

水土保持通报

BULLETIN OF SOIL AND WATER CONSERVATION

第36卷 第2期

Vol.36, No.2

2016年 4月

Apr., 2016



2
2016

ISSN 1000-288X



主办 中国科学院水利部水土保持研究所
水利部水土保持监测中心

目次

试验研究	
中尺度流域土地利用变化对土壤侵蚀的影响	
——以孤山川流域为例	王小燕, 杨勤科 (1)
黄土丘陵区典型农耕地土壤稳定入渗率季节变化	郁耀闯, 张光辉 (8)
基于风蚀模型的河北省土壤风蚀风险评价	刘红, 王卫, 郝彦莉, 等 (12)
呼伦贝尔道路对草地土壤表层颗粒组成空间变异的影响	雷军, 孙禹, 元志辉, 等 (18)
不同盖度羊草地对水土流失的影响	李龙, 郝明德, 肖庆红, 等 (22)
青海省玉树州高原暴雨型泥石流形成机制	
——以称多县拉隆沟泥石流为例	高波, 王佳运, 张成航, 等 (28)
冀北接坝山区风场特征与风蚀沙埋分布的关系	金一鸣, 杨建英, 王志明, 等 (32)
皖西大别山区不同土地利用类型的土壤抗侵蚀性	
——以安徽省岳西县为例	张卫 (38)
三峡库区黄泥巴蹬坎滑坡变形机制	易庆林, 赵能浩 (42)
退耕还茶地土壤动物群落结构及其动态变化	王永东, 郑子成, 李廷轩, 等 (48)
汉江水源区生态沟渠对径流氮、磷的生态拦截效应	刘泉, 李占斌, 李鹏, 等 (54)
荒漠草原风蚀地表颗粒空间异质特征	丁延龙, 蒙仲举, 高永, 等 (59)
近 20 年来陕西省农作物碳截获的时空特征	张宏运, 张艳芳, 位贺杰, 等 (65)
山核桃集约经营过程中土壤微生物量碳氮的变化	邵香君, 徐建春, 吴家森, 等 (72)
单株油蒿蒸腾耗水特征及其与环境因素的关系	高浩, 秦树高, 朱林峰, 等 (76)
滇西北高原湿地不同植被类型下的土壤入渗特性及其影响因素	陈楚楚, 黄新会, 刘芝芹, 等 (82)
腾格里沙漠沙坡头地区旱季沙层含水量	杨晓玉, 邵天杰, 赵景波 (88)
秦岭牛背梁植被覆盖变化及其对气温的时空响应	冯林林, 白红英, 马新萍, 等 (93)
四川省植被变化及其与气象因子的相关性分析	郑杰, 冯文兰, 牛晓俊, 等 (99)
黄土丘陵沟壑区红砂灌丛土壤种子库及其自然更新潜力评估	杨彩红, 李毅, 单立山, 等 (105)
蔬菜废弃物栽培基质对番茄生长发育和营养品质的影响	李瑞琴, 于安芬, 白滨, 等 (110)
不同施肥模式对太湖流域农田土体氮磷流失与营养累积的影响	陈永高, 张瑞斌 (115)
极浅型潜流人工湿地用于污水处理和风沙土改良的中试研究	肖松丽, 任勇翔, 陈灿灿, 等 (120)
水土保持与应用技术	
基于 RS 和 GIS 的敦煌市沙漠化动态监测	尚立照, 陈翔舜, 王小军, 等 (125)
秸秆还田对土壤 Cd(II) 吸附-解吸的影响	黄界颖, 伍震威, 徐晓春, 等 (129)
外掺植物纤维对冻融作用下植被混凝土抗剪强度的影响	梁永哲, 陈毅, 刘大翔 (136)
数量化理论Ⅲ在川东红层岩质滑坡中的应用	张世林, 孙金辉, 马娇 (140)
基于多波段 MODIS 遥感数据的乌审旗土壤含水量监测研究	岳胜如, 李瑞平, 邹春霞, 等 (146)
基于均方差权值法的烟台市城市土地利用效益比较研究	王秋贤, 王富喜 (151)
基于 GIS 的延河流域滑坡崩塌地质灾害空间分布及其引发因素分析	郑苗苗, 牛树轩, 郑泓 (156)
地质封存 CO ₂ 泄露对地表水中非金属类指标的影响	张丙华, 景炯炯, 耿春香, 等 (161)
毛乌素沙地苔藓结皮的野外人工培育技术	杨延哲, 张侃侃, 杨永胜, 等 (165)
基于马尔科夫转移矩阵的南水北调中线水源区土地类型变化分析	朱九龙 (171)
关中地区夏玉米抽穗期叶绿素含量的高光谱估算	解飞, 齐雁冰, 常庆瑞 (176)
地膜降解物对土壤微生物群落结构和多样性的影响	张祯明, 罗学刚, 樊有国, 等 (181)
SH 抑尘剂固化建设场地类型土的抗风蚀性能	李敏, 柴寿喜, 杜红普, 等 (185)

