

干旱地区农业研究

第37卷第5期(总第176期)

2019年9月10日出版

目 次

土壤水分与节水灌溉

- 灌水量及可降解膜覆盖对滴灌玉米土壤呼吸及产量的影响 王风姣,王振华,李文昊(1)
海河平原小麦-玉米不同种植制度节水特性分析 郑媛媛,陈宗培,王贵彦(9)
滴灌定额对棉花株型、产量及纤维品质的影响 李楠楠,马卉,王秀媛,等(16)
盐池县扬黄灌区玉米滴灌制度的制定 王文,翟汝伟,刘平,等(22)
蕾期和花铃期不同灌水下限对滴灌棉花产量的影响

..... 潘俊杰,付秋萍,阿布都卡依木·阿布力米提,等(27)

- 模袋混凝土复合断面衬砌渠道糙率系数原型观测试验研究 翟东汉,何武全,赖红兵,等(33)
季节性冻融期覆砂对太谷农田土壤含水率时空变化的影响 冯慧君,赵浩然,郑秀清,等(40)

耕作与栽培

- 南疆地区田间配置对枣棉间作耗水特性的调控效应 徐鹏,陈国栋,吴全忠,等(46)
基于无人机遥感的棉花主要生育时期地上生物量估算及验证 邓江,谷海斌,王泽,等(55)
栽培密度对高产大豆根系生长及花荚形成的影响 赵占营,楚光红,李思忠,等(62)
夏玉米叶面积指数模型适用性及误差分析 彭记永,李军玲,张志红(70)
间作和施磷对2种牧草生物量及氮磷吸收的影响 张德,龙会英,曾丽萍,等(77)

植物抗逆生理

- 干旱胁迫下不同中间砧对“岳冠”苹果叶片光合特性及叶绿素荧光特性
的影响 里程辉,刘志,王宏,等(83)
向日葵3个谷胱甘肽-S-转移酶GST基因的克隆及表达模式分析 凌云鹤,李静,景兵,等(92)
干旱-复水条件下氮素对高粱光合特性及抗氧化代谢的影响 艾雪莹,吴奇,周宇飞,等(99)
PEG-6000模拟干旱胁迫对15个小黑麦品种苗期生理特性的影响 赵方媛,田新会,杜文华(106)
干旱胁迫下3个油菜品种地上、地下部生长特征与抗旱性的关系 关周博,董育红,田建华,等(114)

旱区作物种质资源

- 河西走廊13个引进紫花苜蓿品种生产性能和营养价值评价 李玉珠,吴芳,师尚礼,等(119)
北方白菜型油菜花器特性及农艺性状与含油量的相关性 白静,孙万仓,马骊,等(130)

- 北部冬麦区小麦新品种(系)的节水生理特性与综合评判 曾占奎,王征宏,王黎明,等(137)
河西灌区玉米密植高产机械粒收品种筛选 丁德芳,柴宗文,徐喜俊,等(144)

土壤与植物营养

- 水肥耦合下温室番茄养分动态变化及与生物量和产量的关系 王虎兵,曹红霞,郝舒雪,等(149)
施氮量对库尔勒香梨园氨挥发和氧化亚氮排放的影响 王成,陈波浪,玉素甫江·玉素音,等(157)
渭北果园土壤紧实化改良效果初探 魏彬萌,李忠徽,王益权(165)
陕西省新老苹果产区果园土壤硝态氮累积特性研究
..... 陈翠霞,刘占军,陈竹君,等(171)
施肥对复垦土壤微生物代谢功能与苗期玉米生长的影响 张变华,靳东升,张强,等(176)
青稞根际优良联合固氮菌的筛选及鉴定 何建清,张格杰,赵伟进,等(182)
钾肥种类和施钾时期对油菜产量及品质的影响 曾骏,郭天文,张平良,等(187)
基于去包络线和连续投影算法的枣园土壤电导率光谱检测研究 王涛,喻彩丽,张楠楠,等(193)

旱区生态与资源利用

- 不同利用方式下草地生态系统的多功能性与物种多样性 蔡艳,吕光辉,何学敏,等(200)
不同磁化水处理下盐渍化土壤脱盐效果研究 徐莉,唐金,陈淑英(211)
气候变化对河南省小麦和玉米气候资源利用效率的影响 徐延红,李树岩(218)

干旱监测预报

- 青藏高原草地降水利用效率时空动态及对气候变化的响应 同琳静,刘洋洋,王倩,等(226)
基于 DSSAT 模型的京津冀地区主要农作物用水分析 郎婷婷,郝蒙蒙,吴风华,等(235)
邢台夏玉米需水量时空分布特征及气象影响因子 贾秋兰,王小娟,赵玉兵,等(243)

植物保护

- 印度梨形孢促进棉花幼苗生长及诱导提高苗期抗旱性研究 潘锐,邓晶,胡爱兵,等(249)
无核白葡萄果实腐烂病的发生规律与防治技术研究 赵荣华,白世践,陈光,等(257)

旱作农业机械

- 大挖深菊芋收获机设计与试验 戴立勋,黄晓鹏,魏宏安,等(262)

