

水土保持研究

第二十七卷第四期

二〇二〇年八月

中国科学院水利部水土保持研究所



中文核心期刊(第八版)
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27卷第4期

2020年8月

4
2020



主管 中国科学院
主办 中国科学院 水土保持研究所
水利部

目 次

- 石漠化地区林草复合治理对土壤团聚体稳定性和可蚀性的影响 陈静, 陈海, 朱大运, 等(1)
基于 GIS 的贡山县土壤侵蚀动态变化研究 李益敏, 袁静, 王东驰, 等(8)
红壤坡耕地地表径流和壤中流中可溶性有机碳的迁移特征 余小芳, 肖胜生, 徐铭泽, 等(16)
不同类型岩溶湿地表层沉积物碳氮磷生态化学计量学特征时空分布 张紫霞, 刘鹏, 王妍, 等(23)
黄土高原不同植被带刺槐生态化学计量特征 乔雨宁, 董从国, 黄敏, 等(31)
退耕还林(草)以来陕北白于山区植被覆盖与土壤侵蚀强度变化 黑哲, 王飞, 韩剑桥, 等(39)
若尔盖高原湿地水质演变特征及氮磷累积效应 顾城天, 罗彬, 王恒, 等(47)
近 60 年汾河中上游水沙变化趋势及其驱动因素 张凯, 鲁克新, 李鹏, 等(54)
长江流域森林碳储量的时空变化及其驱动因素分析 孔蕊, 张增信, 张凤英, 等(60)
不同土地利用方式对土壤团聚体稳定性及其导水率的影响 袁晓良, 李俊雅, 葛乐, 等(67)
3 种地表随机糙率测量方法比较 王洪晓, 张光辉, 朱平宗, 等(72)
基于 Landsat 8 遥感影像的黔中水利枢纽工程区土壤含水量反演分析 李永柳, 周忠发, 蒋翼(78)
基于地学信息图谱的江汉平原土地利用时空变化分析 张韵, 彭建东, 王晶晶, 等(85)
等高反坡台阶整地对坡耕地农田耗水及水量平衡的影响 闫腾云, 王克勤, 赵洋毅, 等(93)
民勤青土湖区不同年限退耕地土壤颗粒组成和养分变化特征 柴成武, 王理德, 尉秋实, 等(99)
草海流域景观结构与土壤保持功能时空动态特征 王志杰, 柳书俊, 喻理飞(105)
基于 SPEI 的广西干旱综合特征及农业旱灾风险研究 杨星星, 杨云川, 邓思敏, 等(113)
近 58 年江西省气候及其生产潜力时空变化特征 安彬, 肖薇薇, 张淑兰, 等(122)
大兴安岭南段白桦树干液流对土壤水分的响应 王媛, 魏江生, 周梅, 等(128)
灌溉方式、灌水量及施氮量对小麦、玉米周年水分利用的影响 杨永辉, 武继承, 高翠民, 等(134)
典型草原不同土壤类型对群落特征和种群生态位的影响

——以锡林河流域为例 王慧敏, 朱仲元, 张璐(142)
宁夏南部黄土丘陵区典型草本根系分布特征 万海霞, 蔡进军, 郭永忠, 等(149)
宁南红梅杏典型栽培区生产中存在的问题调查分析 杨凯齐, 武东波, 王玮, 等(157)
寒地水稻垄作双深耕作栽培模式技术效果的评价 李红宇, 张巩固, 郑桂萍, 等(164)
覆土砒砂岩区沙棘耗水量及其影响因子 朱雅娟, 党宏忠, 杜娟, 等(171)
青海北部草地水分时间异质性及主导因素 马扶林, 杨永胜, 王军邦, 等(178)
不同林龄油松根际土壤微生物群落多样性及其影响因子 丁丽, 冀玉良, 李懿(184)
云南省九大高原湖泊流域 NDVI 时空演变及其与气候的响应关系 李应鑫, 李石华, 彭双云(192)
内蒙古典型草原区 NDVI 对气候变化的响应 王雨晴, 张成福, 李晓鸿(201)
基于 CA-Markov 的渭河流域 NDVI 时空变化模拟及预测 王丽霞, 张珈玮, 孟妮娜, 等(206)
1960—2013 年黄土高原地区气温变化对 Hiatus 现象的响应 张耀宗, 张勃, 刘艳艳, 等(213)
基于无人机遥感的元阳梯田典型灌区渠系结构特征 张兆豪, 宋维峰(220)
长三角城市群生态足迹时空动态及自然资源利用效率分析 闻熠, 高峻, 黄丽萍, 等(225)
青藏高原高寒灌丛昼夜温差对 NEE 的影响及其变化特征 祝景彬, 贺慧丹, 张法伟, 等(232)

