

# 目 次

## 农业强国与粮食安全专栏

中国特色农业强国的基本特征及战略目标与路径

..... 高旺盛 孙其信 陈源泉 王小龙(1)

“虫口夺粮”保安全:风险威胁及应对策略

——基于病虫害风险对粮食安全潜在影响的模拟分析

..... 王晓君 张玉梅 孙炜琳 王国刚 胡向东 毛世平(11)

农业保险保障水平能提高粮食安全与农业增收的一致性吗? ..... 魏超 陈盛伟(22)

粮食主销区耕地非粮化对粮食生产技术效率的影响及区域差异

——以广东省为例 ..... 王舒琪 马铃(38)

河套灌区玉米不同种植密度对田间耗水及产值的影响

..... 白杜娟 邹超煜 白岗栓 池利刚 张俊 边利军(52)

施氮和覆膜对陕北地区玉米生长及氮素转运的影响

..... 密菲瑶 张腾 李卓远 邢英英 王秀康(65)

基于 SNP 和表型性状的籼稻种质资源遗传多样性研究

..... 贺乔乔 周希希 王业文 李培江 王胜宝 张羽(80)

外源茉莉酸对燕麦在不同干旱胁迫下转录组的影响

..... 张志芬 付晓峰 崔思宇 福英 刘俊青 杨海顺(94)

大百合花序分化及生理生化特征..... 魏钰 董知洋 张蕾 李雯琪 张启翔 高亦珂(108)

籽瓜种质资源表型性状鉴定及遗传多样性分析

..... 周远航 鲁伟丹 马小龙 高江龙 樊晓琴  
郭建富 陈友强 林明 石书兵(119)

三七根际耐皂苷木霉菌的分离鉴定及其拮抗促生活性评价

..... 李玥 罗丽芬 王焯东 李梦琪 朱书生 杨敏(133)

基于文献计量分析作物水肥一体化研究特征、热点和趋势 ..... 肖晶 饶良懿(144)

基于全基因组重测序筛选南阳黑猪脂肪沉积相关候选基因

..... 李盼 普布占堆 张浩 鲁云凤 张博(160)

鸡肌肉发育相关 miR-133a-5p 分析和关键靶基因筛选

..... 贾富民 贾羽晴 夏晶晶 税斐 曹程程  
张泰康 丁元飞 郭立平 耿照玉 金四华(172)

利用二代测序技术对柔嫩艾美耳球虫 T-DNA 整合位点的分析及鉴定

..... 郝振凯 汤新明 张媛媛 谢福杰 陈君敏 索静霞 索勋 刘贤勇(183)

LIP1-4EII 对单核细胞增生性李斯特菌关键毒力因子转录调控的影响

..... 史唯地 马勋 刘彩霞 寇丽君 吕双飞 任慧杰  
曾东东 王静 孔翠莲 高盛杰 钱瑞宣(191)

全域土地综合整治与生态修复的市场化机制、模式与路径

..... 肖武 郭既望 张丽佳 余晨 叶艳妹(203)

基于 Web of Science 的 2000—2021 年堆肥氨挥发研究的文献计量分析

..... 陈豹 李丹 曹云 孙倩 张晶 徐跃定 黄红英(218)

渭河流域气象干旱向农业干旱的传播研究..... 毛文静 牛俊(233)

杂交稻制种机不育系精量穴播集中排种装置的设计与试验

..... 周中林 胡洪基 郭金岳 黄邦超 李卉 陶有凤 任万军 雷小龙(245)

苹果管道气力输送装置参数优化与试验..... 王佳 陈春皓 李建平 张阔(259)

管道送风系统对塑料大棚气流场和温度场影响的 CFD 模拟

..... 赵娜 李明 赵淑梅 宋卫堂 石谓(272)

致富带头人带贫减贫机制及个体特征的影响..... 李彬彬(282)

畜牧业高质量发展:内涵、攻坚要点与政策设计..... 李春雷 杜祥 王刚毅(296)

感知价值及政策规制对农户有机肥替代化肥意愿与行为一致性的影响

..... 姜立康 赵伟 周霞(306)