全国二级流域实际蒸散分布式模型	马婷婷, 邱新法, 曾燕 (191)
淮河流域极端降水概率分布模型及其应用	陆苗, 高超, 姚梦婷, 等 (197)
黔西高原地区降雨侵蚀力的简易算法	顾璟冉, 张兴奇, 顾礼彬, 等 (204)
塔里木盆地南缘绿洲地下水时空变异与监测点位优化	
——以策勒绿洲为例	蒙波, 桂东伟, 曾凡江, 等 (209)
井冈山国家级自然保护区杉木林冠层的截留模型	白雲, 李新通, 苏德, 等 (216)
基于地形起伏度的江西省人口—经济格局变化分析	肖池伟, 刘影, 李鹏 (222)
综合研究	
资源约束下安徽省适宜城市人口规模与城镇化演进对策	张乐勤 (228)
毛乌素沙地 3 种主要植物群落的阻沙效益	刘冠志, 李青丰, 贺威, 等 (234)
丹江典型小流域土壤有效铜分布规律	姚京威, 李占斌, 徐国策, 等 (239)
三峡库区水土保持工程农户参与行为调查	洪兰, 韦杰, 李进林, 等 (244)
黄土高原藉河流域径流对气候和土地利用变化的响应	郑培龙, 李云霞, 寇馨月, 等 (250)
鄱阳湖生态经济区畜禽养殖土壤环境承载力及污染风险研究	潘丹 (254)
神东矿区水土保持植物区系分析	郭洋楠 (260)
黄河下游引黄灌区弃土区不同土地利用方式改良土壤功能评价	王贵霞, 夏江宝, 王景元 (264)
农地非农化过程中农民土地权益损益研究	
——以吉林省四平市为例	孟祥凤, 李秀霞 (270)
1960—2013 年中国东南沿海地区年内降水集中度和集中期的时空变化特征	王米雪, 延军平 (277)
城镇化背景下中小流域洪水风险研究	
——以厦门市东西溪流域为例	项捷, 许有鹏, 杨洁, 等 (283)
湖北省耕地利用效率的区域差异及提升对策	单玉红, 朱枫, 柯新利 (288)
广东省极端降水事件的变化特征	王文静, 延军平, 刘永林, 等 (293)
黄土丘陵沟壑区多年生草地的保水固土效益	杨帆, 潘成忠 (300)
江苏省产业结构的水环境污染响应	谢丽芳, 颜城敏, 李该霞, 等 (307)
土地利用变化对塔里木河中游荒漠林地动态的影响	蒲智, 孙伟, 蔡朝朝, 等 (314)
江汉平原水土资源结构与产能时空分异特征	嵇莹, 杨倩, 林爱文, 等 (320)
青海湖流域土壤保持量动态变化	张静, 曹生奎, 曹广超, 等 (326)
2000—2010 年塔里木河流域气候特征及其变化趋势	高国雄, 贾俊姝, 戴俊生 (332)
湖北省土地利用碳排放总量及其效率	董捷, 员开奇 (337)
基于 GIS 的泾河北洛河上游重点治理区土壤侵蚀潜在危险度评价	王凯, 马金辉, 夏燕秋, 等 (343)
附图	(封 2, 3)
《水土保持通报》2013—2015 年被引频次前 10 名论文	《水土保持通报》编辑部 (233)
期刊基本参数: CN61-1094/X * 1981 * b * A4 * 348 * zh * P * 1000 * ￥30.00 * 63 * 2016-04	

