

10

2013

第35卷

ISSN 1003-188X

农机化研究

Journal of Agricultural
Mechanization Research

全国科技精品期刊
全国中文核心期刊



黑龙江省农业机械工程科学研究院
黑龙江省农业机械学会

主办

ISSN 1003-188X



万方数据

农业发展新视点

- 三峡库区耕地资源空间利用模式的探讨—以重庆市开县为例..... 洪惠坤 陈 智 (1)
- 基于钻石模型的重庆微耕机产业集群竞争力分析 谭崇静 杨 仕 (6)

理论研究与探讨

- 栽植机构的运动学建模与参数优化—基于夹持式玉米植质钵育苗全自动移栽机 付晓明 张 伟 牛钊军 (11)
- FP2500A 型翻抛机关键零件的模态分析 王泽民 张维强 杨 军 等 (16)
- 9YG-130 型双圆盘割草机刀片的运动仿真研究 蒙建国 赵满全 黄 炎 等 (21)
- 基于全局优化预测的温室智能控制模型 程 曼 袁洪波 蔡振江 (26)
- 凿形深松犁铲受力的有限元分析 焦仁宝 郝剑 王俊发 (30)
- 2YB-1 型智能烟苗移栽机机械手运动分析与仿真 杨文强 张 飞 (34)
- 基于 ADAMS 的花生收获机清选机构运动仿真分析 胡彩旗 刘 帅 尚书旗 (38)
- 挠性圆盘式蔬菜移栽机运动仿真分析 王 石 王笑岩 李成华 (42)
- 苹果采摘机器人视觉系统的目标提取研究 石雪强 程新文 (46)
- 玉米秸秆皮瓢叶分离机械皮瓢分离机理研究 于克强 王德福 (49)
- 我国农业综合生产能力评价指标体系研究 殷秀萍 王福林 (52)

设计制造

- 日光温室结构拓扑优化设计 袁 余 赵惊鹏 张 程 等 (55)
- 辣椒去核机的设计和动态仿真 唐文波 王春耀 郭亚平 (60)
- 基于单片机的树枝粉碎机控制系统设计 赵 俊 李树君 景全荣 等 (64)
- 棉秆去皮疏解机的研制 景继龄 郭康权 武明放 等 (68)
- 有序铺放花生收获机的研制 赵思静 王东伟 王延耀 等 (73)
- 自走式烟草移栽机投苗相对位置检测系统设计 许艳华 张亮亮 (76)
- 适应深泥脚的插秧机设计 胡相翠 许良元 邵陆寿 等 (80)
- 5YBG-1 型烟叶编杆机的设计 张士领 王 双 张 飞 (83)
- 大蒜直立播种机设计 林悦香 尚书旗 杨然兵 等 (87)
- 双曲柄往复式秸秆固化成型机的技术分析 曾庆辉 刘希锋 郭英洲 (90)
- 基于 PLC 控制挤奶机节拍比的设计 张欣达 刘伟峰 刘景艳 等 (95)
- 农用激光导航无线遥控准直控制系统设计 齐晓娜 姜海勇 李 倩 (99)
- 基于 PLC 和组态王的水果品质分级系统设计 朱培逸 王引佳 高 珏 等 (103)
- 稻田管理机通用底盘的研制 杨 刚 申屠留芳 孙星钊 等 (107)
- 并列双轴整地筑埂联合作业机的设计 赵丽萍 赵清来 (111)
- 大蒜收获机的设计 杨桂林 (114)
- 基于椰子脱壳机械的设计与 ANSYS 分析 蔡 维 张 燕 史留勇 等 (118)
- 一器四行针孔气力式蔬菜播种机的设计 徐 明 邱秀丽 贺 珩 等 (122)

试验研究

土壤参数与马铃薯收获机牵引阻力的研究	李雷霞 贾晶霞 李建东 等 (125)
谷物联合收获机喂入量模型研究	卢文涛 邓志刚 张东兴 等 (129)
不同预处理下冬瓜热风干燥实验研究	张 博 赵士杰 刘景艳 等 (133)
青岛市市郊土壤磷钾状况分析的研究	周亚鹏 张 利 陈 影 等 (137)
基于多光谱的土壤水分测定方法研究	高 瞻 何东健 乔永亮 (141)
冲击载荷对大豆发芽率的影响研究	曹中华 王 鑫 闫 鹏 等 (146)
西北五省农户储藏小麦情况调查研究	胡耀华 陈康乐 刘 聪 等 (150)

新技术应用

喷雾均匀性自动检测系统的设计	郝 强 张文爱 王 秀 等 (154)
基于 WEB 农业温室远程监控系统设计与实现	贺婷婷 白皓然 尚书旗 等 (158)
基于 GPS 手持机的水田信息调查系统研究	李 馨 (162)
温室环境监控系统的设计—基于 RS-485 总线和无线通信方式	杨 靖 白保良 李泽滔 (166)
基于无线网络的农田灌溉智能监测系统	纪文义 张继成 郑 萍 等 (171)
基于单片机的温室恒温控制系统设计	李静红 (174)
禽畜舍环境多因子监测系统	于华丽 刘淑霞 王 骞 等 (178)

