



中文核心期刊(第七版)  
中国科技核心期刊

中国科学引文数据库来源期刊  
RCCSE 中国核心学术期刊

ISSN 1005-3409  
CN 61-1272/P

# 水土保持研究

RESEARCH OF SOIL AND WATER CONSERVATION

SHUITU BAOCHI YANJIU

第23卷第1期

2016年2月

1  
2016

ISSN 1005-3409



主 办 中国科学院水利部水土保持研究所

主 管 中 国 科 学 院

## 目 次

黄土丘陵区刺槐人工林与乡土植物叶片和细根功能性状比较研究 .....	王红霞, 温仲明, 高国雄, 等(1)
不同放牧强度对流域降雨径流中氮磷流失的影响 .....	韩佩江, 李卫平, 于玲红, 等(8)
不同土地利用类型土壤入渗性能及其影响因素研究 .....	莫 斌, 陈晓燕, 杨以翠, 等(13)
绳网护坡的强降雨冲刷和雨水入渗试验研究 .....	王桂尧, 肖 侃, 田瑞丰(18)
宁夏盐池不同草地类型的土壤水平衡研究 .....	刘娜娜, 陈惠娟, 孔德杰(23)
山西太岳山不同林龄油松林生物量及碳储量研究 .....	宋娅丽, 韩海荣, 康峰峰(29)
踩踏干扰下生物结皮的水分入渗与水土保持效应 .....	冯 伟, 叶 菁(34)
垄膜沟种不同沟差比对照春玉米水分利用和产量的影响 .....	刘 志, 肖继兵, 崔丽华(38)
长期向上耕作对坡耕地土壤水稳定性团聚体的影响 .....	王 勇, 张建辉, 张泽洪, 等(44)
金尾矿废弃地不同植被恢复模式群落特征 .....	彭东海, 侯晓龙, 何宗明, 等(50)
太原东山试验林场土壤理化性质及饱和导水率的坡向分异规律研究 .....	余 波, 武晓红(56)
纳米碳对黄绵土 Cu(II) 迁移影响的研究 .....	刘艳丽, 周蓓蓓, 王全九, 等(62)
甘肃中西部地区红砂种群结构及空间格局特征 .....	段桂芳, 单立山, 李 毅, 等(67)
宁夏黄土丘陵区苜蓿土壤水分的时空变异特征 .....	蔡进军, 张源润, 潘占兵, 等(75)
快速城镇化大都市边缘地区耕地红线划定研究 .....	魏玉强, 程倩雯, 单金霞, 等(80)
2000—2013 年江苏省不同植被类型 NDVI 时空变化特征 .....	奚砚涛, 徐 勇, 刘欣婷(86)
烟台市海岸带土地利用空间结构分形特征 .....	邹 敏, 张雯雯(92)
TRMM 卫星降水数据在喀斯特山区的适用性分析	
——以贵州省为例 .....	李 威, 蒋 平, 赵卫权, 等(97)
黄土丘陵区生态退耕中的景观格局演变及其地形驱动 .....	刘栩如, 张 琳, 杨 磊, 等(103)
2001—2013 年西鄂尔多斯国家级自然保护区植被覆盖变化 .....	额尔敦格日乐, 包 刚, 包玉龙, 等(110)
东北农场农作物生长季土壤呼吸对温度和含水量的响应 .....	来雪慧, 李 丹, 于波峰, 等(117)
塔里木灌区膜下滴灌的棉花需水量及节水效益 .....	闫映宇(123)
微咸水膜下滴灌对棉花生长发育及其产量的影响研究 .....	宋有玺, 安进强, 何岸谿, 等(128)
西双版纳热带季雨林土壤呼吸变化规律及其影响因素 .....	王亚军, 郁珊珊(133)
黑龙江省煤炭型城市土地集约利用评价研究 .....	杜 旭, 宋 戈, 李瑞雪, 等(139)
天山北坡中小流域输沙量变化及其影响因素	
——以呼图壁河流域为例 .....	郭小云, 刘志辉, 姚俊强, 等(145)
浑河流域降水与径流变化特征及同步性分析 .....	刘 伟, 何俊仕, 陈 杨(150)
闽江赣江上游流域长时间序列 NPP 变化分析 .....	陈 珂, 杨胜天, 候 鹏, 等(155)
不同土地利用方式下渭一库绿洲土壤盐渍化特征分析 .....	王雪梅, 康 璇, 赵 枫(160)
基于 RS/GIS 的博斯腾湖湖滨绿洲土壤盐渍化敏感性研究 .....	李新国, 古丽克孜·吐拉克, 赖 宁(165)
1951—2010 年汉中市气温变化特征分析 .....	王志杰, 苏 嫒(169)
天津市不同污染梯度树木吸滞重金属及硫能力分析 .....	陈 波, 鲁少波, 李少宁, 等(175)
5 种草本植物对土壤重金属铅的吸收、富集及转运 .....	郭晓宏, 朱广龙, 魏学智(183)
南宁市典型园林植物滞尘效应及生理特性研究 .....	高传友(187)
基于熵权的模糊综合评价模型的广西水资源承载力空间分异研究 .....	戴明宏, 王腊春, 魏兴萍(193)
京津冀地区城市土地集约利用与城镇化耦合协调关系研究 .....	王雨竹, 徐培玮(200)