执行主编 王修

编辑 琚彤军, 吴乃宁, 聂小妮

英文编辑 杜峰

Contents

Research Papers

Effects of Land Use Change on Soil Erosion in Meso-scale Watershed —A Case Study at Gushanchuan Watershed	WANG Xiaoyan, et al (1)
Temporal Variation of Soil Steady-state Infiltration Rate Under Typical Cultivated Land in Hilly Region of Loess Plateau	YU Yaochuang, et al (8)
Risk Assessment on Soil Wind Erosion in Hebei Province Based on Wind Erosion Model	LIU Hong, et al (12)
Influences of Roads on Spatial Variance of Top Soil Particle Size Distribution of Hulunbeier Grassland	LEI Jun, et al (18)
Effects of <i>Leymus Chinensis</i> Grassland Coverage on Soil and Water Loss	LI Long, et al (22)
Formation Mechanism of Rainstorm-induced Debris Flow in Yushu State of Qinghai Province —A Case Study on Debris Flow of Lalong Gully in Chengduo County	GAO Bo, et al (28)
Relation of Wind Field Characteristics with Wind Erosion and Erosive Sand Burial in Jieba Mountain Area of Hebei Province	JIN Yiming, et al (32)
Soil Anti-erodibility Under Different Landuse Types in Dabie Mountainous Area of Western Anhui Province —A Case Study in Yuexi County of Anhui Province	ZHANG Wei (38)
Deformation Mechanism of Huangnibadengkan Landslide in Three Gorges Reservoir Area	YI Qinglin, et al (42)
Community Structure and Dynamic Changes of Soil Fauna in Farmland-transformed Tea Plantation	WANG Yongdong, et al (48)
Effects of Ecological Ditch Interception of Nitrogen and Phosphorus in Water Source Area of Hanjiang River	LIU Quan, et al (54)
Heterogeneity of Soil Particles in Wind Erosion Surface of Desert Steppe	DING Yanlong, et al (59)
Spatial-temporal Characteristics of Carbon Capture Capacity by Crops in Shaanxi Province During Recent Twenty Years	ZHANG Hongyun, et al (65)
Changes in Soil Microbial Biomass Carbon and Nitrogen of <i>Carya Cathayensis</i> Plantations Under Intensive Managements	SHAO Xiangjun, et al (72)
Characteristics of Water Consumption of <i>Artemisia Ordosica</i> Through Transpiration and Its Relationships with Environmental Factors	GAO Hao, et al (76)
Infiltration Characteristics and Influencing Factors of Surface Soil in Plateau Wetland of Northwest Yunnan Province	CHEN Chuchu, et al (82)
Soil Moisture Content in Sand Layers of Shapotou Area in Tengger Desert During Dry Season	YANG Xiaoyu, et al (88)
Variations of Vegetation Coverage and Its Response to Air Temperature at Niubeiliang of Qinling Mountains	FENG Linlin, et al (93)
Vegetation Change and Its Correlation with Meteorological Factors in Sichuan Province	ZHENG Jie, et al (99)
Soil Seed Bank and Natural Regeneration Potential of <i>Reaumuria Soongorica</i> Shrubs at Different Slope Positions in Loess Hilly and Gully Region	YANG Caihong, et al (105)
Tomato Growth and Its Nutritional Quality in Different Vegetable Waste Substrate	LI Ruiqin, et al (110)
Effects of Fertilization Patterns on Loss of Soil Nitrogen, Phosphorus and Nutrients Accumulation in Farmlands of Taihu Lake Basin	CHEN Yonggao, et al (115)
A Pilot Study on Purification of Wastewater and Amelioration of Aeolian Sandy Soil Using Extremely Shallow Sub-surface Flow Constructed Wetland	XIAO Songli, et al (120)