环境与能源动力工程

分流叶片对离心泵径向力特性的影响	张金凤 叶丽婷 袁寿其 等 (181)
拖拉机齿轮泵变位齿轮参数化建模及运动仿真	李 静 卢博友 千勃兴 等 (186)
微型履带拖拉机牵引附着性能研究—基于正交试验	张季琴 杨福增 刘 世 (190)
基于模糊 PID 的线控液压转向系统仿真分析	周 慧 鲁植雄 赵苗苗 (194)
智能 IC 卡管理系统在农村软体沼气工程中的应用	胡万里 刘荣厚 杜章永 (199)
基于 Pro/E 的离心泵扭曲叶片造型	千勃兴 卢博友 李 静 等 (202)
拖拉机用 AMT 操纵执行机构设计与分析	曹森龙 李 强 庞 茂 等 (206)
生物质颗粒成型机理与环境性能研究	张彦民 于振文 王 冠 (210)

综述

国内外马铃薯收获机械发展现状	史明明 魏宏安 刘 星 等 (213)
我国葡萄埋藤机的现状及相关机械化技术发展	李 涛 康 璟 吴建民 等 (218)
农机和农艺技术结合中存在的问题及措施探讨	张 梅 朱广文 (222)
我国水稻收割机的发展现状及发展方向	王 飙 刘 峰 李云伍 (226)
植物工厂发展趋势与存在问题分析	邱兆美 赵 龙 贾海波 (230)
农民专业合作社发展与农地制度变迁效应分析	王 勇 (234)
我国整秆式甘蔗剥叶机械研究现状及思考	刘芳建 杨学军 刘赞东 等 (238)
果蔬气调贮藏保鲜环境控制技术发展研究	周晓龙 吕恩利 陆华忠 等 (242)
重庆市农机服务产业化现状及对策分析	刘建徽 牛 磊 黄庆华 等 (245)
我国农业装备与技术协同创新研究	王卫龙 笪祖林 (249)

Journal of Agricultural Mechanization Research

No. 10 2013

Contents

New View of Agricultural Development

- The Discussion of Space Utilization about Cultivated Land Resources in the Three Gorges Reservoir Area—A Case Study of Kaixian County, Chongqing City Hong Huikun et al. (1)
- Analysis on Competitiveness of Mini-tiller Industrial Cluster in Chongqing Based on Diamond Model Tan Chongjing et al. (6)

Theory Study and Discussion

- Kinematics Modeling and Parameters Optimization —Based on Clamping Type Planting Mechanism for Corn Planting Bowl-seedling Fu Xiaoming et al. (11)
- The Modal Analysis of the key Components of FP2500A Type Stack-turning Machine Wang Zemin et al. (16)
- The Simulation Analysis of the Types of the Front- Mounted Disc Mower Meng Jianguo et al. (21)
- The Model in Intelligent Control of Greenhouse Based on Global Optimization Prediction Cheng Man et al. (26)
- Finite Element Analysis for Stress of Chisel Shaped Deep Loosening Plough Shovel Jiao Renbao et al. (30)
- The 2YB-1 Intelligent Tobacco Transplanting Machine Manipulator Kinematic Analysis and Simulation Yang Wenqiang et al. (34)
- Motion Simulation and Analysis for Cleaning Mechanism of Peanut Harvester Based on ADAMS Hu Caiqi et al. (38)
- Analysis of Kinematic Simulation of Soft Disc-type Vegetable Seedling Transplanter Wang Shi et al. (42)
- Target Extraction Study on the Vision System of Apple Picking Robot Shi Xueqiang et al. (46)
- Experimental Study on the Skin Flesh Separation Mechanism of Separating Machinery for Corn Stalk Skin Flesh Leaf Yu Keqiang et al. (49)
- Study on Evaluation Index System of Agricultural Comprehensive Production in China Yin Xiuping (52)

