



国家期刊奖提名奖 | 中国国际影响力优秀期刊 | ISSN 1009-2242  
中国精品科技期刊 | 中国百种杰出学术期刊 | CN 61-1362/TV

# 水土保持学报

JOURNAL OF SOIL AND WATER CONSERVATION

第34卷 第2期 Vol.34 No.2 **2020**



ISSN 1009-2242



9 771009 224209



中国科学院水利部水土保持研究所 **主办**  
中国土壤学会

# 水土保持学报

第34卷第2期 2020年4月

## 目次

生产建设项目弃土弃渣特性及资源化利用潜力评价 .....	李建明, 王志刚, 张长伟, 等(1)
川西高寒山地灌丛草甸土壤抗蚀性研究 .....	吕宸, 宫渊波, 车明轩, 等(9)
复合侵蚀作用下砒砂岩坡面产流产沙过程试验 .....	卫午毓, 肖培青, 张攀, 等(18)
近100年喀斯特槽谷区洼地沉积速率与流域产沙强度 .....	裴曾莉, 龙翼, 张云奇, 等(23)
冻融循环和土壤性质对东北黑土抗剪强度的影响 .....	左小锋, 王磊, 郑粉莉, 等(30)
佳芦河流域林草覆被变化对产流机制的影响 .....	胡彩虹, 冉广, 苻圣洪(36)
含沙率对层状土浑水膜孔灌单点源自由入渗特性的影响 .....	白瑞, 费良军, 陈琳, 等(43)
渭河陕西段河道沉积物中碳氮磷来源分析及污染评价 .....	何琪琳, 张凤宝, 杨明义(50)
西南干暖河谷土壤细沟可蚀性垂直地带性差异 .....	周涛, 苏正安, 何周窈, 等(56)
近50年来王茂沟流域侵蚀沟变化及其影响因素 .....	杨力华, 庞国伟, 杨勤科, 等(64)
坡耕地地表起伏对坡面漫流的影响 .....	李志刚, 梁心蓝, 黄洪粮, 等(71)
三峡水库坝区生态屏障区近25年土地利用变化评价 .....	田培, 龚雨薇, 朱占亮, 等(78)
不同时间尺度孤山川流域水沙关系变化及驱动因素 .....	姜泓旭, 田鹏, 张铁钢, 董智, 等(86)
水流驱动下不同灌草格局对泥沙分选特征的影响 .....	陈鹏, 张铁钢, 董智, 等(93)
不同土地利用方式下赤红壤坡面土壤侵蚀特征 .....	李桂芳, 杨任翔, 谢福倩, 等(101)
林型和微立地类型及其土壤性质对土壤抗侵蚀能力的影响 .....	兰航芳, 段文标, 陈立新, 等(108)
基于GIS和RUSLE的滇池流域土壤侵蚀敏感性评价及其空间格局演变 .....	张恩伟, 彭双云, 冯华梅(115)
基于WEPP的砒砂岩坡面复合侵蚀治理生态水文效应评价 .....	胡剑汝, 饶良懿, 申震洲(123)
四川凉山州孙水河流域近60年来径流趋势特征分析 .....	李璇欣, 熊东红, 张素, 等(130)
精细水平畦灌灌水质及效益评价 .....	范雷雷, 史海滨, 李瑞平, 等(138)
再生水灌溉模式对潮土结构性及导水性能的影响 .....	胡廷飞, 王辉, 谭帅(146)
赣南地区稀土矿采矿迹地枯落物层和土壤层贮水功能研究 .....	李奕, 宋墩福, 王宗丽, 等(153)
沟垄覆膜不同沟垄比对枸杞产量和水分利用效率的影响 .....	杨一凡, 吴发启, 徐宁, 等(159)
亏缺灌溉与有机肥结合对夏玉米水分及产量影响 .....	宿顺顺, 冯浩, 吴淑芳, 等(165)
玉米地土壤微生物量碳、氮及微生物熵对不同物料还田的响应 .....	周元, 陈远学, 蒋帆, 等(173)
瀑布沟水库干热河谷消落带土壤氮时空分布特征 .....	辛志远, 夏建国(181)