利益相关者对塔里木河下游荒漠河岸林生态系统服务的认知度分析

..... 阿依努尔·艾尼, 玉米提·哈力克, 塔依尔江·艾山, 等(205)

基于小波分析 1956—2010 年焉耆盆地清水河径流量季节变化规律  
..... 古丽孜巴·艾尼瓦尔, 麦麦提吐尔逊·艾则孜, 米热古丽·艾尼瓦尔, 等(210)

基于 PSR 模型的民勤县绿洲—荒漠交错带生态系统健康评价 ..... 杜娟, 陈英(215)

基于分区的环京津土地生态服务价值及灰色预测 ..... 李恒哲, 李超, 陈召亚, 等(221)

玛纳斯河流域土壤盐渍化时空动态变化 ..... 张添佑, 王玲, 罗冲, 等(228)

怀来县农田生态系统服务价值分类评估 ..... 张东, 李晓赛, 陈亚恒(234)

“三江”流域(云南部分)土地利用变化的生态环境效应研究 ..... 赵成, 顾小华, 姜宏雷, 等(240)

基于三角模型的土地生态安全动态评价  
——以西安市为例 ..... 祝培甜, 赵中秋, 陈勇, 等(244)

城乡建设用地增减挂钩项目农户参与意愿及其影响因素研究 ..... 吕品, 王秀兰, 文高辉(249)

沧州市人口—耕地—粮食协调发展关系时空变异 ..... 杨伟州, 郭硕, 于莉, 等(253)

基于 GCM 的西北干旱区降水稳定氢氧同位素年际变化模拟 ..... 刘杨民, 张明军, 王圣杰, 等(260)

基于 SPI 的近 30 年黄河三角洲地区旱涝时空特征 ..... 任建成, 巩在武, 郑宝枝(268)

川西高原精细化生态敏感性评价 ..... 吕远洋, 刘志红, 叶帮苹, 等(272)

流域地貌形态多尺度三维分形量化及尺度效应  
——以砭砂岩区二老虎沟为例 ..... 张传才, 秦奋, 汪永新, 等(278)

半干旱地区典型城市耕地面积变化空间差异及驱动力分析  
——以西安市为例 ..... 魏倩倩, 任志远(284)

湖北水资源生态承压能力的时空分异特征 ..... 杨倩, 孙铖, 李山勇, 等(289)

重点生态功能区生态系统服务价值时空变化特征及启示  
——以湖北省宜昌市为例 ..... 熊善高, 万军, 龙花楼, 等(296)

天山北坡经济带城市人居环境质量与城市化水平协调性评价 ..... 哈尚辰, 阿里木江·卡斯木(303)

有色地膜栽培玉米的主要性状及相关性分析 ..... 李伟绮, 孙建好, 赵建华(309)

黄土丘陵沟壑区主要物种根茎力学特性 ..... 徐海燕, 于卫洁, 王巧利, 等(313)

基于投资—效益准则的滑坡抗滑桩结构目标性能 ..... 罗丽娟, 夏香波, 陈悦, 等(319)

