

干旱地区农业研究

第 28 卷第 5 期(总第 122 期) 2010 年 9 月 10 日出版

目 次

耕作与栽培

- 旱地燕麦新品种定莜 6 号的选育及其特征分析 刘彦明, 李朴芳 (1)
大麦引进种质资源表型的多样性与模糊聚类分析 解松峰, 欧行奇, 张百忍, 等 (5)
亚麻开花结实特性及籽粒干物质积累规律研究 陈双恩, 杜汉强, 普 靖 (15)
线辣椒/玉米套作对产量和品质的影响 徐 强, 程智慧, 卢 涛, 等 (20)
密度对全膜双垄沟播不同品种玉米干物质积累及分配的影响 张永祥, 杨祁峰, 牛俊义, 等 (26)
大气 CO₂ 浓度增高和施氮量对抽穗期春小麦光合参数及水分利用效率的影响
..... 王润佳, 张绪成, 高世铭, 等 (32)
免耕对土壤物理性质及作物产量的影响 郭晓霞, 刘景辉, 张星杰, 等 (38)
辽西半干旱区玉米/大豆单间作田间耗水规律研究 张 莹, 孙占祥, 李 爽, 等 (43)
用增稳系数评价钾肥配合秸秆还田对作物的增产稳定性效应 邢素丽, 刘孟朝, 何 萍 (47)
豫西旱坡地长期定位保护性耕作研究——III. 综合效益分析 王育红, 姚宇卿, 蔡典雄, 等 (52)
渭北旱塬秸秆还田对土壤水分及作物水分利用效率的影响 马晓丽, 贾志宽, 肖恩时, 等 (59)
半干旱黄土区不同施肥水平冬小麦产量形成与氮素利用 赵新春, 王朝辉 (65)
土壤施硒对大蒜硒吸收量及产量和品质的影响 院金谒, 石书兵, 戴俊生, 等 (71)
施磷量对膜下滴灌杂交棉氮磷钾养分吸收利用及产量的影响 杨明花, 姜益娟, 聂万林, 等 (75)
不同培肥措施对枸杞园盐化土壤性质及枸杞生长的影响 李惠霞, 何文寿, 王秀娟, 等 (79)

土壤与植物营养

- 施肥对旱作免耕土壤酶活性与 CO₂ 排放量的影响 张志栋, 刘景辉, YU Qing, 等 (85)
接种根瘤菌对豌豆/玉米体系生长状况的影响 张虎天, 郭丽琢, 柴 强, 等 (92)
商洛多花胡枝子根瘤菌生理生化特性和数值分类研究 冀玉良, 詹俊鹏, 韦革宏 (97)
CaCl₂ 对干旱地区钙质土壤放线菌分离效果的影响 薛 清, 王玲娜, 段春梅, 等 (104)
干旱区绿洲土壤共存重金属 Cd、Pb、Zn、Ni 的吸收积累及形态分布实验研究
..... 廖 琴, 王胜利, 南忠仁, 等 (108)
不同土壤改良剂对碱积盐成土改良效果研究 安 东, 李新平, 张永宏, 等 (115)
迪那河—阳霞河绿洲土壤盐渍化现状特征分析 吐尼沙古丽·牙生, 满苏尔·沙比提, 斯万贵, 等 (119)
宁夏平罗县几种典型土壤修正系数的确定 黄玉霞, 李新平, 毛文娟, 等 (124)
污染的灌溉水对农田土壤养分平衡的作用与影响 胡海燕, 王益权, 张育林, 等 (129)

植物抗逆生理

- 小青菜酶活性与铅形态关系的研究 殷宪强,王昌钊,易 磊,等 (133)
钾水互作对烟草光合特性的影响 曹 芳,赵泽茹,魏永胜 (138)
磷营养和土壤含水量对大豆光合特性的交互影响 王旭明,张 锋,史刚荣 (143)
外源植物激素对宁夏枸杞种子萌发和幼苗生长的影响 柴 淳,黎云祥,陈光登,等 (149)

节水灌溉

- 黑河流域大灌区节水型种植业现状调查分析与对策 王 娜,吴普特,王玉宝,等 (154)
基于作物种植结构优化的农业节水潜力分析——以武威市凉州区为例 徐万林,秉晓玲 (161)
海冰水灌溉对土壤盐分和玉米产量的影响 吴之正,顾 卫,许映军,等 (166)
不同灌溉方式对宁南黄土丘陵区设施辣椒生长发育及产量的影响 王 锐,孙 权,李建设,等 (171)
土壤水势对桃树茎干变化的影响研究 贺军奇,吴普特,汪有科 (176)
灌溉方式对红富士苹果根系活力和新梢生长及果实产量质量的影响 杨素苗,李保国,齐国辉,等 (181)

