

# 目 次

厌氧发酵系统中的微量元素及其生物利用度的研究综述…………… 蔡亚凡 崔宗均 王小芬(1)

EST-SSR 标记应用于麦冬类植物遗传多样性研究…………… 王月 刘晓庆 李昊 董学会(12)

不同水氮运筹对滴灌冬小麦根系生长、水分利用及产量的影响  
…………… 薛丽华 赵连佳 陈兴武 雷钧杰 赛力汗·赛 乔旭 张永强(21)

奶牛性情的影响因素及其对产奶性能的作用…………… 王晔 张海亮 吴帆 杨影 宋朗  
…………… 李想 徐伟 罗汉鹏 董刚辉 郭刚 王雅春(32)

牛乳蛋白与过敏儿童患者血清特异性 IgE 结合情况的检测与分析  
…………… 石径 周亚迪 罗永康 江米足(40)

光控和埋置褪黑激素促进绒山羊长绒的皮肤毛囊差异表达基因网络分析  
…………… 勿都巴拉 刘斌 郭俊 阿云嘎 杨军 乌日格希拉图 李金泉 李玉荣(45)

羊源沙门氏菌耐药性和耐药基因的检测…………… 江萍 关茹飞 夏利宁 徐志勇(55)

“玉米田养鹅”农田生态系统下的土壤温度影响机制  
…………… 仝淑萍 关法春 曹舰艇 张宇阳 边步云 程犇(64)

海参组织蛋白酶 K 的部分酶学性质及其对海参自溶的影响  
…………… 季晓彤 王玲 薛鹏 年益莹 周婉茹 张元峰 张公亮 候红漫 孙黎明(72)

玉米定向栽培及机械化定向种植技术研究综述  
…………… 权龙哲 奚德君 王建森 肖云瀚 王建宇 邴亚军(78)

大豆种子与排种器接触物理参数的测定与离散元仿真标定  
…………… 张涛 刘飞 赵满全 刘月琴 李凤丽 麻乾 张勇 周鹏(86)

马铃薯恢复系数测定试验分析  
…………… 蒙建国 王春光 谢胜仕 邓伟刚 祁少华 李靖(93)

黑茶茶多酚类物质的提取及其抗氧化性能研究…………… 陈红艳 李雨浩 岑浩彬(101)

微藻水热液化有机相最佳回收工艺研究…………… 石泽 张超 唐晓寒 赵兵伟 杨晓奕(108)

紫色土集流桶(池)搅拌取样测量含沙量误差试验  
…………… 唐菊 黄钰涵 陈晓燕 张满良 张守孝(116)

脱硫石膏配合淋洗改良碱化土壤对土壤盐分分布及作物生长的影响 .....	王嘉航 杨培岭 任树梅 谭煌 俞昊良 杨婧(123)
韩江流域近 50 年极端气候事件的时空变化特征 .....	万露文 张正栋 李英杰 张杰 叶晨(133)
基于 CA-Markov 的农林交错区土地利用变化分析及预测 .....	高凤杰 韩文文 单培明 鞠铁男 吴啸 张炳芳 黄善林(145)
基于监测单元划分方法的耕地质量监测效率研究——以内蒙古自治区开鲁县为例 .....	张玉臻 刘树明 孔祥斌 李月 张蚌蚌 张青璞(154)
耕地经营规模及其质量禀赋对农户生产环节外包行为的影响 ——基于中国广西水稻种植农户的调研数据 .....	钱静斐 陈志钢 FilipskiMateusz 王建英(164)
农户贷款拖累农村信用社的经营绩效吗? .....	鞠荣华 肖迪(174)
我国农业绿色生产水平的时空差异及影响因素 .....	黄炎忠 罗小锋 李兆亮(183)
农户恢复村校的需求意愿及影响因素分析 ——基于 Ordinal Logit 模型的西部三省(区)数据实证 ...	史耀波 赵欣欣 岳爱(191)
湖北省农业结构调整对农民收入的效应分析 .....	刘成 周晓时 陈莎莎 刘明迪 李谷成 李勤志 冯中朝(201)
基于集合覆盖模型的农产品冷链网络布局 .....	李玉民 王新露 郭晓燕(212)