Soil and Water Conservation Monitoring and Applied Technology

Desertification Monitoring of Dunhuang City Based on GIS and RS	SHANG Lizhao, et al (125)
Effects of Straw Returning on Adsorption-desorption Characteristics of Cd(II) in Soils ...	HUANG Jieying, et al (129)
Effect of Additive Plant Fiber on Shearing Strength of Vegetation-compatible Concrete Under Freezing-thawing Cycles	LIANG Yongzhe, et al (136)
A Study of Rock Mass Landslide in Red Rock Area of East Sichuan Province Based on Third Theory of Quantification	ZHANG Shilin, et al (140)
Soil Moisture Monitoring Based on Multichannel MODIS Remote Sensing Data in Wushen Banner	YUE Shengru, et al (146)
Comparison Study on Benefits of Urban Land Use in Yantai City by Weight Method of Mean Squared Deviation	WANG Qiuxian, et al (151)

A GIS-based Research on Triggering Factors of Erosive Landslide and Collapse in Yanhe River Basin	ZHENG Miaomiao, et al (156)
Influence on Non-metallic Parameters of Surface Water for Leakage of Carbon Dioxide During Geological Storage	ZHANG Binghua, et al (161)
Field Artificial Cultivation Technology of Moss Dominated Crust in Mu Us Sandland	YANG Yanzhe, et al (165)
Analysis on Changes of Land Use Structure in Water Source Area of Middle Route of South to North Water Diversion Project Based on Markov Transfer Matrix	ZHU Jiulong (171)
Hyperspectral Estimation of Canopy Chlorophyll Content in Summer Corn in Guanzhong Area	XIE Fei, et al (176)
Effects of Membrane Degradation Production on Community Structure and Diversity of Soil Microorganisms	ZHANG Zhenming, et al (181)
Wind Erosion Control of Soil Solidified by SH Dust-depressor in Construction Site	LI Min, et al (185)
Distributed Model of Actual Evapotranspiration in Nationwide Secondary River Basins	MA Tingting, et al (191)
Probability Distribution Model and its Application on Extreme Precipitation in Huaihe River Basin	LU Miao, et al (197)
Simple Algorithm of Rainfall Erosivity in West Guizhou Plateau Area	GU Jingran, et al (204)
Spatio-temporal Variability of Oasis Groundwater in Southern Rim of Tarim Basin and Monitoring Sites Optimization—A Case Study in Cele Oasis	Meng Bo, et al (209)
Model Refinement of Canopy Interception of Rainfall by Chinese Fir Forests at Jinggangshan National Nature Reserve	BAI Yun, et al (216)
Analysis of Pattern Changes of Population Distribution and Economic Development in Jiangxi Province Based on Relief Degree of Land Surface	XIAO Chiwei, et al (222)

Comprehensive Research

Proper Urban Population Scale and Urbanization Evolutionary Countermeasures in Anhui Province Under Resource Constraints	ZHANG Leqin (228)
Efficiency of Sand Resistance of Three Main Plant Communities in Mu Us Sandland	LIU Guanzhi, et al (234)
Distribution of Soil Available Copper in Small Typical Watershed of Danjiang River	YAO Jingwei, et al (239)
Investigation on Farmer Participation Behavior in Soil Conservation Projects in Three Gorges Reservoir Area	HONG Lan, et al (244)
Effects of Climate Variation and Land Use Change on Runoff in Jiehe Watershed of Loess Plateau	ZHENG Peilong, et al (250)
Environment Carrying Capacity and Pollution Risk of Livestock Breeding in Ecological Economic Zone of Poyang Lake	PAN Dan (254)
Analysis on Flora of Soil and Water Conservation Plants in Shendong Mining Area	GUO Yangnan (260)
Evaluation of Soil Improvement Resulted from Land Use Type in Post-irrigation Spoil Area of Lower Reaches of Yellow River	WANG Guixia, et al (264)
Profit or Loss: A Case Study of Farmers' Land Rights and Interests in Process of Land Conversion in Siping City of Jilin Province	MENG Xiangfeng, et al (270)
Spatial-temporal Variation of Intra-annual Precipitation Concentration Degree and Precipitation Concentration Period on Southeast Coast of China from 1960 to 2013	WANG Mixue, et al (277)
Flood Risk in Medium and Small Basin During Urbanization—A Case Study on East and West Streams Watershed in Xiamen City	XIANG Jie, et al (283)
Comparison and Analysis of Cultivated Land Use Efficiency and Its Improving Proposals in Hubei Province	SHAN Yuhong, et al (288)
Variation Characteristics of Extreme Precipitation Events in Guangdong Province	WANG Wenjing, et al (293)
Effects of Perennial Grassland on Soil and Water Conservation in Hilly Region of Loess Plateau	YANG Fan, et al (300)
Responses of Water-environment to Industry Structure in Jiangsu Province	XIE Lifang, et al (307)
Influences of Land Use Change on Dynamics of Desert Woodland in Middle Reaches of Tarim River	PU Zhi, et al (314)
Spatial-temporal Variation of Land and Water Resource Structure and Farmland Productivity in Jiangnan Plain	JI Ying, et al (320)
Variation of Soil Conservation Quantity in Qinghai Lake Basin	ZHANG Jing, et al (326)
Characteristics and Change Trend of Climate in Tarim River Basin During 2000—2010	GAO Guoxiong, et al (332)
Carbon Emission from Land Use and Its Efficiency in Hubei Province	DONG Jie, et al (337)
Evaluation of Potential Soil Erosion Risk in Key Harnessing Areas of Jinghe and Beiluo River Upstream Based on GIS	WANG Kai, et al (343)