不同有机肥对采煤塌陷区土壤氮素矿化动态特征研究 .....	张若扬, 郝鲜俊, 韩阳, 等(188)
不同施肥处理土壤覆膜后秸秆碳对土壤有机碳的贡献 .....	程娜, 李双异, 安婷婷, 等(195)
有机物料对原生盐碱土微团聚体特征及稳定性的影响 .....	陈晓东, 吴景贵, 范围, 等(201)
秸秆还田与化肥减施对水稻生长指标及光合参数的影响 .....	李思平, 丁效东, 曾路生, 等(208)
2种紫花苜蓿耐盐生理特性的初步研究 .....	黄婷, 麻冬梅, 王文静, 等(216)
黄腐酸对蒜套棉制度下棉花产量品质及土壤性状的影响 .....	吕冬青, 张铭谷, 马玉增, 等(222)
缓控释掺混尿素对章丘大葱—小麦产量、效益及土壤氮素的影响 .....	张玉凤, 沈玉文, 王江涛, 等(231)
甘肃秦王川灌区种植豆禾混播牧草的农田生态保育效应 .....	李昂, 李昌明, 尹卓忻, 等(239)
塔里木盆地南缘新垦农田土壤性状变化及其与小麦产量的关系 .....	黄彩变, 严军, 鞠景枫, 等(245)
炭化苹果枝皮和木材对水中硝态氮和铵态氮的差异吸附 .....	石钧元, 荀味, 崔迎宾, 等(253)
添加剂对不同还田深度秸秆腐解及周际土壤环境的影响 .....	曲晓晶, 孙大雁, 吴南, 等(261)
宁夏贺兰山东麓洪积扇区酿酒葡萄对水肥一体化响应 .....	王潇, 王振龙, 王锐, 等(269)
华蓥市山区典型林分水源涵养功能评价 .....	聂泽旭, 齐实, 马曦瑶, 等(276)
包膜脲酶抑制剂增效尿素对小麦生长的影响及其机理研究 .....	李玉, 王茂莹, 张倩, 等(283)
生物炭和PAM混施影响煤矸石基质水分入渗和蒸发 .....	李娜, 耿玉清, 赵新宇, 等(290)
黔中不同龄组柳杉人工林枯落物水源涵养能力综合评价 .....	杨家慧, 谭伟, 卯光宪, 等(296)
生物炭隔盐层在盐碱土淋洗改良中的应用效果 .....	田飞, 张楚涵, 王国强, 等(302)
生物有机肥与减量配施化肥对连作黄瓜养分利用率及产量的影响 .....	李小萌, 陈效民, 曲成闯, 等(309)
3种有机酸对伴矿景天修复效率及土壤微生物数量的影响 .....	柏佳, 谭长银, 曹莹莹, 等(318)
硫酸铝对新开垦苏打盐碱水田的快速改良和培肥效果 .....	马玉涛, 苑佰飞, 张鹏, 等(325)
闽江大樟溪下游沿线湿地沉积物中重金属分布特征及生态风险评价 .....	李亚瑾, 孙志高, 李晓, 等(331)
滨海新围滩涂不同改良方式对土壤盐渍化调控效应及其主控因素 .....	解雪峰, 吴涛, 沈洪运, 等(340)
电渗析与酸淋洗模拟紫色土酸化的效果比较 .....	王朋顺, 刘莉, 李忠意, 等(348)
长期秸秆还田对污染农田土壤与农产品重金属的影响 .....	郑顺安, 刘代丽, 章明奎, 等(354)
添加生物质炭对红壤性水稻土Cd <sup>2+</sup> 吸附解吸特性的影响 .....	胡世民, 陈效民, 景峰, 等(360)
湘乡市某地区土壤—水稻系统镉平衡源解析 .....	唐盛爽, 蒋凯, 黄敬, 等(365)
象草在南方典型母质土壤中的镉修复效应 .....	覃建军, 唐盛爽, 蒋凯, 等(372)
生物炭对水稻—再生稻体系吸收土壤中Cd和Pb的影响 .....	李苙苙, 李洲, 陈春乐, 等(378)

期刊基本参数: CN 61-1362/TV \* 1987 \* b \* A4 \* 384 \* zh \* P \* ¥45.00 \* 1000 \* 54 \* 2020-04

