

节水灌溉

2015.2

中国国家灌溉排水委员会 中国灌溉排水发展中心
武汉大学 国家节水灌溉北京工程技术研究中心

主 办



ISSN 1007-4929



大禹节水集团股份有限公司
Dayu Water-saving Group Co.,Ltd

地址：甘肃省酒泉市高新技术工业园区解放路290号
电话：0937-2688658 传真：0937-2688963
网址：www.dyjs.com 邮箱：gsdyjs@vip.163.com

节 水 灌 溉

2015年第2期 总第234期

目 次

□理论研究□

- 土壤入渗传输函数输入变量分析 冯锦萍 樊贵盛(1)

□试验研究□

- 滴灌和畦灌的幼龄核桃树根系空间分布特性研究 赵经华 洪 明 穆哈西 等(5)
郑州市土壤相对湿度变化特征及影响因素分析 王富强 王 雷 陈 希(8)
江苏沿海新围垦区不同灌溉模式种植大棚西瓜比较 刘德斌 聂 杰 邹志国(12)
单盐和混合盐胁迫对沙冬青种子萌发的影响 庄华蓉(15)
不同土壤含水量条件棉花光合作用日变化特性研究 姬亚琴 杨鹏年(21)
黄瓜根系对连续亏缺复水交替灌水的响应 乔林然 胡笑涛 王文娥(24)
制种玉米密度对土壤水分及产量构成的影响研究 刘兴成 彭治云 李永德 等(27)
单翼迷宫式滴灌带中炭黑含量及分散性对耐候性能的影响 马 宁 冉文生(31)

□水环境与水资源□

- 基于气温预报和神经网络的参考作物腾发量预报 谢梅香 罗玉峰 钱子嘉 等(33)
冰封期和非冰封期达里诺尔湖营养盐分布特征分析 王利明 甄志磊 于瑞雪 等(37)
反硝化聚磷菌研究进展 孙 玲 钱雨荷 张惠芳 等(40)
基于等标污染负荷法的生活和农业污染源分析 陆 珊 代俊峰 周作旺(45)
基于解析法预测地下水溶质运移的研究 刘 婷 肖长来 王雅男 等(47)
昆明地区玉米需水量及灌溉用水量研究 吴 澜 王 杰 黄 英 等(50)
基于模糊物元模型的威宁草海湿地生态环境质量评价 秦 趣 张美竹 杨 洪(54)
自由渗漏灌溉渠道输水损失量计算方法理论探讨 张 晶 程伍群 孟 霄 等(58)
波动水资源数据灰幂模型预测中的维数选择 董承秀 陈继光(61)

□工程技术□

- 单片机控制的草坪喷头变域喷洒系统 顾 哲 汤 跃 汤玲迪 等(63)
基于数值模拟的分离鳃水沙分离效率及机理分析 陶洪飞 邱秀云 王 苗(66)
土壤墒情传感器布点算法研究 李 飚 魏正英 张育斌 等(72)

□工程管理□

- 农业水土资源潜力研究进展 南纪琴 陶国通 王景雷(77)
塔里木河流域可转让农用水权分配价格研究 孙建光 韩桂兰(81)
灌区尺度月灌溉用水量预报及模型敏感性分析 李依耘 王 莹 王 龙 等(85)
天津市渠灌区节水灌溉工程与管理技术研究 朱士权 李 娟 史庆生(89)

□信 息□

欢迎订阅《节水灌溉》(4)

喷灌喷泉百家合作专业市场(57)

Water Saving Irrigation

(Monthly)

