

目 次

河套地区春小麦向日葵复种对土壤盐分及农田生产力的影响
 邹超煜 白岗栓 杜社妮(1)

河北省曲周县不同时期夏玉米生产的环境代价分析
 王方 王冲 刘全清 张宏彦(11)

西藏林芝高产春青稞品种冠层形态结构特性分析
 卓嘎 次仁央金 韦泽秀 白玛德吉 次旺平措 何燕(21)

甘蔗蔗糖转运蛋白 *SoSUT2* 基因克隆和表达分析
 牛俊奇 王震 杨丽涛 李杨瑞(32)

三种管理模式仁用杏园主要害虫与天敌动态研究
 王焱炜 刘奇志 刘乐乐 张炳龙(41)

豆科和非固氮植物氮磷利用效率的比较研究 彭昫月 彭慧元 韩文轩(48)

苜蓿与无芒雀麦混播对苜蓿根系性状影响及抗寒效应研究
 冯鹏 申晓慧 李如来 张华 郑海燕 李志民 李增杰 姜成
 孙力 郭伟 张英俊(56)

造纸废水灌溉芦苇湿地土壤锰形态分布及再分配模拟研究
 惠淑荣 宋晓星 苏芳莉 刘惠 李丽锋 徐棚(67)

2000—2012 年北京绿地生态系统服务价值时空变化规律的研究
 田志会 王润 赵群 马晓燕(76)

奶牛小肠上皮细胞的原代培养和鉴定
 赵倩明 左晓昕 詹康 隋雁南 封飞飞 赵国琦(84)

非遗传因素对西门塔尔牛主要经济性状的影响
 魏趁 葛建军 张梦华 张晓雪 刘丽元 王丹 张春红
 马新兵 黄锡霞 马光辉(91)

Wnt-LRP6 信号通路激活 REST 蛋白的表达并发挥神经保护作用
 宋志琦 王进 朱婷 周向梅 杨利峰 赵德明(100)

nisin 及大黄复方对子宫内膜炎大鼠血清中 MMP-2 和 MMP-9 活性的影响	贾知锋 王纯洁 敖日格乐 贺美玲 徐进 高瑞娟 阿琪玛(109)
我国果园机械化生产现状与发展策略	赵映 肖宏儒 梅松 宋志禹 丁文芹 金月 韩余 夏先飞 杨光(116)
基于智能手机方位传感器的叶面积测量校正	高大帅 林剑辉 余江斌 孙宇瑞 SCHULZE Lammers Peter(128)
概念喷雾机底盘双侧液压马达自抗扰同步控制研究.....	张华 郑加强 徐幼林(135)
鲜枣应力松弛特性试验及虚拟样机仿真分析	谢军海 张雪坤 张锋伟 张涛 戴飞 宋学锋(144)
卷帘牛舍矮墙对舍内清粪通道地面温度影响的数值模拟	吴含萍 施正香 袁小艳(151)
草原超载过牧的牧户异质性研究.....	胡振通 柳荻 靳乐山(158)
养猪户环境风险感知影响因素的实证研究——基于湖北省 280 个规模养猪户的调研	张郁 刘耀东(168)
乌鲁木齐市土地利用和覆被生态变化及其驱动力分析	李丽国 王宇欣 邱硕 王平智(177)
政府支持、市场化程度与农业技术创新效率——以中部 6 省为例	李洪炼 马春艳(189)
健康乡村治理村民满意度评价体系构建初探——基于内蒙古某村的调研	严瑞河(199)

