

2024 年 第 14 卷 第 3 期 (总第 127 期)

目 次

农业机械化

新疆残膜机械化回收技术研究现状与展望姜羽晗	张海春	叶尔波拉提	•铁木尔	刘旋峰	周	欣(5)	
贵州省锦屏县油菜种植全程机械化模式	汤眼	分盼 任永飞	刘春波	吴桂芝	刘	伟(12)	
信息与智能化							
新疆三屯河灌区水利信息化应用研究			·张侨洪	靳 晟	刘	杰 (16)	

北京市畜牧业生物安全智能监管系统(生猪)技术(体系架构										
王晓丽	王彩虹	薛晓娟	范媛媛	王	淼	韩	姣	程	旭	刘胤池	(23)
基于改进 YOLOv8 卷积神经网络的蟹味菇检测方法						·林沪	亲缪	马	超	胡 冬	(27)

设施农业工程

半封闭温室关键系统设计与应用 李秀刚	王志冉	周增产	李新旭	兰立波	高	鑫	姚 涛 (32)
船载式垂直植物工厂设计与应用	李楠	苌 进	宋作玮	苏 红	翟	豪	余文元 (36)

农业生物系统与能源

规模化蛋鸡养殖过程碳排放量核算与减排措施				·代小蓉	汪	媛	周 斌	(41)
播期对夏玉米生长、品质及产量的影响					·卢	霞	王福州	(47)
不同耕作模式下农机作业对 PM2.5、PM10 和 TSP 排放的影响 …		·段改莲	陈卫文	王揽月	周明	月源	邢广青	(53)
南充市高坪区早熟蓝莓气象条件分析 张	力	钟启琴	蒋杰峰	程 莉	龙侈	支天	何 崧	(56)
液体硅肥对青脆李品质的影响 唐	笑	马倩倩	薛晓杰	姜乐璞	赵	婧	姜中武	(61)

设计制造与研究

5XZ-10型比重式种子分选机气流孔板布置优化 程丽娟	自 何强龙	盲 鑫	刘建明	伍永福 (65)
苎麻连续剥麻机设计与试验陈 静 冯 艳	色 袁梦涵	龚 正	胡 雷	王 瑛 (73)
公差仿真分析在谷物收获机械车门系统中的应用 郇新明	耿佃才	黄 超	代冬梅	任子童 (78)
玉米精密播种机漏播监测器研制与试验	… 崔玉祥	康力峰	郭 玮	杨志林 (85)

农产品加工工程

基于机器视觉的小白杏热风干燥控制系统设计			·杨嘉鹏	王帅帅	黄 卉	刘子绰	(91)
外源添加物对桑黄液体发酵菌丝体和多糖含量的影响							
	朱雨馨	沈梦玲	朱蕴兰	范晓博	周芸好	黄立杰	(97)

水土工程

基于时变非线性特征和状态变量的农田灌溉节水控制方法 … 杨明娟	刘宗浩	岳 鹏	孙利军	孙庆艳	李 娜	(104)
1990—2020年南渡江流域景观格局变化特征及其对人为干扰动态响应机	几制					
	毛铭江	韦玲艳	龚文峰	刘铁冬	吴庚鸿	(109)
高标准农田建设项目管理常见问题和建议					·李启斌	(122)

科研与教学

农业工程类研究生培养模式创新性研究 … 马	淏	任	静	刘亚蕊	金	鑫	尹冬雪	赵贵	凱旋	高	颂	刘孟	楠	(127)
基于 OBE 理念的食品专业创新创业教学体系构	J建 ·						朱新鹏	梁	如	陈	芳	周	琼	(132)
基于个性化教育理念的高素质农民学历教育教会		t.—	以身	果树生产打	支术设	果程さ	♭例 ⋯⋯	·张	雯	范	学科	王厚	锁	(137)

农业产业研究

基于产业融合视角的镇域农业发展路径——以内蒙古自治区	科右前旗	归流河镇	水稻产」	上发展	实践	为例		
	·周丹丹	赵 威	庞中伟	; 符	莉	王海鸽	高 峰	(141)
百色市西甜瓜生产现状与发展建议	罗思良	费永红	农媛	長 韦	静	罗顺遂	黄文伟	(146)
山东省农业可持续发展空间分异研究			·龙孟	刘	嘉豪	吴 吴	崔茂森	(150)
基于 SWOT 分析的陕西省周至县猕猴桃产业经济效益提升策	宦略						·屈 佳	(157)

AGRICULTURAL ENGINEERING Vol. 14 No.3 2024 Contents

Agricultural Mechanization

Current Status and Prospects of Mechanized Recovery Technology for Residual Film in Xinjiang Uygur Autonomous Region ······· JIANG Yuhan, ZHANG Haichun, Yebolati • Tiemuer, LIU Xuanfeng, ZHOU Xin (5) Rapeseed Planting Full Process Mechanization Mode in Jinping County of Guizhou Province ······ TANG Panpan, REN Yongfei, LIU Chunbo, WU Guizhi, LIU Wei (12)