February 2015

No. 2(2015), Total No. 234

Contents

Input Variable Analysis of Soil Infiltration Transfer Function	FENG Jin-ping, FAN Gui-sheng(1)
Spatial Distribution Feature of Young Walnut Tree Root under Drip Irrigation and Border Irrigation	ZHAO Jing-hua, HONG Ming, MU Ha-xi, et al. (5)
Analysis of Relative Soil Moisture Variation Characteristics and Influencing Factors in Zhengzhou City	WANG Fu-qiang, WANG Lei, CHEN Xi(8)
Comparison of Different Irrigation Modes for Greenhouse Watermelon Planting in Coastal Areas of Jiangsu Province	LIU De-bin, NIE Jie, ZOU Zhi-guo(12)
Effects of Single and Compound Salt Stress on Seed Germination of Ammopiptanthus mongolicus	ZHUANG Hua-rong(15)
Diurnal Variation Characteristics of Cotton Photosynthesis under Different Soil Moisture Conditions	JI Ya-qin, YANG Peng-nian(21)
Response of Root to Continuous Deficit and Re-water Alternative Irrigation	QIAO Lin-ran, HU Xiao-tao, WANG Wen-e(24)
Effect of Density of Maize for Seed on Soil Moisture and Yield	LIU Xing-cheng, PENG Zhi-yun, LI Yong-de, et al. (27)
Effects of Carbon Black Content and Dispersion in Single Wing Labyrinth Drip Irrigation Belt on Weather Resistance Performance	MA Ning, RAN Wen-sheng(31)
Reference Crop Evapotranspiration Forecasting Based on Temperature Forecasts and Neural Network	XIE Mei-xiang, LUO Yu-feng, QIAN Zi-jia, et al. (33)
Spatial Distribution of Nutrients in Dali Lake during Ice-laying and Non-ice-laying Period	WANG Li-ming, ZHEN Zhi-lei, YU Rui-xue, et al. (37)
Advance of Research on Denitrifying Phosphorus Accumulating Organisms	SUN Ling, QIAN Yu-he, ZHANG Hui-fang, et al. (40)
Analysis of Domestic and Agricultural Pollutant Sources Based on Equal Standard Pollution Load Method	LU Shan, DAI Jun-feng, ZHOU Zuo-wang(45)
Research of Groundwater Solute Transport Forecast based on Analytical Method	LIU Ting, XIAO Chang-lai, WANG Ya-nan, et al. (47)
Study on Crop Water Requirement and Irrigation Requirement of Rice in Kunming	WU Hao, WANG Jie, HUANG Ying, et al. (50)
Evaluation of Eco-environmental Quality of Caohai Wetland in Weining County based on Fuzzy Matter-Element Method	QIN Qu, ZHANG Mei-zhu, YANG Hong(54)
Theoretical Analysis of Conveyance Loss Calculation Method for Free Seepage Irrigation Channels	ZHANG Jing, CHENG Wu-qun, MENG Xiao, et al. (58)
Selection of Sample Dimension in Water Resources Fluctuation Statistics Prediction using GM (1,1) Power Model	DONG Cheng-xiu, CHEN Ji-guang(61)
Variable Range Spraying Control System for Dawn Sprinklers with a Single-chip Microcomputer	GU Zhe, TANG Yue, TANG Ling-di, et al. (63)
Analysis of Water-Sediment Separation Efficiency and Mechanism of Gill-piece Separation Device based on Numerical Simulation	TAO Hong-fei, QIU Xiu-yun, WANG Miao(66)
Optimal Placement Algorithm of Soil Moisture Sensors	LI Biao, WEI Zheng-ying, ZHANG Yu-bin, et al. (72)
Advance of Research on Agricultural Water and Soil Resources Potential	NAN Ji-qin, TAO Guo-tong, WANG Jing-lei(77)
Research on Allocation Price of Transferable Agricultural Water Rights in Tarim River Basin	SUN Jian-guang, HAN Gui-lan(81)
Monthly Irrigation Water Amount Forecast and Model Sensitivity Analysis	LI Yi-yun, WANG Ying, WANG Long, et al. (85)

Competent Authorities: Ministry of Water Resources

Sponsor: Chinese National Committee on Irrigation and Drainage

China Irrigation and Drainage Development Centre

Wuhan University

National Center of Efficient Irrigation Engineering and Technology Research-Beijing

Publisher and editor: Editorial Department of Water Saving Irrigation

(Wuhan University, Wuhan, 430072, China)

Editor in Chief: Li Yuanhua

Distribute Scope: Worldwide

Domestic Subscription: Every Post Office in China

E-mail: jieshuiguangai@188. com

Homepage: <http://www.irrigate.com.cn>



中国华维 品质灌溉
Quality Irrigation of China Huawei

让天下种植者轻松赚钱大计



上海华维节水灌溉有限公司

Shanghai Huawei Water Saving Irrigation Co.,Ltd

★ 国家科技部863项目承担单位 ★ 上海市科技小巨人企业 ★ 中国灌排协会副理事长单位 ★ 国家支持推广农机补贴企业

地址：上海市奉浦大道933号（江海工业园） 电话：021-50187018 50187098 50187099 50849489 传真：021-50187028 网址：www.hwei.net
广州华维：020-32229400 北京华维：010-62480155 云南华维：0871-63108787

诚招区域经销商：400-820-0406