资源与生态

- 黑龙江省黑土区主要作物对农业资源利用率评价 段晓凤,张 磊,张 慧,等 (185)
内蒙古粮食生产动态分析与粮食安全评价 张丽慧,赵先贵,赵达伟,等 (190)
陕西省农业生态经济系统综合评估及空间聚集特征分析 徐 苗,任志远 (196)
咸阳市建国 60 年来耕地利用因素与粮食生产相关分析 郭 毅,赵景波 (203)
基于自然植被的延河流域农田生态系统土壤固碳潜力评估 杨尚斌,温仲明,张 佳 (211)
基于地形因子的土壤水分反演研究——以延河流域为例 刘晓婧,李新平,杨勤科,等 (218)
黄土坡面薄层流产流过程试验研究 刘俊娥,王占礼,袁 殷,等 (223)
西藏河谷区人工牧草地的苔藓植物群落研究 李 融,余成群,姜炎彬,等 (228)
基于 GIS Server 的罗布泊“大耳朵”地区土壤信息系统 顾 安,蒋平安,武红旗,等 (233)
农牧交错地带土地利用分层分类方法研究——以靖边县为例 李晓明,常庆瑞,张仁慧 (237)
小波变换在土壤有机质含量可见/近红外光谱分析中的应用 刘 炳,常庆瑞,郭 曼,等 (241)

干旱监测预报

- 陕西春季干旱的环流特征分析 方建刚,白爱娟 (247)
渭北旱塬近 40 年降水波动特征及作物干旱指标分析计算 马延庆,刘新生,刘长民,等 (254)
西北干旱区阿勒泰地区暖季干湿气候变化及 R/S 分析 庄晓翠,赵正波,杨 森,等 (259)
内蒙古自治区干旱灾害时空分布特征及区划 李 晶,王耀强,屈忠义,等 (266)
近 48 年大同市旱涝灾害对气候变化的响应 王新华,延军平,柴莎莎 (273)

AGRICULTURAL RESEARCH IN THE ARID AREAS

Vol. 28 No. 5 (Total No. 122)

Sept. 10, 2010

CONTENTS

Tillage and Cultivation

- Study on the cross breeding and the germplasm characters of a new dryland oat variety LIU Yan-ming, LI Pu-fang (1)
- Phenotypic diversity analysis and fuzzy clustering in barley germplasm resources introduced from abroad XIE Song-feng, et al (5)
- Study on the accumulating rules about seeds dry matter and blooming and bearing fruit of flax CHEN Shuang-en, et al (15)
- Yield and quality of capsicum and maize in strip relay intercrops and monoculture patterns ... XU Qiang, et al (20)
- Effect of plant density on dry matter accumulation and transfer in different varieties of maize under full coverage on double ridges ZHANG Yong-xiang, et al (26)
- Effects of atmospheric CO₂ enrichment and nitrogen application rate on photosynthetic parameters and water use efficiency of spring wheat WANG Run-jia, et al (32)
- Effects of no-tillage on soil physical properties and crop yields GUO Xiao-xia, et al (38)
- Study on water consumption of corn and soybean in different cropping patterns on the semi-arid region of western Liaoning Province ZHANG Ying, et al (43)
- Evaluating stability of durative yield-increasing effect of potassium(K) fertilization and straw recycling on crop yields by yield increase stability coefficient (YISC) XING Su-li, et al (47)
- Study on site-specific long-term conservation tillage on dry sloping farmland in Western He'nan WANG Yu-hong, et al (52)
- Effects of wheat-residue application on soil water and water use efficiency in the Weibei Loess Plateau MA Xiao-li, et al (59)
- Effects of nitrogen fertilizer rates on yield formation and nitrogen utilization of winter wheat ZHAO Xin-chun, et al (65)
- Effect of applying sodium selenium in soil on selenium uptake content and yield and quality of garlic YUAN Jin-ye, et al (71)
- Effect of phosphorus rates on nitrogen, phosphorus and potassium uptake and utilization and yield of hybrid cotton with drip irrigation under membrane YANG Ming-hua, et al (75)
- Effect of different fertilization systems on salty soils properties and the growth of wolfberry in Ningxia LI Hui-xia, et al (79)
- ### Soil and Plant Nutrition
- Effects of different fertilizers on soil enzyme activities and soil CO₂ emission under no-tillage on dry land in farming-pastoral zone of northern China ZHANG Zhi-dong, et al (85)
- Effects of nodule bacteria inoculation on growth of pea/maize system ZHANG Hu-tian, et al (92)
- Study on physiological and biochemical characters and numerical taxonomy of rhizobia isolated from *Lespedeza floribunda* in Shangluo Region of Shaanxi JI Yu-liang, et al (97)
- The influence of adding CaCl₂ on the isolation of actinomycetes from calcareous soil in arid areas XUE Qing, et al (104)
- Experiments on accumulation and chemical forms of Cd, Pb, Zn and Ni in arid oasis soils LIAO Qin, et al (108)
- Study on effect of different soil conditioners on water content and other characteristics of alkali soil AN Dong, et al (115)
- Analysis of characteristics of soil salinization in the delta oasis of the Dina and Yangtze Rivers Tunsagul·Yasin, et al (119)
- Determining soil modification coefficient of several typical soils in Pingluo, Ningxia HUANG Yu-xia, et al (124)

