



Q K 2 3 0 2 9 8 8 945

CN 21-1172/S

土壤通报

CHINESE JOURNAL OF SOIL SCIENCE

第 54 卷 第 3 期 Vol. 54 No.3

2023



中国土壤学会 主办



科学出版社

出版

土 壤 通 报

(Turang Tongbao)

第 54 卷 第 3 期 2023 年 6 月
目 次

研究报告

黑龙江省松嫩平原土地生态脆弱性时空特征分析 张琳琳, 黄 勤, 赵华甫, 吴 用 (505)

基于产业发展的新型农业经营主体对设施农用地来源需求及供需匹配
..... 欧云梅, 张仕超, 刘竞宇, 张艺耀 (516)

辽宁省生态系统服务价值及粮食供需变化 任东风, 曹爱华, 杜文婧 (527)

杞麓湖流域灌区土壤有机碳空间分异及潜在影响因素分析
..... 胡亚珍, 陈奕云, 吴子豪, 张哲乐, 余珮珩 (536)

基于古诗词的中国古代耕地生态系统辨识
..... 边振兴, 郑艳清, 果晓玉, 张宇飞, 刘晓晨, 靳文娟, 王楚翘, 于 森 (549)

基于遥感数据改进修正通用土壤流失方程的广州市土壤侵蚀定量研究
..... 程馨蓉, 胡月明, 刘振华, 缙武龙, 彭一平, 卢文婷 (559)

浑善达克沙地东南缘坡地风蚀速率变化的¹³⁷Cs 与²¹⁰Pb 复合示踪研究 王 攀, 张培新, 巩雪娇 (569)

紫色土坡耕地埂坎土壤裂隙发育及其对抗剪强度的影响 谢思凯, 韦 杰, 康进承 (577)

不同入渗水量下的西南喀斯特地区人工林土壤优先流特征
..... 管 凝, 程金花, 侯 芳, 沈子雅, 曾合州, 赵梦圆, 秦建森 (587)

长期增温对西藏高寒草甸土壤团聚体周转和稳定性影响 王 茹, 张永清, 宗 宁, 田 静 (596)

黄土丘陵区生物结皮覆盖对土壤团聚体分布特征及稳定性影响
..... 张二芳, 郝旺林, 马奇美 (606)

免炼山管理对桉树人工林土壤团聚体养分及稳定性的影响
..... 王 晔, 陈宗福, 黄康庭, 陈晓龙, 陈利军, 王亚琼, 柯 琴, 吴立潮 (614)

非灌溉季节生物炭施用对滴灌棉田土壤团聚体及其碳含量的影响
..... 邹瑞晗, 王振华, 朱 艳, 宗 睿, 陈 睿 (626)

人为破碎和见光风干对于干湿交替培养下土壤有机碳矿化的影响
..... 陈洋洋, 慈 恩, 李 松, 曾蔓漫, 刘 彬 (636)

西藏日喀则地区青稞籽粒与栽培土壤中锌和硒含量特征
..... 李 爽, 时学双, 次旦卓嘎, 德庆卓玛, 王 敏, 张小村, 孔凡美 (645)

氮肥减施和秸秆还田对土壤固定态铵含量的影响
..... 李明嵘, 马雪松, 周 锋, 陈智文, 何红波, 滕泽宇 (654)

含铁秸秆腐熟物对砂姜黑土和潮土磷形态及有效性的影响 蔡 成, 王擎运, 王 慧, 曹 维, 齐永波, 章力干 (662)

化肥氮素减施条件下生物炭施用对冬瓜产量和品质及土壤氮素淋失的影响 孙海军, 吴 思, 萧洪东, 李学文, 刘家友, 喻 敏, 施卫明 (673)

纳帕海高原湿地土壤微生物群落对土地利用方式改变的响应 吕晶花, 李 聪, 杨志东, 刘 攀, 陆 梅, 任玉连, 田 昆, 赵旭燕, 陈志朋 (682)

不同农田生境对通俗腔蚓肠道菌群结构的影响 张玉峰, 刘宏毅, 刘 敏, 董润玉, 樊双虎, 杨益津, 毕艳孟 (695)

大兴安岭地区笃斯越橘铅和镉的吸收特性及污染评价 张继舟, 袁 磊, 于志民, 王立民, 吕 品 (703)

专题综述

耕地“非粮化”管控路径梳理与展望 吕欣彤, 郝士横, 吴克宁, 冯 喆, 赵煜炜, 马金亮, 李晓亮 (713)

基于 CiteSpace 的土壤质量遥感研究文献计量分析 丁琪洵, 江文娟, 童 童, 王 强, 马友华 (721)

坡面水文过程与土壤有机碳迁移研究进展 张宇恒, 刘 春, 付智勇, 何春欢, 吴志男, 黄伟佳 (730)

