旱地麦田土壤主要肥力性状的影响…………… 张达斌,姚鹏伟,李 婧,等 (2272)
沟垄全覆盖种植方式对旱地玉米生长及水分利用效率的影响…………… 李 荣,侯贤清,贾志宽,等 (2282)

城乡与社会生态

北京北护城河河岸带的温湿度调节效应 …………… 吴芳芳,张 娜,陈晓燕 (2292)
西安太阳总辐射时空变化特征及对城市发展的响应…………… 张宏利,张纳伟锐,刘敏茹,等 (2304)

研究简报

安徽琅琊山大型真菌区系多样性…………… 柴新义,许雪峰,汪美英,等 (2314)

中国生态学会 2013 年学术年会征稿通知 …………… (2320)

第七届现代生态学讲座、第四届国际青年生态学者论坛通知 …………… (I)

中、美生态学会联合招聘国际期刊主编 …………… (i)

期刊基本参数:CN 11-2031/Q * 1981 * m * 16 * 318 * zh * P * ¥90.00 * 1510 * 32 * 2013-04



封面图说: 金灿灿的小麦熟了——小麦是世界上最早栽培的农作物之一,是一种在世界各地广泛种植的禾本科植物,起源于中东地区。全世界大概有 43 个国家,近 35%—40% 的人口以小麦为主要粮食。小麦是禾谷类作物中抗寒能力较强的越冬作物,具有一定的耐旱和耐盐碱能力。中国的小麦分布于全国各地,主要集中于东北平原、华北平原和长江中下游一带。小麦秋季播种、冬季生长、春季开花、夏季结实。子粒含有丰富的淀粉、较多的蛋白质、少量的脂肪,还有多种矿物质元素和维生素 B,是一种营养丰富、经济价值较高的粮食。

彩图及图说提供: 陈建伟教授 北京林业大学 E-mail: cites.chenjw@163.com