## CONTENTS

- A critical review on trace elements and bioavailability in anaerobic digestion system  
..... CAI Yafan, CUI Zongjun, WANG Xiaofen (1)
- Genetic diversity of *Liriodendrons* revealed by EST-SSR markers  
..... WANG Yue, LIU Xiaoqing, LI Hao, DONG Xuehui (12)
- Effects of different water and nitrogen application patterns on the growth of root and yield of  
winter wheat ..... XUE Lihua, ZHAO Lianjia, CHEN Xingwu, LEI Junjie,  
SAILIHAN Sai, Qiao Xu, ZHANG Yongqiang (21)
- Factors affecting dairy cow's temperament and the effect of temperament on milking performance  
..... WANG Ye, ZHANG Hailiang, WU Fan, YANG Ying, SONG Lang, LI Xiang,  
XU Wei, LUO Hanpeng, DONG Ganghui, GUO Gang, WANG Yachun (32)
- Detection and analysis of binding activities of IgE antibodies from child patients allergic to  
cow's milk protein ..... SHI Jing, ZHOU Yadi, LUO Yongkang, JIANG Mizuo (40)
- Network of differentially expressed genes in Cashmere goat skin follicles under short  
photoperiod and exogenous melatonin ..... Wudubala, LIU Bin, GUO Jun,  
Ayunga, YANG Jun, Wurigexilatu, LI Jinquan, LI Yurong (45)
- Detection of the antibiotic resistance and related resistance genes of *Salmonella*  
..... JIANG Ping, GUAN Rufeifei, XIA Lining, XU Zhiyong (55)
- Influence mechanism of the farmland ecosystem of "Raising geese in corn field" on soil temperature  
..... TONG Shuping, GUAN Fachun, CAO Jianting,  
ZHANG Yuyang, BIAN Buyun, CHENG Ben (64)
- Characteristics of cathepsin K of sea cucumber *Stichopus japonicus* and its effects on autolysis  
..... JI Xiaotong, WANG Ling, XUE Peng, NIAN Yiyong, ZHOU Wanru,  
ZHANG Yuanfeng, ZHANG Gongliang, HOU Hongman, SUN Liming (72)
- A review on the theory and mechanization cultivation technology of maize  
..... QUAN Longzhe, XI Dejun, WANG Jiansen, XIAO Yunhan, WANG Jianyu, LI Yajun (78)
- Measurement of physical parameters of contact between soybean seed and seed metering device and  
discrete element simulation calibration ..... ZHANG Tao, LIU Fei, ZHAO Manquan,  
LIU Yueqin, LI Fengli, MA Qian, ZHANG Yong, ZHOU Peng (86)
- Measurement test analysis of potato restitution coefficient ..... MENG Jianguo,  
WANG Chunguang, XIE Shengshi, DENG Weigang, QI Shaohua, LI Jing (93)
- Studies on polyphenols extraction technology and the performance of the antioxidants arising  
from dark tea ..... CHEN Hongyan, LI Yuhao, CEN Haobin (101)

- Optimum recovery conditions of organic phase after hydrothermal liquefaction of microalgae  
 ..... *SHI Ze, ZHANG Chao, TANG Xiaohan, ZHAO Bingwei, YANG Xiaoyi* (108)
- Experimental study on sediment measurement errors from sampling-mixing procedures of purple soil  
 ..... *TANG Ju, HUANG Yuhan, CHEN Xiaoyan, ZHANG Manliang, ZHANG Shouxiao* (116)
- Effect of flue gas desulphurized gypsum and sodic soil reclamation by leaching water on  
 soil salt distribution and the growth of crop ..... *WANG Jiahang, YANG Peiling,  
 REN Shumei, TAN Huang, YU Haoliang, YANG Jing* (123)
- Temporal and spatial characteristics of extreme temperature and precipitation events in  
 Hanjiang River Basin over the past 50 years ..... *WAN Luwen, ZHANG Zhengdong,  
 LI Yingjie, ZHANG Jie, YE Chen* (133)
- Dynamic changes and prediction of land use in farm-forest ecotone based on CA-Markov model  
 ..... *GAO Fengjie, HAN Wenwen, SHAN Peiming, JU Tienan,  
 WU Xiao, ZHANG Bingfang, HUANG Shanlin* (145)
- Monitoring efficient study of arable land quality based on the monitoring unit division method:  
 A case study of Kailu County in Inner Mongolia ..... *ZHANG Yuzhen, LIU Shuming,  
 KONG Xiangbin, LI Yue, ZHANG Bangbang, ZHANG Qingpu* (154)
- Impact of land resources and quality on farmers' outsourcing decisions:  
 Evidence from rice farmers in Guangxi, China  
 ..... *QIAN Jingfei, CHEN Zhigang, FILIPSKI Mateusz, WANG Jianying* (164)
- Does farmer loan harm the performance of the rural credit cooperative?  
 ..... *JU Ronghua, XIAO Di* (174)
- Analysis on spatial-temporal differences and influence factors of agricultural green production  
 level in China ..... *HUANG Yanzhong, LUO Xiaofeng, LI Zhaoliang* (183)
- Influence factors of farmers' willingness to restore rural school: Based on an Ordinal Logit  
 model from empirical data in three western provinces of China  
 ..... *SHI Yaobo, ZHAO Xinxin, YUE Ai* (191)
- The effect analysis of agricultural structure adjustment on farmers' income in Hubei Province  
 ..... *LIU Cheng, ZHOU Xiaoshi, CHEN Shasha, LIU Mingdi,  
 LI Gucheng, LI Qinzhi, FENG Zhongchao* (201)
- Cold chain network layout of agricultural products based on cluster coverage model  
 ..... *LI Yumin, WANG Xinlu, GUO Xiaoyan* (212)