新疆天山托木尔峰地区夏季大气 0℃层高度变化 ..... 强芳, 张明军, 王圣杰, 等(325)

陇西会宁地区全新世时期气候变化探讨 ..... 王琳栋, 杨太保, 何毅, 等(332)

华南活动崩岗崩壁土体裂隙发育规律试验研究 ..... 周红艺, 李辉霞, 叶奇, 等(338)

关中西部大型黄土滑坡滑带土的物理力学特性研究 ..... 郑苗苗, 郑泓, 李同录(343)

水利开发对二滩水库浮游植物及水质状况季节性影响 ..... 邓金燕(349)

江西省水土流失现状与发展趋势分析 ..... 张利超, 王辉文, 谢颂华(356)

陕南土坎梯田田坎强度试验研究 ..... 杨娟, 李光录, 魏舟, 等(360)

《水土保持研究》投稿须知 ..... (364)

附图 ..... (封 2, 封 3)

期刊基本参数: CN 61-1272/P \* 1985 \* b \* A4 \* 364 \* zh \* P \* ¥35.00 \* 1000 \* 64 \* 2016-02

执行主编 赵丽英 编辑 张娜 辛小桂 英文编辑 王百群

## Contents

Comparative Studies on Plant Functional Traits of Leaf and Fine Root Between <i>Robinia pseudoacacia</i> and Local Plant Community in Hilly-Gully Region of the Loess Plateau, China .....	WANG Hongxia, WEN Zhongming, GAO Guoxiong, et al(1)
Effects of Different Grazing Systems on Nitrogen and Phosphorus Losses Along the Rainfall Runoff .....	HAN Peiji, LI Weiping, YU Linghong, et al(8)
Research on Soil Infiltration Capacity and Its Influencing Factors in Different Land Uses .....	MO Bin, CHEN Xiaoyan, YANG Yicui, et al(13)
Experimental Study on Erosion and Rainwater Infiltration on the Rope Net Protection Slope Under Heavy Rainfall .....	WANG Guiyao, XIAO Kan, TIAN Ruifeng(18)
Soil Moisture Budget in Different Types of Grasslands in Yanchi County of Ningxia Arid Zone .....	LIU Nana, CHEN Huijuan, KONG Dejie(23)
Study on Biomass and Carbon Storage with Age-Chronosequence in <i>Pinus tabulaeformis</i> Forest in Taiyue Mountain of Shanxi Province .....	SONG Yali, HAN Hairong, KANG Fengfeng(29)
Effects of Biological Soil Crusts on Infiltration and Soil and Water Conservation Under Trample Disturbance .....	FENG Wei, YE Jing(34)
Effects of Different Ratios of Furrow to Ridge Under Ridge Film Mulching and Furrow Seeding on Water Use and Yield of Spring Corn .....	LIU Zhi, XIAO Jibing, CUI Lihua(38)
Impacts of Long-Term Upslope Tillage Systems on Soil Water-Stable Aggregates on a Steep Hillslope .....	WANG Yong, ZHANG Jianhui, ZHANG Zehong, et al(44)
Community Characteristics of Different Vegetation Restoration Models in Gold Tailing Wasteland .....	PENG Donghai, HOU Xiaolong, HE Zongming, et al(50)
Slope-Aspect Driven Variation of Soil Physicochemical Properties and Saturated Hydraulic Conductivity in Dongshan Experimental Forest Farm of Taiyuan City .....	SHE Bo, WU Xiaohong(56)
Effects of Nano-carbon on the Migration of Cu(II) in Loessal Soil .....	LIU Yanli, ZHOU Beibei, WANG Quanjiu, et al(62)
Population Structure and Spatial Pattern of <i>Reaumuria soongorica</i> Population in Midwest Region of Gansu .....	DUAN Guifang, SHAN Lishan, LI Yi, et al(67)
The Characteristics of Spatiotemporal Variability of Soil Water of Alfalfa Fields in Hilly and Gully Loess Regions of Ningxia .....	CAI Jinjun, ZHANG Yuanrun, PAN Zhanbing, et al(75)