万方数据

执行主编 付会芳

责任编辑 王红红 董志刚

## Contents

Evaluation of Characteristics and Resource Utilization Potential of Residues in Production and Construction Projects .....	LI Jianming, et al(1)
Study on the Soil Erosion Resistance of Alpine Shrub Meadow in Western Sichuan .....	LÜ Chen, et al(9)
Experiment on Runoff and Sediment Production Process of Pisha Sandstone Slope Under Composite Erosion .....	WEI Wuyu, et al(18)
Deposition Rate of Karst Depression and Sediment Yield Intensity of the Watershed in Karst Trough-Valley Area in the Past 100 Years .....	PEI Zengli, et al(23)
Effects of Freeze-thaw Cycles and Soil Properties on Mollisol Shear Strength in Chinese Black Soil Region .....	ZUO Xiaofeng, et al(30)
Effect of Forest and Grass Cover Change on Runoff Mechanism in Jialu River Basin .....	HU Caihong, et al(36)
Effect of Sediment Concentration on Single Point Source Free Infiltration Characteristics of Muddy Water in Layered Soil with Film Hole Irrigation .....	BAI Rui, et al(43)
Source Analysis and Pollution Evaluation of Carbon, Nitrogen and Phosphorus in River Sediments of the Weihe River in Shaanxi Province .....	HE Qilin, et al(50)
Variation in the Vertical Zonality of Rill Erodibility in Southwest Dry-warm Valley of China .....	ZHOU Tao, et al(56)
Changes and Influencing Factors of Erosion Gully in Wangmaogou Watershed in the Last 50 Years .....	YANG Lihua, et al(64)
Effect of Surface Land Fluctuation on Overland Flow in Sloping Farmland .....	LI Guifang, et al(71)
Evaluation of Land Use Change in the Ecological Barrier Zone of the Dam Area of the Three Gorges Reservoir in Recent 25 Years .....	TIAN Pei, et al(78)
Variation and Driving Factor of Flow-sediment Relationship in Gushanchuan River Basin at Different Time Scales .....	JIANG Hongxu, et al(86)
Effects of Different Shrub-Grass Patterns on Size Selectivity of Sediment Under Flow-driven .....	CHEN Peng, et al(93)
Slope Soil Erosion Characteristic of Lateritic Red Soil Under Different Land Use Types .....	LI Guifang, et al(101)
Effects of Forest Type, Microsite Type and Soil Properties on Soil Erosion Resistance .....	LAN Hangyu, et al(108)
Sensitivity Assessment of Soil Erosion and Its Spatial Pattern Evolution in Dianchi Lake Basin Based on GIS and RUSLE .....	ZHANG Erwei, et al(115)
Evaluation of Eco-hydrological Effect of Composite Erosion Control of Pisha Sandstone Slope Based on WEPP Model .....	HU Jianru, et al(123)
Trends Analysis of Sunshuihe River Basin for the Last Six Decades in Liangshan Prefecture, Sichuan Province .....	LI Wanxin, et al(130)
Irrigation Performance and Benefit Evaluation of Fine Horizontal Field Irrigation in Hetao Irrigation District .....	FAN Leilei, et al(138)
Effect of Reclaimed Water Irrigation Modes on the Structural Properties and Hydraulic Conductivity of Tidal Soil .....	HU Tingfei, et al(146)
Research on Water Storage of Litter and Soil Layer in the Rare Earth Ore Mining Site in Southern Jiangxi .....	LI Yi, et al(153)
Effects of Furrow-ridge Mulching with Different Furrow-ridge Ratios on Yield and Water Use Efficiency of Wolfberry .....	YANG Yifan, et al(159)
Effect of Deficit Irrigation Combined with Organic Fertilizer on Water Content and Yield of Summer Maize .....	SU Shunshun, et al(165)
Responses of Soil Microbial Biomass Carbon, Nitrogen and Microbial Entropy to Different Materials Returned to Corn Fields .....	ZHOU Yuan, et al(173)
Spatial and Temporal Distribution Characteristics of Soil Nitrogen of the Dry-hot Valley in the Hydro-fluctuation Belt of the Pubugou Reservoir .....	XIN Zhiyuan, et al(181)
Dynamic Characteristics of Soil Nitrogen Mineralization in Mining Subsidence Area with Different Organic Fertilizers .....	ZHANG Ruoyang, et al(188)