丛枝菌根真菌缓解土壤过量微量元素和重金属对植物毒害的研究进展 侯赛赛, 蒲子天, 张 弛, 张瑞芳, 王 红, 王鑫鑫 (739)

农田土壤硝化微生物的生态学研究进展 潘 红, 冯浩杰, 姜燕宏, 王 会, 杨全刚, 杨忠臣, 诸葛玉平 (750)

CHINESE JOURNAL OF SOIL SCIENCE
Vol.54 No.3 Jun.,2023
CONTENTS

Research Articles

Temporal and Spatial Characteristics of Land Ecological Vulnerability in Songnen Plain, Heilongjiang Province ZHANG Lin-lin, HUANG Qin, ZHAO Hua-fu, WU Yong (505)

Source and Supply-demand Matching of Facility Farmland of the New Agricultural Management Based on Industrial Development OU Yun-mei, ZHANG Shi-chao, LIU Jing-yu, ZHANG Yi-yao (516)

Ecosystem Service Value and Changes in Food Supply and Demand in Liaoning Province REN Dong-feng, CAO Ai-hua, DU Wen-jing (527)

Spatial Differentiation and Potential Influencing Factors of Soil Organic Carbon in the Irrigation Area of Qilu Lake Watershed HU Ya-zhen, CHEN Yi-yun, WU Zi-hao, ZHANG Zhe-yue, YU Pei-heng (536)

Identification of Farmland Ecosystem in Ancient China Based on Ancient Poetry BIAN Zhen-xing, ZHENG Yan-qing, GUO Xiao-yu, ZHANG Yu-fei, LIU Xiao-chen, JIN Wen-juan, WANG Chu-qiao, YU Miao (549)

Quantitative Study On Soil Erosion in Guangzhou Based on RUSLE Model Improved by Remote Sensing Data CHENG Xin-rong, HU Yue-ming, LIU Zhen-hua, GOU Wu-long, PENG Yi-ping, LU Wen-ting (559)

Tracing Wind Erosion Rates with ¹³⁷Cs and ²¹⁰Pb in a Typical Slope on the Southeast Margin of Hunshandake Sandy Land, Inner Mongolia WANG Pan, ZHANG Pei-xin, GONG Xue-jiao (569)

The Development of Soil Cracks on Bunds in Purple Soil Sloping Farmlands and Its Influence on the Soil Shearing Strength XIE Si-kai, WEI Jie, KANG Jin-cheng (577)

Characteristics of Preferential Flow of Artificial Forest in Karst Areas of Southwest China under Different Infiltration Amounts GUAN Ning, CHENG Jin-hua, HOU Fang, SHEN Zi-ya, ZENG He-zhou, ZHAO Meng-yuan, QIN Jian-miao (587)

Effects of Long-term Warming on Turnover and Stability of Soil Aggregates in Tibetan Alpine Meadow WANG Ru, ZHANG Yong-qing, ZONG Ning, TIAN Jing (596)

Effect of Biological Crust Mulching on Distribution Characteristics and Stability of Soil Aggregates in Loess Hilly Region ZHANG Er-fang, HAO Wang-lin, MA Qi-mei (606)

Effects of Non-burning Management on Soil Aggregate Nutrients and Stability in *Eucalyptus* Plantations WANG Ye, CHEN Zong-fu, HUANG Kang-ting, CHEN Xiao-long, CHEN Li-jun, WANG Ya-qiong, KE Qin, WU Li-chao (614)

Effect of Biochar Application before Winter on Soil Aggregates and Carbon Sequestration in Drip Irrigation Cotton Field ZOU Rui-han, WANG Zhen-hua, ZHU Yan, ZONG Rui, CHEN Rui (626)

Impacts of Man-made Crushing and Air-drying under Sun on Soil Organic Carbon Mineralization during Dry-wet Cycles CHEN Yang-yang, CI En, LI Song, ZENG Man-man, LIU Bin (636)

Characteristics of Zinc and Selenium Contents in Highland barley and Their Cultivated Soils from Shigatze, Tibet LI Shuang, SHI Xue-shuang, CI Danzhuoga, DE Qingzhuoma, WANG Min, ZHANG Xiao-cun, KONG Fan-mei (645)

Effects of Fertilizer Nitrogen Reduction and Crop Residue Return on Soil Fixed Ammonium Content LI Ming-rong, MA Xue-song, ZHOU Feng, CHEN Zhi-wen, HE Hong-bo, TENG Ze-yu (654)

Effects of Decomposed Straw Added Iron on Phosphorus Fractions and Availability in Lime Concretion Black Soil and Fluvo-aquic Soil CAI Cheng, WANG Qing-yun, WANG Hui, CAO Wei, QI Yong-bo, ZHANG Li-gan (662)

Effect of Biochar Application on Yield and Quality of White Gourd and Soil Nitrogen Leaching with Fertilizer Nitrogen Reduction SUN Hai-jun, WU Si, XIAO Hong-dong, LI Xue-wen, LIU Jia-you, YU Min, SHI Wei-ming (673)