CONTENTS

Soil Moisture and Water-saving Irrigation

- Effects of irrigation amount and degradable membrane mulching on soil respiration and yield of drip-irrigated corn *WANG Feng-jiao, et al(1)*
- Analysis on the water-saving characteristics of winter wheat and summer maize cropping system on Haihe Plain *ZHENG Yuan-yuan, et al(9)*
- Effects of drip irrigation quota on plant shape, yield and fiber quality of cotton *LI Nan-nan, et al(16)*
- The formulation of drip irrigation system for corn in Yanghuang pumping irrigation area of Yanchi County *WANG Wen, et al(22)*
- Effects of irrigation limits at bud stage and flowering stage on yield of drip irrigation cotton *PAN Jun-jie, et al(27)*

Prototype observation study on roughness coefficient of bag concrete composite section

- lining channel *ZHAI Dong-han, et al(33)*
- Effect of sand mulching on spatiotemporal variation of soil water content during the seasonal freezing-thawing period *FENG Hui-jun, et al(40)*

Tillage and Cultivation

- Effects of field collocation patterns on water consumption characteristics of jujube-cotton intercropping system in Southern Xinjiang *XU Peng, et al(46)*
- Estimation and validation of above-ground biomass of cotton during main growth period using Unmanned Aerial Vehicle (UAV) *DENG Jiang, et al(55)*
- Effects of different densities on root growth and pod formation of high-yield soybean *ZHAO Zhan-ying, et al(62)*
- Applicability and error analysis of leaf area index model of summer maize *PENG Ji-yong, et al(70)*
- Effects of intercropping and phosphorus application on biomass, nitrogen and phosphorus absorption of two forage species *ZHANG De, et al(77)*

Plant Adverse-resistance Physiology

- Effects of different interstocks on photosynthetic and chlorophyll fluorescence characteristics in leaves of 'Yueguan' apple under different drought stress conditions *LI Cheng-hui, et al(83)*
- Cloning and expression analysis of three glutathione S-transferase *CST* genes from sunflower (*Helianthus annuus*) *LING Yun-he, et al(92)*

- Effects of nitrogen on photosynthesis and antioxidant enzyme activities of sorghum under drought stress and re-watering *AI Xue-ying, et al(99)*

- Effects of PEG-6000 simulated drought stress on the physiological characteristics of 15 triticale varieties at the seedling stage *ZHAO Fang-yuan, et al(106)*

- Relationship between growth characteristics of above- and under-ground and drought resistance of three rapeseed cultivars under drought stress *GUAN Zhou-bo, et al(114)*

Crop Germplasm Resources in Arid Area

- Evaluation on production and nutritional value of 13 introduced alfalfa cultivars in Hexi corridor of Gansu Province *LI Yu-zhu, et al(119)*

Correlation between floral characteristics, agronomic traits and oil content of winter rapeseed (<i>Brassica rapa</i> L.) in northern China	BAI Jing, et al(130)
Water-saving physiological characteristics and comprehensive evaluation of new wheat varieties (lines) in northern winter wheat region	ZENG Zhan-kui, et al(137)
The selection of high yield maize cultivars suitable for dense planting and machine harvest in Hexi Irrigation District	DING De-fang, et al(144)
Soil and Plant Nutrition	
The relationship between dynamic change in nutrient contents and biomass and yield of tomato under coupled irrigation and fertilization in greenhouse	WANG Hu-bing, et al(149)
Effect of nitrogen application rate on ammonia volatilization and nitrous oxide emission in Korla fragrant pear orchard	WANG Cheng, et al(157)
Preliminary study on improvement of soil compaction in Weibei apple orchard	WEI Bin-meng, et al(165)
Characteristics of nitrate accumulation in soils of new and old apple orchards in Shaanxi Province	CHEN Cui-xia, et al(171)
Effects of fertilization on metabolic function of microorganisms and growth of maize at seedling stage in reclaimed soil	ZHANG Bian-hua, et al(176)
Screening and identification of superior associative nitrogen fixing bacteria in rhizosphere of <i>Hordeum vulgare</i>	HE Jian-qing, et al(182)
Effects of potassium fertilizer type and application time on yield and quality of oil sunflower	ZENG Jun, et al(187)
Spectral detection of electrical conductivity in jujube orchard soil based on continuum- removal and SPA	WANG Tao, et al(193)
Ecology and Resource Utilization in Arid Areas	
Study on the multifunctionality and species diversity of grassland ecosystem under different land-uses	CAI Yan, et al(200)
Effects of different magnetized-water treatments on soil desalinization	XU Li, et al(211)
Impact of climate change on climatic resources utilization efficiency of wheat and maize in Henan Province	XU Yan-hong, et al(218)
Drought Monitoring and Forecast	
Spatial-temporal dynamics of precipitation use efficiency in grassland and its relationship with climate changes on Qinghai-Tibet Plateau	TONG Lin-jing, et al(226)
Study on water requirements of major crops in Beijing-Tianjin-Hebei region using DSSAT model	LANG Ting-ting, et al(235)
Spatial and temporal distribution of water requirement of summer corn in Xingtai and the meteorological impact factors	JIA Qiu-lan, et al(243)
Plant Protection	
Growth promotion and tolerance improvement to drought stress of cotton seedling conferred by <i>Piriformospora indica</i>	PAN Rui, et al(249)
Study of occurrence regularity and control techniques of fruit rot on Thompson Seedless grapes	ZHAO Rong-hua, et al(257)
Dryland Farm Machinery	
Design and test of Jerusalem artichoke harvester characterized by large dredging depth ...万方数据.....	DAI Li-xun, et al(262)