- 河南省城镇化进程与水资源利用响应关系 焦士兴, 崔思静, 王安周, 等(239)
北京湾过渡带生态系统服务地形梯度效应评价 陈龙, 刘春兰, 裴夏, 等(247)
渭河关中段水系演变及其对城镇化的响应 邓礼强, 王飞, 韩剑桥, 等(256)
基于小流域的汾河上游生态服务价值演变 王怡帆, 师学义(262)
中国不同农业区气温和降水时空演变格局分析 姜萍, 潘新民, 曾雪莹(270)
中国县域生态系统弹性力时空演变特征分析 杨超, 陈万旭, 冉端, 等(279)
长三角城市群城市韧性与城镇化水平耦合协调发展研究 周倩, 刘德林(286)
基于 Meta 分析的长白山地区土地利用变化与生态系统服务价值转移
..... 刘晖, 李春波, 韩旭龙, 等(293)
福建省土地利用隐性形态与土地生态安全耦合协调分析 宋家鹏, 陈松林(301)
西安市土地利用效益与城镇化耦合协调关系 仇振宇, 朱记伟, 解建仓, 等(308)
资源型城市国土开发强度与生态承载力时空耦合特征及驱动要素解析
——以马鞍山市为例 朱晓青, 黄志豪, 章天成, 等(317)
河套灌区番茄微咸水灌溉定额探讨 李金刚, 王少丽, 何平如, 等(327)
干旱区城市生态安全格局优化研究
——以内蒙古呼和浩特市为例 冯琰玮, 甄江红, 马晨阳(336)
欠发达地区失地农民可持续生计影响因素分析
——以兰州安宁区为例 杨琨, 刘鹏飞(342)
川西北高原区生态环境脆弱性评价 姚昆, 张存杰, 何磊, 等(349)
山区城市建设用地集约利用时空分异研究
——以玉溪市为例 金杰, 陈武, 何锋(356)
基于 LESA 综合评价模型的耕地质量定级方法 李卓倩, 赵贤好, 张莉坤, 等(363)
环境约束下的甘肃省城市土地利用效率时空差异及其演进特征 朱立祥, 锤占福, 王启雯, 等(368)
快速城市化背景下黔中多山城市扩展模式及景观格局动态
——以安顺市为例 李睿, 王志泰, 包玉(376)
江西省三生空间结构时空格局的多尺度分析 陈钱钱, 舒晓波, 曾凡彬(385)
基于 maxEnt 模型的哈尼梯田核心区滑坡易发性评价 赵冬梅, 角媛梅, 邱应美, 等(392)
淤地坝沉积泥沙解译小流域土壤侵蚀信息研究进展 赵恬茵, 王志兵, 吴媛媛, 等(400)
附图 (封 2, 封 3)

期刊基本参数:CN 61-1272/P * 1985 * b * A4 * 404 * zh * P * ¥40.00 * 1000 * 56 * 2020-08