CONTENTS

- Effects of spring wheat-sunflower multiple cropping on soil salinity and farmland productivity in Hetao irrigation area ZOU Chaoyu, BAI Gangshuan, DU Sheni (1)
- Environmental impact assessment in summer maize system in different periods of Quzhou County in Hebei WANG Fang, WANG Chong, LIU Quanqing, ZHANG Hongyan (11)
- Analysis on canopy architecture and growth performance of high yield spring barley cultivars in Tibet region ZHUO Ga, CI Ren yangjin, WEI Zexiu, BAI MA deji, CI WANG pingcuo, HE Yan (21)
- Cloning and expression analysis of sucrose transporter gene (SoSUT2) in sugarcane NIU Junqi, WANG Zhen, YANG Litao, LI Yangrui (32)
- Temporal dynamics of main pests and natural enemies in kernel-apricot orchards under three different management models WANG Yanwei, LIU Qizhi, LIU Lele, ZHANG Binglong (41)
- The comparison of nitrogen- and phosphorus- use efficiency between legume and non-nitrogen-fixing plant PENG Yunyue, PENG Huiyuan, HAN Wenxuan (48)
- Effect of alfalfa with smooth brome on the root traits and cold resistance of alfalfa FENG Peng, SHEN Xiaohui, LI Rulai, ZHANG Hua, ZHENG Haiyan, LI Zhimin, LI Zengjie, JIANG Cheng, SUN Li, GUO Wei, ZHANG Yingjun (56)
- Simulation study of speciation distribution and redistribution characteristics of manganese in reed wetland soil irrigated by papermaking wastewater HUI Shurong, SONG Xiaoxing, SU Fangli, LIU Hui, LI Lifeng, XU Peng (67)
- Study on temporal and spatial variations in the ecosystem service value of Beijing greenlands from 2000 to 2012 TIAN Zhihui, WANG Run, ZHAO Qun, MA Xiaoyan (76)
- Study on primary culture and identification of bovine intestinal epithelial cells ZHAO Qianming, ZUO Xiaoxin, ZHAN Kang, SUI Yannan, FENG Feifei, ZHAO Guoqi (84)
- Effects of non-genetic factors on main economic traits of Simmental cattle WEI Chen, GE Jianjun, ZHANG Menghua, ZHANG Xiaoxue, LIU Liyuan, WANG Dan, ZHANG Chunhong, MA Xinbing, HUANG Xixia, MA Guanghui (91)
- Wnt-LRP6 signaling pathway regulates the expression of REST and its neuroprotective function SONG Zhiqi, WANG Jin, ZHU Ting, ZHOU Xiangmei, YANG Lifeng, ZHAO Deming (100)

- Effects of nisin and rhubarb compound on the activity of serum MMP-2 and MMP-9
in the endometritis of rats *JIA Zhifeng, WANG Chunjie, Aorigele,
HE Meiling, XU Jin, GAO Ruijuan, Aqima*(109)
- Current status and development strategies of orchard mechanization production in China
..... *ZHAO Ying, XIAO Hongru, MEI Song, SONG Zhiyu,
DING Wengqin, JIN Yue, HAN Yu, XIA Xianfei, YANG Guang*(116)
- Leaf area measurement correction based on smartphone orientation sensor
..... *GAO Dashuai, LIN Jianhui, YU Jiangbin, SUN Yurui, SCHULZE Lammers Peter*(128)
- Study of auto disturbance rejection synchronous control for bilateral hydraulic motor of
concept sprayer chassis *ZHANG Hua, ZHENG Jiaqiang, XU Youlin*(135)
- Stress relaxation properties test and virtual prototype simulation for fresh jujube
..... *XIE Junhai, ZHANG Xuekong, ZHANG Fengwei, ZHANG Tao,
DAI Fei, SONG Xuefeng*(144)
- Numerical simulation of curtain barn's low-wall affecting the surface temperature of
internal clearance channel *WU Hanping, SHI Zhengxiang, YUAN Xiaoyan*(151)
- Study on herdsman-level heterogeneity of grassland overgrazing
..... *HU Zhentong, LIU Di, JIN Leshan*(158)
- Empirical study on the influencing factors of pig farmers' environmental risk perception:
Based on the survey of 280 scale pig farmers in Hubei Province
..... *ZHANG Yu, LIU Yaodong*(168)
- Research on land-use and land-cover change of Urumqi City and its driving mechanism
..... *LI Liguo, WANG Yuxin, QIU Shuo, WANG Pingzhi*(177)
- The impact of government support, marketization on innovation efficiency of agricultural techniques:
A case study of six provinces in the middle of China *LI Honglian, MA Chunyan*(189)
- Evaluation of peasant satisfaction about the healthy village governance:
Based on a village survey of Inner Mongolia *YAN Ruihe*(199)