



Q K 2 1 3 3 7 4 2

土壤通报

CHINESE JOURNAL OF SOIL SCIENCE

第 52 卷 第 4 期 Vol. 52 No.4

2021



中国土壤学会 主办
科学出版社 出版

土壤通报

(Turang Tongbao)

第 52 卷 第 4 期 2021 年 8 月
目 次

研究报告

- 关中壤土堆垫层厚度空间分布特征及其影响因素 白丽敏, 李媛媛, 王铭姝, 齐雁冰, 刘梦云, 常庆瑞 (757)
贵州岩溶峡谷地表覆盖变化的地形分异特征 龙映豪, 李旭东, 程东亚 (767)
基于高光谱的土壤不同颗粒含量预测分析 张雅梅, 施梦月, 王德彩, 郭芳 (777)
基于质量指数和空间自相关分析的耕地保护分区研究 李志芳, 王锐, 沈新磊 (785)
基于改进 BP 神经网络与支持向量机的土壤墒情预测方法研究 薛明, 韦波, 李娟, 陈慈豪, 黄敏慧, 邹林芯 (793)
“旋松—一体”耕作对潮土和砂姜黑土物理性质及作物生长的影响 蒋发辉, 王玥凯, 郭自春, 张中彬, 彭新华 (801)
河西走廊沙漠—绿洲过渡带固沙植物根区土壤物理性质及持水特性 付鹏程, 胡广录, 巩炜, 李浩然, 周川 (811)
不同类型土壤—柠条根系复合抗剪力学特性的比较 杨锐婷, 格日乐, 郝需婷, 王争贤, 崔天民 (821)
不同植被类型人工绿地土壤饱和导水能力、持水特征的比较 李青林, 杨静, 王琨, 王彪, 严令斌 (828)
利用探地雷达低频天线监测滴灌棉田盐渍化土壤盐分迁移研究 邹杰, 张金珠, 王振华, 陈林, 李文昊, 宗睿 (836)
犁底层深度对膜下滴灌土壤水盐运移影响的模拟研究 魏建涛, 张建新, 范文波, 许忠宇, 董倩倩, 李长晓, 王雅琴 (845)
大兴安岭南段不同生长衰退程度山杨林生态化学计量特征 王亚东, 魏江生, 周梅, 刘艳琦, 孙逸晨, 赵晓娟, 郭娇宇 (854)
基于有限样点和大尺度模型的区域土壤呼吸模型研究 闫世琦, 赵正勇, 杨旗, 丁晓纲 (865)
低温堆腐与秸秆深翻还田对玉米产量及土壤微生物群落的影响 刘慧屿, 何志刚, 刘艳, 王秀娟, 董环, 娄春荣 (873)
施肥对植烟土壤有机碳组分及土壤呼吸的影响 秦焱鹤, 李雪利, 王静, 卢剑, 刘晓涵, 张建鹿, 叶协锋, 姚鹏伟 (885)
添加秸秆及其生物质炭对淹水条件下砖红壤 N_2O 和 CH_4 排放的影响 曹明, 朱启林, 汤水荣, 孟磊, 柯用春 (895)
不同施氮水平下配施硅肥对水稻根部周围土壤微生物群落结构的影响 寿南松, 黄迪, 吴漪, 陈若夫, 张立钦, 吴小映 (903)

- 不同施肥方式对马铃薯农田土壤有机碳组分和碳库管理指数的影响 郭亚军, 邱慧珍, 张玉娇, 张建斌, 王友玲, 张春红, AnningDominic Kwadwo (912)
- 不同污染条件下毒死蜱在蚯蚓体内的蓄积特征及其生长影响 杨广斌, 周世萍, 熊张平, 陈修才, 朱鑫泽 (920)
- 上海城市中心区不同类型绿地土壤重金属污染特征 滕吉艳 (927)
- 巯基膨润土钝化修复镉污染水稻土的研究 安 艳, 朱霞萍, 孟兴锐, 邢 智, 赖 波 (934)
- 氧化钙改性坡缕石对水稻土中 Cd 污染的钝化效果研究 陶 玲, 秦 彤, 刘瑞珍, 任 琪 (940)
- 基于累积 logistic 回归模型的重金属污染耕地轮作休耕治理满意度影响因素实证研究 黄 穀, 邓志英, 熊 曜, 黎 博 (947)
- 浙西石灰岩地区土壤和稻米镉含量研究 徐秋桐, 郑顺安, 刘代丽, 倪润祥, 章明奎 (954)
- 基于高光谱的北京铁矿区土壤重金属镍元素含量反演研究 郭学飞, 曹 颖, 焦润成, 南 赞, 赵云峰, 丁 霞 (960)
- 基于 GA-SVM 的耕地土壤重金属含量高光谱反演方法的研究 郭云开, 张思爱, 谢晓峰, 谢 琼 (968)