Responses of Soil Microbial Communities to Land Use Changes in the Napahai Plateau Wetlands LV Jing-hua, LI Cong, YANG Zhi-dong, LIU Pan, LU Mei, REN Yu-lian, TIAN Kun, ZHAO Xu-yan, CHEN Zhi-peng (682)

Comparison of Intestinal Bacteria Structure of *Metaphire vulgaris* from Different Habitats ZHANG Yu-feng, LIU Hong-yi, LIU Min, DONG Run-yu, FAN Shuang-hu, YANG Yi-feng, BI Yan-meng (695)

Absorption Characteristics and Pollution Evaluation of Pb and Cd by *Vaccinium uliginosum* L. in the Greater Khingan Mountains ZHANG Ji-zhou, YUAN Lei, YU Zhi-min, WANG Li-min, LV Pin (703)

Reviews and Comments

Review and Prospect of Management and Control Path for “Non-grain” Cultivated Land LV Xin-tong, HAO Shi-heng, WU Ke-ning, FENG Zhe, ZHAO Yu-wei, MA Jin-liang, LI Xiao-liang (713)

Bibliometric Analysis of Soil Quality Remote Sensing Literature Based on CiteSpace DING Qi-xun, JIANG Wen-juan, TONG Tong, WANG Qiang, MA You-hua (721)

Research Progress of Hydrological Process and Soil Organic Carbon Migration in Slope Field ZHANG Yu-heng, LIU Chun, FU Zhi-yong, HE Chun-huan, WU Zhi-nan, HUANG Wei-jia (730)

Research Progress in Arbuscular Mycorrhizal Fungi Alleviating the Toxicity of Soil Excessive Trace Elements and Heavy Metals to Plants HOU Sai-sai, PU Zi-tian, ZHANG Chi, ZHANG Rui-fang, WANG Hong, WANG Xin-xin (739)

Advances in Microbial Ecology of Nitrifying Communities in Agricultural Soils PAN Hong, FENG Hao-jie, LOU Yan-hong, WANG Hui, YANG Quan-gang, YANG Zhong-chen, ZHUGE Yu-ping (750)

中文核心期刊
中国科学引文数据库 (CSCD) 来源期刊
中国学术期刊综合评价数据库 (CAJCED) 统计源期刊
中国期刊全文数据库 (CJFD) 全文收录期刊
《中国期刊网》、《中国学术期刊 (光盘版)》全文收录期刊
《中国核心期刊 (遴选) 数据库》收录期刊
中国科技论文统计源期刊 (中国科技核心期刊)
《中国生物学文摘》和生物学文献数据库收录期刊
RCCSE 中国权威学术期刊
CA 化学文摘(美) 收录期刊
JST 日本科学技术振兴机构数据库(日) 收录期刊
《CAJ-CD 规范》执行优秀奖
辽宁省一级期刊

土壤通报
Turang Tongbao
(双月刊 1957 年创刊)

第 54 卷 第 3 期(总第 324 期) 2023 年 6 月

CHINESE JOURNAL
OF SOIL SCIENCE
(Bimonthly, Started in 1957)
Vol.54 No.3 Jun., 2023

主管单位	中国科学技术协会	Administered by	China Association for Science and Technology
主办单位	中国土壤学会	Sponsored by	Soil Science Society of China
承办单位	沈阳农业大学	Undertaken by	Shenyang Agricultural University
编辑	《土壤通报》编辑部 地址:沈阳市沈河区东陵路120号 邮编:110866 电话:024-88487213 电子邮箱:trtb@163.com; trtbjb@126.com 网址:www.trtb.cbpt.cnki.net; www.trtb.net	Edited by	Editorial Department of Chinese Journal of Soil Science Add: No.120 Dongling Road, Shenyang, Liaoning 110866, China Tel: 024-88487213 E-mail: trtb@163.com; trtbjb@126.com Website: www.trtb.cbpt.cnki.net; www.trtb.net
主编	汪景宽	Editor in Chief	WANG Jing-kuan
出版	科学出版社 地址:北京市东皇城根北街16号 邮编:100717	Published by	Science Press Add: No.16 Donghuangchenggen North Street, Beijing 100717, China
印刷	沈阳中科印刷有限责任公司	Printed by	Shenyang Zhongke Printing Co.Ltd.
总发行	辽宁省邮政公司报刊发行公司	Released by	Post Company in Liaoning Province Newspaper Distribution Companies
国内发行	全国各地邮局	Domestic Issue by	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, 邮编:100048	Oversea Issue by	China International Book Trading Corporation P.O.Box 399, Beijing 100048, China

刊号: ISSN 0564-3945
CN 21-1172/S

国内邮发代号: 8-15
国外发行代号: BM8088

2023 年 6 月 6 日出版 定价: 50.00 元