Study on the Demarcating Method of Farmland Redline in Metropolitan Fringe Area with Rapid Urbanization .....	WEI Yuqiang, CHENG Qianwen, SHAN Jinxia, et al(80)
Spatiotemporal Changes of Different Vegetation Coverage in Jiangsu Province in the Period from 2000 to 2013 .....	XI Yantao, XU Yong, LIU Xinting(86)
Fractal Analysis on Spatial Structure of Land Use in the Sea Coastal Zone of Yantai City .....	ZOU Min, ZHANG Wenwen(92)
Analysis on Applicability of TRMM Precipitation Data in Karst Areas .....	LI Wei, JIANG Ping, ZHAO Weiquan, et al(97)
The Effects of Ecological Cropland-Conversion on Landscape Pattern Change and Its Topography Driving in Loess Hilly Region .....	LIU Xuru, ZHANG Lin, YANG Lei, et al(103)
Vegetation Coverage Changes in West Ordos National Natural Reserves During the Period from 2001 to 2013 .....	Erdengerel, BAO Gang, BAO Yulong, et al(110)
Effects of Soil Temperature and Water Content on Soil Respiration Rate During the Crop Growing Season in a Farm of Northern China .....	LAI Xuehui, LI Dan, YU Bofeng, et al(117)
Cotton Water Requirements and Water Saving Benefit Under Mulched Drip Irrigation in Tarim Irrigated Area .....	YAN Yingyu(123)
Effect of Mulched Drip Irrigation with Saline Water on Cotton Growth and Yield .....	SONG Youxi, AN Jinqiang, HE Anrong, et al(128)
Soil Respiration and Impact Factors of Tropical Seasonal Rainforests in Xishuangbanna, Yunnan Province .....	WANG Yajun, YU Shanshan(133)
Evaluation of Urban Intensive Land Use in the Coal-Mining City of Heilongjiang Province .....	DU Xu, SONG Ge, LI Ruixue, et al(139)
Sediment Discharge Change and Its Affecting Factors of Small Watershed on the Northern Slope of Tianshan Mountains .....	GUO Xiaoyun, LIU Zhihui, YAO Junqiang, et al(145)
Variation Characteristics and Synchronicity Analysis of the Precipitation and Runoff in Hunhe River Basin .....	LIU Wei, HE Junshi, CHEN Yang(150)
Long Series Analysis on NPP Variation in the Upper Minjiang River Basin and the Upper Ganjiang River Basin .....	CHEN Ke, YANG Shengtian, HOU Peng, et al(155)
Analysis on Characteristics of Soil Salinization in the Weigan-Kuqa River Delta Oasis Under Different Land Use Patterns .....	WANG Xuemei, KANG Xuan, ZHAO Feng(160)
Study on the Sensitivity of Soil Salinization in the Lakeside Oasis of Bosten Lake Based on RS/GIS .....	LI Xinguo, Gulikezi · Tulake, LAI Ning(165)
Characteristics of Air Temperature in Hanzhong City from 1951 to 2010 .....	WANG Zhijie, SU Yuan(169)
Analysis of Heavy Metal and Sulfur Absorption Ability of Trees Under Different Pollution Gradients in Tianjin City .....	CHEN Bo, LU Shaobo, LI Shaoning, et al(175)