专题综述

- 基于文献计量学分析土壤氮素矿化研究进展 蒋竹青, 彭 辉 (975)
- 近 20 年农田精准管理分区施肥方法研究进展 鲍依临, 孟祥添, 刘焕军, 殷 悅, 马雨阳, 邱政超, 赵明明 (988)
- 近十年来我国土壤重金属污染源解析方法比较 于旦洋, 王颜红, 丁 荻, 陈 欣, 王镜然 (1000)

CHINESE JOURNAL OF SOIL SCIENCE

Vol.52 No.4 Aug., 2021

CONTENTS

Research Articles

Spatial Distribution Characteristics and Impact Factors of Cumulic Epipedon Thickness in Lou Soil of Guanzhong Region in Shaanxi Province	BAI Li-min, LI Yuan-yuan, WANG Ming-zhu, QI Yan-bing, LIU Meng-yun, CHANG Qing-rui	(757)
Topographic Differentiation of Land Cover in Karst Canyon of Guizhou	LONG Ying-hao, LI Xu-dong, CHENG Dong-ya	(767)
Different Soil Particle Contents Prediction Based on Hyperspectral Data	ZHANG Ya-mei, SHI Meng-yue, WANG De-cai, GUO Fang	(777)
Cultivated Land Protection Zoning Based on Quality Index and Spatial Autocorrelation	LI Zhi-fang, WANG Rui, SHEN Xin-lei	(785)
Forecast Method of Soil Moisture Based on Improved BP Neural Network and Support Vector Machine	XUE Ming, WEI Bo, LI Juan, CHEN Ci-hao, HUANG Min-hui, ZOU Lin-xin	(793)
Effect of “Rotary-subsoiling” Tillage on Soil Physical Properties and Crop Growth in Fluvo-aquic Soil and Shajiang Black Soil	JIANG Fa-hui, WANG Yue-kai, GUO Zi-chun, ZHANG Zhong-bin, PENG Xing-hua	(801)
Soil Physical Properties and Water Retention Characteristics of the Sand-Fixing Plant Root Zone in the Desert-Oasis Transition Area of Gansu Corridor	FU Peng-cheng, HU Guang-lu, GONG Wei, LI Hao-ran, ZHOU Chuan	(811)
Comparison of Composite Shear Mechanical Properties of Different Types of Soil-like <i>caragana korshinskii</i> Root	YANG Rui-ting, GE Ri-le, HAO Xu-ting, WANG Zheng-xian, CUI Tian-min	(821)
Comparison of Saturated Water Carrying Capacity and Water Holding Capacity of Artificial Green Land With Different Vegetation Types	LI Qing-lin, YANG Jing, WANG Kun, WANG Biao, YAN Ling-bin	(828)
Salt Transfer of Salinized Soil in a Drip Irrigation Cotton Field Investigated by Using GPR Low Frequency Antenna	ZOU Jie, ZHANG Jin-zhu, WANG Zheng-hua, CHEN Lin, LI Wen-hao, ZONG Rui	(836)
Effect of the Plough Bottom Depth on the Soil Water and Salt Transport under Mulched Drip Irrigation	WEI Jian-tao, ZHANG Jian-xin, FAN Wen-bo, XU Zhong-yu, DONG Qian-qian, LI Chang-xiao, WANG Ya-qin	(845)
Ecological of Stoichiometric Characteristics of <i>Populus davidiana</i> forests with Different Growth and Decline Degrees in Southern Daxing'anling	WANG Ya-dong, WEI Jiang-sheng, ZHOU Mei, LIU Yan-qi, SUN Yi-chen, ZHAO Xiao-juan, GUO Jiao-yu	(854)
Regional Soil Respiration Modelling Based on the Finite Sample Points and the Large-Scale Model	YAN Shi-qi, ZHAO Zheng-yong, YANG Qi, DING Xiao-gang	(865)
Effects of Low-Temperature Compost and Deep Tillage Returning of Maize Straw on Maize Yield and Soil Microbial Community	LIU Hui-yu, HE Zhi-gang, LIU Yan, WANG Xiu-juan, DONG Huan, LOU Chun-rong	(873)
Effects of Fertilization on Soil Organic Carbon Fractions and Respiration under Tobacco Cultivation	QIN Yi-he, LI Xue-li, WANG Jing, LU Jian, LIU Xiao-han, ZHANG Jian-lu, YE Xie-feng, YAO Peng-wei	(885)