Informatization and Intelligence

Facility Agriculture Engineering

Design and Application of Key System in Semi Closed Greenhouse

..... LI Xiugang, WANG Zhiran, ZHOU Zengchan, LI Xinxu, LAN Libo, GAO Xin, YAO Tao (32) Design and Application of Shipborne Vertical Plant Factory

..... LI Nan, CHANG Jin, SONG Zuowei, SU Hong, ZHAI Hao, YU Wenyuan (36)

Agricultural Biological Systems and Energy

Carbon Emission Calculation and Emission Reduction Measures in Process of Intensive Laying Hens Farming
 DAI Xiaorong, WANG Yuan, ZHOU Bin (41)
 Effect of Sowing Date on Growth, Yield and Quality of Summer Maize
 LU Xia, WANG Fuzhou (47)
 Effect of Agricultural Machinery Operation on PM_{2.5}, PM₁₀ and TSP Emissions under Different Tillage Modes
 DUAN Gailian, CHEN Weiwen, WANG Lanyue, ZHOU Mingyuan, XING Guangqing (53)
 Meteorological Conditions for Early Maturing Blueberry in Gaoping District of Nanchong City
 ZHANG Li, ZHONG Qiqin, JIANG Jiefeng, CHENG Li, LONG Juntian, HE Song (56)
 Effect of Liquid Silicate Fertilizer on Fruit Quality of Green Crisp Plum

..... TANG Xiao, MA Qianqian, XUE Xiaojie, JIANG Lepu, ZHAO Jing, JIANG Zhongwu (61)

Design, Manufacture and Research

Arrangement Optimization of Airflow Orifice Plates of 5XZ-10 Specific Gravity Seed Sorter

..... CHENG Lijuan, HE Qianglong, GUAN Xin, LIU Jianming, WU Yongfu (65) Design and Experiment of Ramie Continuous Stripping Machine

..... CHEN Jing, FENG Yan, YUAN Menghan, GONG Zheng, HU Lei, WANG Ying (73) Application of Tolerance Simulation Analysis in Door System of Grain Harvester

......XUN Xinming, GENG Diancai, HUANG Chao, DAI Dongmei, REN Zitong (78)

Development and Experiment of Missing Sowing Monitor for Corn Precision Seeder

Agricultural Product Processing Engineering

Design on Apricot Hot Air Drying Control System Based on Machine Vision
 YANG Jiapeng, WANG Shuaishuai, HUANG Hui, LIU Zichuo (91)
 Effect of Exogenous Additives on Mycelium Yield and Polysaccharide Content of *Phellinus igniarius* Liquid Fermentation DAI Yongqi, ZHU Yuxin, SHEN Mengling, ZHU Yunlan, FAN Xiaobo,

ZHOU Yunhao, HUANG Lijie (97)

Water and Soil Engineering

Water Saving Control Method for Farmland Irrigation Based on Time-varying Nonlinear Characteristics and							
State Variables	(104)						
Characteristics of Landscape Pattern Changes in Nandu River Basin and Its Dynamic Response Mechanism to							
Anthropogenic Disturbance from 1990 to 2020 MAO Mingjiang, WEI Lingyan, GONG Wenfeng,							
LIU Tiedong, WU Genghong ((109)						
Common Problems and Suggestions of High Standard Farmland Construction Project Management LI Qibin ((122)						

Scientific Research and Teaching

Innovative Research on Training Mode of Agricultural Engineering Postgraduate Students
MA Hao, REN Jing, LIU Yarui, JIN Xin, YIN Dongxue, ZHAO Kaixuan, GAO Song, LIU Mengnan (127)
Construction of Innovation and Entrepreneurship Teaching System for Food Major Based on OBE Concept
Construction of High Quality Farmers Academic Education Based on Concept of Personalized Education:
A Case Study of Fruit Tree Cultivation Technology Course ZHANG Wen, FAN Xueke, WANG Zhousuo (137)

Agricultural Industry Research

Development Path of Township Agriculture from Perspective of Industrial Integration: Taking Practical Exploration
on Rice Industry Development in Guiliuhe Town, Keyouqian Banner, Inner Mongolia
Autonomous Region as an Example ZHOU Dandan, ZHAO Wei, PANG Zhongwei, FU Li,
WANG Haige, GAO Feng (141)
Production Status and Development Suggestions of Watermelon in Baise City
······ ZHOU Yinhui, LUO Siliang, FEI Yonghong, NONG Yuan, WEI Jing,
LUO Shunsui, HUANG Wenwei (146)
Spatial Distribution Differentiation of Agricultural Sustainable Development in Shandong Province
LONG Meng, LIU Jiahao, WU Hao, CUI Maosen (150)
Strategy of Promoting Economic Benefits of Kiwifruit Industry in Zhouzhi County of Shaanxi
Province Based on SWOT Analysis