- Characteristics of Uptake, Bioaccumulation and Translocation of Soil Lead (Pb) in Five Species of Herbaceous Plants  
..... GUO Xiaohong, ZHU Guanglong, WEI Xuezi(183)
- Research on Dust Retention Capacities and Physiological Properties of Different Typical Green Plants in Nanning City  
..... GAO Chuanyou(187)
- Spatial Difference of Water Resource Carrying Capacity of Guangxi Using Fussy Comprehensive Evaluation Model Based on Entropy Weight Method ..... DAI Minghong, WANG Lachun, WEI Xingping(193)
- Coupling Coordination Between Urbanization and Intensive Urban Land Use in Beijing-Tianjin-Hebei Area  
..... WANG Yuzhu, XU Peiwei(200)
- Analysis of Stakeholders' Cognition on Desert Riparian Forest Ecosystem Services in the Lower Reaches of Tarim River, China  
..... Ayinuer · Aini, Umut · Halik, Tayierjiang · Aishan, et al(205)
- The Seasonal Runoff Variation of Qingshui River in Yanqi Basin During Period from 1956 to 2010 Based on Wavelet Analysis  
..... Gulziba · Anwar, Mamattursun · Eziz, Mihrigul · Anwar, et al(210)
- Ecosystem Health Evaluation of Oasis-Desert Ecotone in Minqin County Based on PSR Model ..... DU Juan, CHEN Ying(215)
- Land Ecosystem Service Values and Their Grey Forecast Based on Partition Surrounding Beijing and Tianjin  
..... LI Hengzhe, LI Chao, CHEN Zhaoya, et al(221)
- Spatiotemporal Change of Soil Salinization in Manasi River Basin ..... ZHANG Tianyou, WANG Ling, LUO Chong, et al(228)
- Classification Evaluation on Agriculture Ecosystem Service Value of Huailai County  
..... ZHANG Dong, LI Xiaosai, CHEN Yaheng(234)
- Study on Ecoenvironmental Effects of Land Use Change of Three River Basin in Yunnan Province  
..... ZHAO Cheng, GU Xiaohua, JIANG Honglei, et al(240)
- Dynamic Assessment of Land Ecologic Safety Based on Triangle Model...ZHU Peitian, ZHAO Zhongqiu, CHEN Yong, et al(244)
- Factors Influencing Rural Households' Participation Willingness in Linkage Between Urban-Land Taking and Rural-Land Giving Area ..... LÜ Pin, WANG Xiulan, WEN Gaohui(249)
- Spatiotemporal Variation of Coordinated Development Relationship Between Population, Cultivated Land and Grain in Cangzhou City ..... YANG Weizhou, GUO Shuo, YU Li, et al(253)
- Interannual Variation of Stable Hydrogen and Oxygen Isotopes in Precipitation in Arid Northwest China Based on GCMs  
..... LIU Yangmin, ZHANG Mingjun, WANG Shengjie, et al(260)
- Spatiotemporal Characteristics of Drought/Flood in the Yellow River Delta Based on SPI in Recent 30 Years  
..... REN Jiancheng, GONG Zaiwu, ZHENG Baozhi(268)
- Evaluation on Ecological Sensitivity of Chuanxi Plateau Based on GIS.....LÜ Yuanyang, LIU Zhihong, YE Bangping, et al(272)
- Multi-Scale Quantification of Topographic Feature Using Three-Dimensional Fractal Model and Its Scale Effect in Watershed  
..... ZHANG Chuancai, QIN Fen, WANG Yongxin, et al(278)
- Spatial Differences of Cultivated Land Change and Driving Force Analysis in Typical Semi-Arid Area  
..... WEI Qianqian, REN Zhiyuan(284)
- Analysis on the Spatiotemporal Difference of Water Resources Ecological Carrying Capacity in Hubei Province  
..... YANG Qian, SUN Cheng, LI Shanyong, et al(289)
- Spatiotemporal Dynamics and Implications of Ecosystem Service Value in the Key Ecological Function Area  
..... XIONG Shangao, WAN Jun, LONG Hualou, et al(296)
- Coordination Evaluation Between Urban Human Settlement Environment Quality and Urbanization Development of the Economic Belt on the North Slope of Tianshan ..... HA Shangchen, Alimujiang · Kasimu(303)
- Correlation Analysis on Major Agronomic Traits of Corn Mulched by Films in Different Colors  
..... LI Weiqi, SUN Jianhao, ZHAO Jianhua(309)
- Mechanical Properties of Stem and Root of Main Plant Species in the Hilly-Gully Loess Plateau  
..... XU Haiyan, YU Weijie, WANG Qiaoli, et al(313)
- Target Performance of Anti-Slide Pile Structure in Landslide Based on Investment-Benefit Criteria  
..... LUO Lijuan, XIA Xiangbo, CHEN Yue, et al(319)
- Variation of Free-Air 0°C Isotherm Height over Tomur Peak in the Tianshan Mountain, Xinjiang Uygur Autonomous Region  
..... QIANG Fang, ZHANG Mingjun, WANG Shengjie, et al(325)
- The Preliminary Examination of Climate Change Since Holocene in the Huining, Longxi Area  
..... WANG Lindong, YANG Taibao, HE Yi, et al(332)
- Simulation of Morphological Development of Soil Cracks in the Collapsing Hill Region of Southern China  
..... ZHOU Hongyi, LI Huixia, YE Qi, et al(338)
- Study on Physical-Mechanical Properties of Sliding Soil of Large-Scale Loess Landslides in Western Guanzhong  
..... ZHENG Miaomiao, ZHENG Hong, LI Tonglu(343)
- Effect of Development of Water Conservancy on Seasonal Community Structure of Phytoplankton and Water Quality of Ertan Reservoir, Sichuan Province ..... DENG Jinyan(349)
- Current Status and Developing Trend of Soil and Water Loss in Jiangxi Province  
..... ZHANG Lichao, WANG Huiwen, XIE Songhua(356)
- Experimental Study on Strength of Terraced Field Ridge in Southern Shaanxi Province  
..... YANG Juan, LI Guanglu, WEI Zhou, et al(360)