Effects of Corn Straw and Its Biochar Application on N ₂ O and CH ₄ Emissions from Laterite Soil under Strong Reductive Condition	CAO Ming, ZHU Qi-lin, TANG Shui-rong, MENG Lei, KE Yong-chun	(895)
Effects of Silicon on Microbial Community Structure of Rhizosphere Soil of Rice at Different Nitrogen Levels	SHOU Nan-song, HUANG Di, WU Yi, CHEN Ruo-fu, ZHANG Li-qin, WU Xiao-ying	(903)
Effects of Four Fertilization Regimes on Soil Organic Carbon Fractions and Carbon Pool Management Index of Potato Farmland	GUO Ya-jun, QIU Hui-zhen, ZHANG Yu-jiao, ZHANG Jian-bin, WANG You-ling, ZHANG Chun-hong, Anning Dominic Kwadwo	(912)
Bioaccumulation of Chlorpyrifos in Earthworm and Its Growth under Different Soil Pollution Conditions	YANG Guang-bin, ZHOU Shi-ping, XIONG Zhang-ping, CHEN Xiu-cai, ZHU Xing-ze	(920)
Contamination Characteristics of Heavy Metals in Soils from Urban Green Space in Central Shanghai	TENG Ji-yan	(927)
Passivation Remediation of Cd Contaminated Paddy Soils by Mercapto Bentonite	AN Yan, ZHU Xia-ping, MENG Xing-rui, XING Zhi, LAI Bo	(934)
Passivation Effects of Palygorskite Modified by CaO on Cd Contamination in Paddy Soil	TAO Ling, QIN Tong, LIU Rui-zhen, REN Jun	(940)
An Empirical Study on the Influence Factors' Satisfaction of the Crop Rotation and Fallow Governance with the Heavy Metal Contaminated Farmland Based on the Cumulative Logistic Regression Model	HUANG Yi, DENG Zhi-ying, XIONG Xi, LI Bo	(947)
Cadmium Cumulation Characteristics in the Contaminated Farmland Soils and Rice in the Limestone Hilly Areas of Western Zhejiang Province	XU Qiu-tong, ZHENG Shun-an, LIU Dai-li, NI Run-xiang, ZHANG Ming-kui	(954)
An Inversion of Soil Nickel Contents with Hyperspectral in Iron Mine Area of Beijing	GUO Xue-fei, CAO Ying, JIAO Run-cheng, NAN Yun, ZHU Yun-feng, DING Xia	(960)
The Hyperspectral Inversion Method of Heavy Metal Contents in Cultivated Soils Based on GA-SVM	GUO Yun-kai, ZHANG Si-ai, XIE Xiao-feng, XIE Qiong	(968)

Reviews and Comments

Review on the Progress of Soil Nitrogen Mineralization Based on Bibliometrics Analysis	JIANG Zhu-qing, PENG Hui	(975)
Review on Site-Specific Management Zone for Zonal Fertilization Delineation in Last 20 Years	BAO Yi-lin, MENG Xiang-tian, LIU Huan-jun, YIN Yue, MA Yu-yang, QIU Zheng-chao, ZHAO Ming-ming	(988)
Comparison of Analysis Methods of Soil Heavy Metal Pollution Sources in China in Last Ten Years	YU Dan-yang, WANG Yan-hong, DING Fu, CHEN Xin, WANG Jing-ran	(1000)

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 52 卷 第 4 期(总第 313 期) 2021 年 8 月

CHINESE JOURNAL
OF SOIL SCIENCE
(Bimonthly, Started in 1957)

Vol.52 No.4 Aug., 2021

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

Edited by Editorial Department of Chinese Journal of Soil Science

地址: 沈阳市沈河区东陵路120号

Add: No.120 Dongling Road, Shenyang,

邮编: 110866

Liaoning 110866, China

电话: 024-88487213

Tel: 024-88487213

电子邮箱: trtb@163.com; trtbbjb@126.com

E-mail: trtb@163.com; trtbbjb@126.com

网址: www.trtb.cbpt.cnki.net; www.trtb.net

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

Published by Science Press

地址: 北京市东皇城根北街16号

Add: No.16 Donghuangchenggen North Street,

邮编: 100717

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

Oversea Issue by China International Book Trading Corporation

地址: 北京399信箱, 邮编: 100048

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

2021年 8月 6 日出版 定价: 50.00 元