Design and Manufacture

- The Topological Optimization Design of the Structure of the Solar Greenhouse Yuan Yu et al. (55)
- Design and Dynamic Simulation for a Kind of Chili Pitter Tang Wenbo et al. (60)
- Design of Control System for Brush Chipper Based on Micro Chip Unit Zhao Jun et al. (64)
- The Design and Experiment of Cotton Stalk Fluffer Jing Jiling et al. (68)
- Development of Peanuts Setting Orderly Harvester Zhao Sijing et al. (73)
- Design on Relative Position Detecting System of 2YZS-selfpropelled Tobacco Transplanter Seedling Launching Mechanism Xu Yanhua et al. (76)
- Design of the Transplanter Adapting to Deep Mud Feet Paddy Field Hu Xiangcui et al. (80)
- The Design of 5YBG-1 Tobacco Leaf Tied Machine Zhang Tuling et al. (83)
- The Design of Upright Garlic Planter Lin Yuexiang et al. (87)
- Technical Analysis of Double Crank Reciprocating Piston Straw Curing Machine Zeng Qinghui et al. (90)
- Design of Pulsation Ratios About Milking Machine Based on PLC Control Zhang Xinda et al. (95)
- Design of Collimation System for Field Machinery Based on Laser Navigation and Remote Control Technology Qi Xiaona et al. (99)
- Design of the Fruit Quality Grading System Based on PLC and KingVIEW Zhu Peiyi et al. (103)
- The Development of a Versatile Chassis for Paddy Land Management Machine Yang Gang et al. (107)
- Design of the Rotavate and Ridge Combined Machine in Parallel Biaxial Zhao Liping et al. (111)
- Design of the Garlic Harvesting Machine Yang Guilin et al. (114)

Design of the Mechanical Based on Coconut Shelling and ANSYS Analysis	Cai Wei et al. (118)
Design and Test of High Efficiency Nozzle Pneumatic Seeder for Vegetable	Xu Ming et al. (122)

Experiment and Research

The Research of Soil Parameters And Potato Harvester Traction Resistance	Li Leixia et al. (125)
Combine Feed Rate Modeling Research	Lu Wentao et al. (129)
Experimental Study on Hot Air Drying of Wax Gourd in Different Pretreatment	Zhang Bo et al. (133)
Study on Fertility Status of Phosphorous and Potassium in Suburbs of Qingdao	Zhou Yapeng et al. (137)
Research on Soil Moisture Measurement Based on UV-VIS and NIRS	Gao Zhan et al. (141)
Impact load Has Influence on Germination Percentage of Soybean Seed	Cao Zhonghua et al. (146)
Survey on Stored-wheat in Farmer Households from Five Provinces of Northwest China	Hu Yaohua et al. (150)

Application of New Technology

Design of The Spray Uniformity Automation Test System	Hao Qiang et al. (154)
The Design and Implementation of Agricultural Greenhouse Remote Monitoring System Based on WEB	He Tingting et al. (158)
A research on GPS Handset Based Rice Field Information Survey System	Li Xin(162)
Design of Greenhouse Environment Monitoring System—Based on RS-485 BUS and Wireless Communication	Yang Jing et al. (166)
Research on an Intelligent Monitoring System of Farmland Irrigation Base on Wireless Network	Ji Wenyi et al. (171)
The Greenhouse Thermostat Control System Design Based Microcontroller	Li Jinghong(174)
Environment Multi-parameters Monitoring System in Poultry-livestock House	Yu Huali et al. (178)

Environment and Energy Power Engineering

Effects of Splitter Blades on the Radial Force in a Centrifugal Pump	Zhang Jinfeng et al. (181)
Parametric Modeling and Motion Simulation of Modified Gears in Gear Pump of Tractor	Li Jing et al. (186)
Research of the Micro-crawler Tractor Adhesion Performance —Based on Orthogonal Experiment	Zhang Jiqin et al. (190)
Simulation of Hydraulic Steering By-wire System Based on Fuzzy PID Control	Zhou Hui et al. (194)
The Application of Intelligent IC Card Management System in Rural Software Biogas Engineering	Hu Wanli et al. (199)
Solid Modeling for Twisted Blade of Centrifugal Pump Based on Pro/E	Qian Boxing et al. (202)
Design and Analysis on AMT Shift Mechanism for Tractor	Cao Miaolong et al. (206)
Biomass Particles Forming Mechanism and Ring Mode Performance	Zhang Yanmin et al. (210)

Summary

The Present Situation of Potato Harvester Development at Home and Abroad	Shi Mingming et al. (213)
Current Situation and Development of Mechanization Technology for Grape Vine Layer in China	Li Tao et al. (218)
Problems and Countermeasures to Push Technique Combined Agriculture Machine and Agronomy	Zhang Mei et al. (222)
The Development Status and Trends of China's Rice Harvester	Wang Biao et al. (226)
Analysis on the Development Trends and Problems of Plant Factory	Qiu Zhaomei et al. (230)
Analysis on Interaction Effect of Farmers Professional Cooperative and the Rural Land System Change	Wang Yong(234)
The Current Situation and Deliberation of Whole Stalk Sugarcane Leaf-stripping Machine in Our Country	Liu Fangjian et al. (238)
Research Status and Prospects of Control Technologies in Fresh-keeping Environment of Controlled Atmosphere Storage and Transportation for Fruits and Vegetables	Zhou Xiaolong et al. (242)
Promote Chongqing Agriculture Machinery Service Industrialization Countermeasure Research	Liu Jianhui et al. (245)
A Research on Collaborative Innovation of China's Agricultural Equipment and Technology	Wang Weilong et al. (249)
Basic Parameters of the Journal: CN 23-1233/S * 1979 * m * A4 * 252 * zh * P * ¥20.00 * 1500 * 63 * 2013-10	