执行主编 赵丽英 编辑 张娜 辛小桂 英文编辑 王百群

Contents

- Effects of Combined Governance Using Forest and Grass on Stability and Erosibility of Soil Aggregates in Rock Desertification Area CHEN Jing, CHEN Hai, ZHU Dayun, et al(1)
- GIS-based Study on the Dynamic Changes of Soil Erosion in Gongshan County LI Yimin, YUAN Jing, WANG Dongchi, et al(8)
- Characteristics of Migration of Dissolved Organic Carbon in Overland Flow and Interflow in Red Soil Sloping Field YU Xiaofang, XIAO Shengsheng, XU Mingze, et al(16)
- Spatial and Temporal Distribution of Eco-Chemometric Characteristics of Carbon, Nitrogen and Phosphorus in Surface Sediments of Different Karst Wetlands ZHANG Zixia, LIU Peng, WANG Yan, et al(23)
- Ecological Stoichiometric Characteristics of *Robinia pseudoacacia* in Different Vegetation Zones on the Loess Plateau QIAO Yuning, DONG Congguo, HUANG Min, et al(31)
- Change in Vegetation Cover and Soil Erosion in Baiyushan Hilly Area Since the Grain for Green Project HEI Zhe, WANG Fei , HAN Jianqiao, et al(39)
- Water Quality Evolution and Effect of Nitrogen and Phosphorus Accumulation in Wetland of Ruergai Plateau GU Chengtian, LUO Bin, WANG Heng, et al(47)
- Trend of Runoff and Sediment Change and Its Driving Factors in the Middle and Upper Reaches of Fenhe River in the Past 60 Years ZHANG Kai, LU Kexin, LI Peng, et al(54)
- Spatial and Temporal Dynamics of Forest Carbon Storage and Its Driving Factors in the Yangtze River Basin KONG Rui, ZHANG Zengxin, ZHANG Fengying, et al(60)
- Effects of Different Land Use Patterns on Soil Aggregate Stability and Saturated Hydraulic Conductivity YUAN Xiaoliang, LI Junya, GE Le, et al(67)
- Comparison of Three Methods to Measure Surface Random Roughness WANG Hongxiao, ZHANG Guanghui, ZHU Pingzong, et al(72)
- Retrieval of Soil Moisture in the Zone of Qianzhong Water Diversion Project Based on Landsat 8 Image Data LI Yongliu, ZHOU Zhongfa, JIANG Yi(78)
- Analysis on Spatial and Temporal Change of Land Use in Jianghan Plain Based on Geo-information Atlas ZHANG Yun, PENG Jiandong, WANG Jingjing, et al(85)
- Effect of Contour Reversed Terrace Preparation on Water Consumption and Water Balance in the Sloping Farmland YAN Tengyun, WANG Keqin, ZHAO Yangyi, et al(93)
- Change Characteristics of Soil Particle Composition and Nutrient of Abandoned Farmland in Different Years in Qingtu Lake Area in Minqin CHAI Chengwu, WANG Lide, YU Qiushi, et al(99)
- Characteristics of Temporal and Spatial Dynamic of Landscape Structure and Soil Conservation Function in Caohai Watershed WANG Zhijie, LIU Shujun, YU Lifei(105)
- Research on Drought Characteristics and Agricultural Drought Risk Assessment in Guangxi Based on SPEI YANG Xingxing, YANG Yunchuan, DENG Simin, et al(113)
- Spatial and Temporal Features of Climate and Its Potential Productivity in Jiangxi Province During the Period 1960—2017 AN Bin, XIAO Weiwei, ZHANG Shulan, et al(122)
- Response of Sap Flow of *Betula platyphylla* to Soil Moisture in Southern Greater Xing'an Mountains WANG Yuan, WEI Jiangsheng, ZHOU Mei, et al(128)
- Effects of Irrigation Mode, Irrigation Volume and Application Rate of Nitrogen on Annual Water Use of Wheat and Maize YANG Yonghui, WU Jicheng, GAO Cuimin, et al(134)
- Effects of Different Soil Types on Community Characteristics and Population Niche in Typical Grasslands WANG Huimin, ZHU Zhongyuan, ZHANG Lu(142)
- Characteristics of Root Distributions of Typical Herbs in Loess Hilly Region of Southern Ningxia WAN Haixia, CAI Jinjun, GUO Yongzhong, et al(149)
- Investigation and Analysis on the Production Problems of Hongmei Apricot in Ningnan Typical Cultivation Areas YANG Kaiqi, WU Dongbo, WANG Wei, et al(157)
- Evaluation on Technical Effect of Double Depth Ridge Cultivation Mode of Rice in Cold Region LI Hongyu, ZHANG Gongliang, ZHENG Guiping, et al(164)
- Water Consumption of *Hippophae rhamnoides* and Its Affecting Factors in Loess-Covered Pisha Rock Area ZHU Yajuan, DANG Hongzhong, DU Juan, et al(171)
- Temporal Heterogeneity and Dominant Factors of Soil Water Content in the Grassland in the Northern Qinghai Province MA Fulin, YANG Yongsheng, WANG Junbang, et al(178)
- Soil Microbial Diversity and Its Influencing Factors in Rhizosphere and Non-Rhizosphere in the Stands of *Pinus tabuliformis* with Different Ages in Minjiang River Valley Ding Li, JI Yuliang, LI Yi(184)