《水土保持通报》2015年度引证报告

(1) 根据中国科技信息研究所(ISTIC)《2015年版中国科技期刊引证报告(核心版)》数据,《水土保持通报》2014年核心影响因子为0.538,总排序第844/2 383位,在农业工程类期刊中排序第12/20位;核心总被引频次为1 847,总排序第391/2 383位,学科排序第7/20位;综合评价总分为46.6分,总排序第787/2 383位,学科排序第7/20位,在水土保持类期刊中排序第2位。

(2) 根据中国知网(CNKI)《中国学术期刊影响因子年报:自然科学与工程技术·2015年版》数据,《水土保持通报》2014年复合总被引频次为4 940次;复合影响因子0.954,学科排序第15/19位;期刊综合影响因子为0.608,学科排序第14/19位;技术研究类影响因子为0.574,学科排序第3/7位;影响力指数CI为502.775,学科排序第10/19位,在水土保持类期刊中排序第3位。

(3) 根据中国科学文献服务系统《中国科技期刊引证指标(CSCD-JCR)》统计,《水土保持通报》2014年总被引频次为1 612次,在该库来源期刊中总排序第219/1 200位,在农业基础学科期刊中排序第11/20位,在水土保持类期刊中排序第3位;影响因子为0.453 6,总排序第458/12 000位,学科排序第19/20位。在水土保持类期刊中排序第4位。

水土保持通报		Bulletin of	
Shuitu Baochi Tongbao		Soil and Water Conservation	
1981年创刊(双月刊)		Started in 1981 (Bimonthly)	
(总第211期)		(Sum.211)	
第36卷第2期 2016年4月		Vol.36 No.2 Apr.,2016	
主 管	中国科学院	Administrated by	The Chinese Academy of Sciences
主 办	中国科学院水利部水土保持研究所 水利部水土保持监测中心	Sponsored by	Institute of Soil and Water Conservation, CAS & MWR; Monitoring Center of Soil and Water Conservation, MWR
主 编	刘国彬 副主编 郭索彦	Chief Editor	LIU Guo-bin Vice-chief Editor GUO Suo-yan
编 辑	《水土保持通报》编辑委员会	Edited and	Editorial Committee of Bulletin o Soil and Water Conser-
出 版	(电话:029-87018442) (陕西·杨凌·712100)	Published by	vation (Tel:029-87018442) (Yangling 712100, Shaanxi Province, China)
印 刷	中共陕西省委机关第二印刷厂	Printed by	The Second Printing House of CPC Shaanxi Provincial Committee Office
国 内	陕西省杨凌示范区邮政局	Demestric Distri-	The Post Office of Yangling District, Shaanxi Province
发 行	(陕西·杨凌·712100)	buted by	(Yangling 712100, Shaanxi Province, China)
订 购	全国各地邮局	Ordered by	Post Office all Over the Country
国 外	中国国际图书贸易总公司	Oversea Distri-	China International Book Trading Corporation
发 行	(北京399信箱 100044)	buted by	(P.O.Box 399, Beijing 100044, China)

ISSN 1000-288X	国外发行代号 BM4721	定 价 30.00元
CN 61-1094/X	国内邮发代号 52-167	国内外公开发行