Contribution of Straw Carbon to Soil Organic Carbon Indifferent Fertilization Treatments with Plastic Film Mulching .....	CHENG Na, et al(195)
Effect of Organic Materials on the Characteristics and Stability of Micro-aggregates in the Native Saline-alkali Soil .....	CHEN Xiaodong, et al(201)
Effects of Straw Returning and Chemical Fertilizer Reduction on Growth Index and Photosynthetic Parameters of Rice .....	LI Siping, et al(208)
Preliminary Study on Physiological Characteristics of Salt Tolerance of Two Genotypes of Alfalfa .....	HUANG Ting, et al(216)
Effect of Fulvic Acid on Cotton Growth and Soil Chemical Properties in a Garlic-cotton Intercropping System .....	LÜ Dongqing, et al(222)
Effects of Mixed Application of Slow- and Controlled-Release Urea on Yield, Benefit and Soil Nitrogen of Zhangqiu Onion-Wheat .....	ZHANG Yufeng, et al(231)
Ecological Conservation Effect of Mixed Planting Legume and Grass in Qinwangchuan Irrigation Area of Gansu Province .....	LI Ang, et al(239)
Dynamic Changes of Soil Properties and Their Relationships with Wheat Yield in the New Reclaimed Farmland in the Southern Tarim Basin .....	HUANG Caibian, et al(245)
Differential Adsorption of Nitrate Nitrogen and Ammonium Nitrogen in Water by Carbonized Apple Bark and Wood .....	SHI Junyuan, et al(245)
Effects of Additives on Straw Decomposition and Its Surrounding Soil Environment Under Different Returning Depths .....	QU Xiaoqing, et al(261)
Response of Wine Grape to Water-fertilizer Integration in the Alluvial Sector at Eastern Foot of Helan Mountain, Ningxia .....	WANG Xiao, et al(269)
Evaluation of Water Conservation Function of Typical Stands in Mountainous Areas of Huaying City .....	NIE Zexu, et al(276)
Effects of Coated Urease Inhibitor Synergic Urea on Wheat Growth and Its Mechanism .....	LI Yu, et al(283)
Mixed Application of Biochar and PAM Influence Water Infiltration and Evaporation of Coal Gangue Matrix .....	LI Na, et al(290)
Water Conservation Ability of Litter in <i>Cryptomeria fortunei</i> Plantation with Different Age Groups in Central Guizhou .....	YANG Jiahui, et al(296)
The Application Effects of Biochar Salt-isolation Layer in Aaline-alkali Soil Leaching Improvement .....	TIAN Fei, et al(302)
Effects of Bio-organic Fertilizer Combined with Reduced Fertilizer on Nutrient Utilization and Yield of Continuous Cropping Cucumber .....	LI Xiaomeng, et al(309)
Effect of Three Organic Acids on the Remediation Efficiency of <i>Sedum Plumbizincicola</i> and Soil Microbial Quantity .....	BAI Jia, et al(318)
Effects of Aluminium Sulphate on Rapid Amelioration and Fertility Improvement of Newly Reclaimed Soda Saline-alkali Paddy Field .....	MA Yutao, et al(325)
Distribution Characteristics and Ecological Risk of Heavy Metals in Sediments of Wetland Along the Lower Reach of the Dazhang Stream(Min River) .....	LI Yajin, et al(331)
Regulatory Effect of Different Amelioration Methods on Soil Salinization and Its Main Control Factors in a Newly Reclaimed Coastal Tidal Land .....	XIE Xuefeng, et al(340)
Effect of Electro dialysis and Acid Leaching on the Acidification of Purple Soil .....	WANG Pengshun, et al(348)
Effects of Long-term Straw Returning on Heavy Metals of Soil and Agricultural Products in the Polluted Farmland .....	ZHENG Shun'an, et al(354)
Effects of Biochar Amendment on Adsorption and Desorption Characteristics of Cd <sup>2+</sup> in Red Paddy Soil .....	HU Shimin, et al(360)
Analysis of Cadmium Balance Source in Soil-rice System in a Certain Area of Xiangxiang City .....	TANG Shengshuang, et al(365)
The Remediation Effect of Napier Grass to Cd-contaminated Soil with Typical Parent Materials in Southern China .....	QIN Jianjun, et al(372)
Effects of Biochar on the Uptake of Cd and Pb from Soil by Rice-Ratoon System .....	LI Honghong, et al(378)