- Temporal and Spatial Evolution of NDVI and Its Response Relation with the Climate in the Nine Plateau Lake Basins of Yunnan Province LI Yingxin, LI Shihua, PENG Shuangyun(192)
- Response of NDVI to Climate Change in Typical Steppes of Inner Mongolia WANG Yuqing, ZHANG Chengfu, LI Xiaohong(201)
- Simulation and Prediction of Temporal and Spatial Changes of NDVI in Weihe River Basin Based on CA-Markov WANG Lixia, ZHANG Jiawei, MENG Nina, et al(206)
- Response of Variability of Temperature in the Loess Plateau to the Hiatus in the Process of Global Warming in the Period from 1960 and 2013 ZHANG Yaozong, ZHANG Bo, LIU Yanyan, et al(213)
- Canal System Structure Characteristics of Typical Irrigation Areas in Yuanyang Terraces Based on UAV Remote Sensing ZHANG Zhaozhao, SONG Weifeng(220)
- Spatiotemporal Dynamics of Ecological Footprint and Efficiency of Natural Capital Utilization of Urban Agglomeration in Yangtze River Delta WEN Yi, GAO Jun, HUANG Liping, et al(225)
- Effect of Temperature Difference Between Day and Night on NEE and Its Variation Effect of Temperature Difference Between Day and Night on NEE and Its Variation Characteristics in Alpine Shrubland in the Qinghai-Tibetan Plateau Characteristics in Alpine Shrubland in Qinghai-Tibetan Plateau ZHU Jingbin, HE Huidan, ZHANG Fawei, et al(232)
- Response Relationship Between Urbanization Process and Water Resource Utilization in Henan Province JIAO Shixing, CUI Sijing, WANG Anzhou, et al(239)
- Evaluation of the Effect Terrain Gradient of Ecosystem Services in the Transitional Zone of Beijing Bay CHEN Long, LIU Chunlan, PEI Sha, et al(247)
- Change of Weihe River System and Its Response to Urbanization in Guanzhong Area DENG Liqiang, WANG Fei, HAN Jianqiao, et al(256)
- Evolution of Ecological Service Values Based on Small Watershed in the Upper Reaches of Fenhe River WANG Yifan, SHI Xueyi(262)
- Temporal and Spatial Variation of Temperature and Precipitation in Each Agricultural Sub-region of China JIANG Ping, PAN Xinmin, ZENG Xueying(270)
- Analysis on Spatio-Temporal Evolution Characteristics of Ecosystem Resilience at the County Level in China YANG Chao, CHEN Wanxu, RAN Duan, et al(279)
- Study on the Coordinated Development of Urban Resilience and Urbanization Level in the Urban Agglomeration of Yangtze River Delta ZHOU Qian, LIU Delin(286)
- Land Use Change and Transfer of Ecosystem Service Value in Changbai Mountains Based on Meta-Analysis LIU Hui, LI Chunbo, HAN Xulong, et al(293)
- Coupling Relationship and Coordination Between Recessive Land Use Morphology and Land Eco-security in Fujian Province SONG Jiapeng, CHEN Songlin(301)
- Coupling Coordination Between Land Use Benefits and Urbanization in Xi'an City ZHANG Zhenyu, ZHU Jiwei, XIE Jianchang, et al(308)
- Spatiotemporal Coupling Characteristics and Driving Factors of Land Development Intensity and Ecological Bearing Capacity in Resource-based Cities ZHU Xiaoqing, HUANG Zhihao, ZHANG Tiancheng, et al(317)
- Discussion on Saline Water Irrigation Quota for Tomato in Hetao Irrigation Zone LI Jingang, WANG Shaoli, HE Pingru, et al(327)
- Analysis of Spatial Optimization of Urban Ecological Security Pattern in Arid Area FENG Yanwei, ZHEN Jianghong, MA Chenyang(336)
- Analysis on Influencing Factors on Land-Lost Farmers' Livelihood Sustainability in Underdeveloped Region YANG Kun, LIU Pengfei(342)
- Evaluation of Ecological Environment Vulnerability in the Northwest Plateau Area of Sichuan YAO Kun, ZHANG Cunjie, HE Lei, et al(349)
- Research on Spatiotemporal Differentiation of Intensive Utilization of Construction Land in Mountain Towns JIN Jie, CHEN Wu, HE Feng(356)
- Cultivated Land Quality Grading Method Based on LESA Comprehensive Evaluation Model LI Zuoqian, ZHAO Xianyu, ZHANG Likun, et al(363)
- Spatial-temporal Differences of Urban Land Use Efficiency and Its Evolution Characteristics Under Environmental Constraints in Gansu Province ZHU Lixiang, LUO Zhanfu, WANG Qiwen, et al(368)
- Urban Sprawl and Landscape Pattern of Hilly City in Central Guizhou Province Under the Background of Fast Urbanization LI Rui, WANG Zhitai, BAO Yu(376)
- Multi-Scale Analysis of the Spatio-temporal Pattern of the Spatial Structure of Ecology-Production-Living Space in Jiangxi Province CHEN Qianqian, SHU Xiaobo, ZENG Fanbin(385)
- Assessment on Landslide Susceptibility of the Core Area of Hani Race Terraces Heritage Site Based on Maximum Entropy Model ZHAO Dongmei, JIAO Yuanmei, QIU Yingmei, et al(392)
- Review of Studies on Using Sediment in Check Dam to Interpret Soil Erosion Information of Small Catchment ZHAO Tianyin, WANG Zhibing, WU Yuanyuan, et al(400)