The action and influence of polluted irrigation water on soil nutrients balance	HU Hai-yan , et al (129)
Plant Adverse-resistance Physiology	
Study on relationship between Pb chemical forms and enzyme activity in <i>Brassica Chinensis</i>	YIN Xian-qiang , et al (133)
Interactive effect of water and potassium on photosynthesis of tobacco	CAO Fang , et al (138)
Interaction of phosphorus concentration and soil moisture on photosynthetic traits in soybean plants	WANG Xu-ming , et al (143)
Effects of exogenous hormones on the germination and seedling growth of Ningxia wolfberry	CHAI Chun , et al (149)
Water-saving Irrigation	
Analysis and countermeasures on current water-saving planting structure in Daman irrigation district of Heihe River Basin	WANG Juan , et al (154)
Agricultural water-saving potential analysis based on crop planting structure optimization	XU Wan-lin , et al (161)
Effect of irrigation with sea ice water on soil salinity and corn yield	WU Zhi-zheng , et al (166)
The influence of different irrigation methods on greenhouse pepper growth and yield in the loess hilly regions of southern Ningxia	WANG Rui , et al (171)
Study on the effect of soil water potential on stem diameter variation of peach tree	HE Jun-qi , et al (176)
Effects of different irrigation patterns on root activity, new shoot growth, fruit yield and quality of red Fuji apple	YANG Su-miao , et al (181)
Ecology and Resource	
Evaluation of agricultural resource utilization in the black soil region of Heilongjiang Province	DUAN Xiao-feng , et al (185)
Dynamic analysis of grain production and evaluation of food security of Inner Mongolia	ZHANG Li-hui , et al (190)
The analysis of comprehensive assessment of agricultural eco-economy system and its feature on gathering in Shaanxi Province	XU Qian , et al (196)
Analysis of correlations between cultivated land use change factors and grain production since the founding of PRC in Xiangyang	GUO Yi , et al (203)
The evaluation of carbon sequestration potential in farmland ecosystem in Yanhe River catchment using natural ecosystem as a reference	YANG Shang-bin , et al (211)
Retrieving soil moisture based on terrain factors	LIU Xiao-jing , et al (218)
Experimental study on runoff dynamic processes on loess hillslope	LIU Jun-e , et al (223)
Study on bryophyte communities in planted pastures of valley area of Tibet	LI Rong , et al (228)
Soil Information System Based on GIS Server in Lop Nur “Great Ear” area	YAN An , et al (233)
Study on hierarchical classification method of land use in the agriculture and pasturage interlaced region	LI Xiao-ming , et al (237)
Application of wavelet transformation in detection of organic matter content based on visible/near infrared reflectance spectroscopy	LIU Wei , et al (241)
Drought Monitoring and Forecast	
The analysis of atmospheric circulation during the years with spring drought in Shaanxi	FANG Jian-gang , et al (247)
Weibei Plateau precipitation fluctuations in the past 40 years, characteristics and calculation of crop drought index analysis	MA Yan-qing , et al (254)
The dry-wet climate variation in warm season and R/S analysis of sensible heat in Altay Area of Northwest China	ZHUANG Xiao-cui , et al (259)
Characteristics of temporal and spatial distribution of drought occurrence in Inner Mongolia Autonomous Region	LI Jing , et al (266)
Study on the characters of drought and flood response to climate change in Datong over the past 48 years	WANG Xin-hua , et al (273)