**中国学术期刊影响因子年报(自然科学与工程技术·2015版)**

期刊名称: 水土保持研究

主办单位: 中国科学院水利部水土保持研究所

学科类目: 农业基础科学

研究层次: 技术研究

CN/ISSN: 61-1272/P 1005-3409

## 一、影响力指数(CI)

他引TC			他引JIF			CI值	影响力指数(CI) 学科排序
本刊数值	学科最大值	学科最小值	本刊数值	学科最大值	学科最小值		
2751	5596	173	0.568	1.46	0.057	589.933	8/19

## 二、被引频次(本刊发表的可被引文献在2014年度的被引频次)

本刊发表文献 被各种来源文献引用频次	2014年发表文献		2013年发表文献		2012年发表文献		历年发表文献
	被引频次	他引频次	被引频次	他引频次	被引频次	他引频次	总被引频次
复合引用	18	11	390	264	705	508	7090
技术研究型统计源期刊引用	12	5	261	135	456	259	3192

## 三、影响因子(JIF)

影响因子种类	即年指标	5年影响因子	他引5年影响因子	影响因子学科排序
复合JIF	0.049	1.539	1.204	8/19
技术研究类JIF	0.033	0.902	0.567	1/7

## 四、其他参考指标

基金论文比	平均引文数	引用半衰期	引用期刊数	被引半衰期	被引期刊数	他引总引比	互引指数	WEB即年下载率	WEB下载量/万次	量效指数
0.95	20	7.0	611	6.2	735	0.8	10.18	38	15.76	477.228

中国学术期刊(光盘版)电子杂志社

中国科学文献计量评价研究中心

2016年10月18日

**水土保持研究**

Shuitu Baochi Yanjiu

双月刊 1985年创刊,1994年更名

第23卷第1期

总第114期 2016年2月

**RESEARCH OF SOIL AND WATER CONSERVATION**

Bimonthly (Started in 1985)

Vol. 23 No. 1

Total No. 114 Feb., 2016

主办单位 中国科学院水利部水土保持研究所

主管单位 中国科学院

主 编 张 兴 昌

编辑出版 《水土保持研究》编辑部

(陕西 杨凌 712100)

(电话: 029-87012705)

印 刷 陕西天地印刷有限公司

(陕西 西安 710016)

国内发行 杨凌示范区邮政局

订 购 全国各地邮电局(所)

国外发行 中国国际图书贸易总公司

(北京 399 信箱 100044)

Sponsored by Institute of Soil and Water Conservation, CAS &amp; MWR

Administrated by The Chinese Academy of Sciences

Editor-in-Chief ZHANG Xing-chang

Edited and Editorial Department of Research of Soil and

Published by Water Conservation (Tel: 029-87012705)

(Yangling, Shaanxi, China, 712100)

Printed by Shaanxi Tiandi Printing Co., Ltd.

(Xi'an, Shaanxi, China, 710016)

Distributed by The Post Office of Yangling Demonstration Zone

Ordered by Post Office all over the Country

Foreign China International Book Trading Corporation

distributed by (P. O. Box 399 Beijing 100044)