## CONTENTS

### China's Strength in Agriculture and Food Security

- Basic characteristics, strategic goals and paths for building up China's strength  
in agriculture with Chinese characteristics  
..... GAO Wangsheng, SUN Qixin, CHEN Yuanquan, WANG Xiaolong (1)
- Potential impact of disease and pest risk on food security and its countermeasures  
..... WANG Xiaojun, ZHANG Yumei, SUN Weilin,  
WANG Guogang, HU Xiangdong, MAO Shiping (11)
- Can agricultural insurance security level improve the consistency between food security and  
agricultural income increase? ..... WEI Chao, CHEN Shengwei (22)
- Impact of non-grain utilization of cultivated land on the technical efficiency of  
grain production and regional differences in major grain-consuming areas:  
A case study of Guangdong Province ..... WANG Shuqi, MA Ling (38)
- Effects of different planting densities of maize on field water consumption and  
output value in Hetao irrigation area  
..... BAI Dujuan, Zou Chaoyu, BAI Gangshuan, Chi Ligang, Zhang Jun, Bian Lijun (52)
- Effects of nitrogen application and plastic mulching on the growth and  
nitrogen transport of maize in northern Shaanxi Province  
..... MI Feiyao, ZHANG Teng, LI Zhuoyuan, XING Yingying, WANG Xiukang (65)
- Genetic diversity of *Indica* rice germplasm resources based on SNP and phenotypic markers  
..... HE Qiaoqiao, ZHOU Xixi, WANG Yewen, LI Peijiang, WANG Shengbao, ZHANG Yu (80)
- Effects of exogenous jasmonic acid on the transcriptome of oat under different water conditions  
..... ZHANG Zhifen, FU Xiaofeng, CUI Siyu, FU Ying, LIU Junqing, YANG Haishun (94)
- Inflorescence differentiation of *Cardiocrinum giganteum* and its morphological and  
physiological-biochemical characteristics  
..... WEI Yu, DONG Zhiyang, ZHANG Lei, LI Wenqi, ZHANG Qixiang, GAO Yike (108)
- Phenotypic characters identification and genetic diversity analysis of seed melon germplasm resources  
..... ZHOU Yuanhang, LU Weidan, MA Xiaolong, GAO Jianglong, FAN Xiaoqin,  
GUO Jianfu, CHEN Youqiang, LIN Ming, SHI Shubing (119)
- Isolation and identification of ginsenosides-tolerant *Trichoderma* strains from rhizosphere of  
*Panax notoginseng* and evaluation of their effect on antagonistic and growth promotion activity  
..... LI Yue, LUO Lifeng, WANG Xuandong, LI Mengqi, ZHU Shusheng, YANG Min (133)
- Research characteristics, hotspots and trend of crop fertigation based on bibliometric analysis  
..... XIAO Jing, RAO Liangyi (144)
- Screening of candidate genes related to fat deposition in Nanyang black pigs  
based on whole genome resequencing  
..... LI Pan, PUBU Zhandui, ZHANG Hao, LU Yunfeng, ZHANG Bo (160)

- Analysis of miR-133a-5p related to chicken muscle development and screening of key target genes  
 ..... JIA Fumin, JIA Yuqing, XIA Jingjing, SHUI Fei, CAO Chengcheng,  
 ZHANG Taikang, DING Yuanfei, GUO Liping, GENG Zhaoyu, JIN Sihua (172)
- Analysis and identification of T-DNA insertion sites in transgenic *Eimeria tenella*  
 ..... HAO Zhenkai, TANG Xinming, ZHANG Yuanyuan, XIE Fujie,  
 CHEN Junmin, SUO Jingxia, SUO Xun, LIU Xianyong (183)
- Transcriptional regulation of key virulence factors in *Listeria monocytogenes* by EII of LIPI-4  
 ..... SHI Weidi, MA Xun, LIU Caixia, KOU Lijun, LV Shuangfei, REN Huijie,  
 ZENG Dongdong, WANG Jing, KONG Cuilian, GAO Shengjie, QIAN Ruixuan (191)
- Marketization mechanism, model and path of comprehensive land consolidation and ecological restoration  
 ..... XIAO Wu, GUO Jiwang, ZHANG Lijia, YU Chen, YE Yanmei (203)
- A bibliometric analysis on literature related to ammonia emission during composting process  
 published from 2000 to 2021: Based on the Web of Science database  
 ..... CHEN Bao, LI Dan, CAO Yun, SUN Qian,  
 ZHANG Jing, XU Yueding, HUANG Hongying (218)
- Study on the propagation of meteorological drought to agricultural drought in Weihe River Basin  
 ..... MAO Wenjing, NIU Jun (233)
- Design and experiment of precision hill-seeding device for female parent rice  
 in mechanized seed production ..... ZHOU Zhonglin, HU Hongji, GUO Jinyue,  
 HUANG Bangchao, LI Hui, TAO Youfeng, REN Wanjun, LEI Xiaolong (245)
- Parameter optimization and experiment of the pneumatic conveying device of apple pipe  
 ..... WANG Jia, CHEN Chunhao, LI Jianping, ZHANG Kuo (259)
- CFD simulation on the influences of pipe air supply system on airflow field and  
 temperature field in plastic tunnel  
 ..... ZHAO Na, LI Ming, ZHAO Shumei, SONG Weitang, SHI Wei (272)
- Mechanisms of rural entrepreneurial leaders to help poor households reduce poverty  
 and individual characteristics influence ..... LI Binbin (282)
- High-quality development of animal husbandry:  
 Framework, key points and policy design ..... LI Chunlei, DU Xiang, WANG Gangyi (296)
- Effects of perceived value and policy regulation on farmers' willingness and  
 behavior consistency of organic fertilizer to replace chemical fertilizer  
 ..... JIANG Likang, ZHAO Wei, ZHOU Xia (306)