



中国核心期刊(遴选)数据库全文收录期刊
中国学术期刊综合评价数据库统计源期刊
中国学术期刊(光盘版)全文收录期刊
中文科技期刊数据库全文收录期刊

ISSN 1674-1161

CN 21-1559/S

农业科技与装备

AGRICULTURAL SCIENCE&TECHNOLOGY AND EQUIPMENT

2021年第2期

nongye keji yu zhuangbei



ISSN 1674-1161



主管单位: 辽宁省农业科学院
主办单位: 辽宁省农业机械化研究所
协办单位: 辽宁省农机学会 辽宁省农学会
辽宁省农业工程学会



农业科技与装备

NONGYE KEJI YU ZHUANGBEI

2021 年第 2 期
(总第 302 期)
3 月 20 日出版
双月刊
(1979 年 4 月创刊)

主管单位 辽宁省农业科学院
主办单位 辽宁省农业机械化研究所
出版发行 农业科技与装备杂志社
印刷单位 沈阳市东实印刷厂
主 编 高希君
副 主 编 刘 欣 王 帅
地 址 沈阳市东陵路 90 号
邮政编码 110161
电 话 024-88416286(传真)
电子邮箱 nykjyzzb@163.com
网 址 <http://www.lnsnjs.com.cn>
国内统一出版物号 CN 21-1559/S
国际标准连续出版物号 ISSN 1674-1161
发行范围 国内公开发行
订 阅 全国各地邮局
邮发代号 8-211
每期定价 15.00 元

如需转载本刊文章及图片, 请注明摘自《农业科技与装备》杂志, 并寄样刊。

中国核心期刊(遴选)数据库全文收录期刊
中国学术期刊综合评价数据库统计源期刊

目 次

品种与栽培

- 影响红南果梨品质原因分析及其改善措施 王英华(01)
小型西瓜生育特性与保护地栽培技术 唐海红(03)

土肥与环境

- 水稻留高茬还田技术改良土壤效果研究 戴继光(05)
水溶有机肥对水稻促早熟的效果研究 赵 琦(09)
土壤有机质对烤烟品质的影响 时 强(12)

林学与植保

- 敌草快水剂防除杂草效果试验
..... 安福涛, 高希君, 许国庆, 张旭东, 董怀玉, 姜 燕(14)
苹果蠹蛾在辽宁省的传播风险分析及管理对策 鲁旭鹏(16)
不同浓度多·甲合剂处理对花生农艺性状的影响 陈 菁(19)
园林绿化树木的移植及其养护管理技术 孙 玮(21)

农业工程

- 一种便携式土壤检测装置的设计 李海龙(23)
开沟合垄深施肥耕耙犁的设计 孙继东(25)
青(黄)贮饲料收获机圆弧过渡料口及其挂接机构的设计
..... 任一迪, 孙利峰, 李谦绪, 阿力木·买买提吐尔逊(27)
2BMS-4 型免耕播种机的设计及性能试验 王荣祥, 杜秀国(30)
农田暗管排水技术及其施工机械 安鹤峰(32)
平菇灌肠的工艺研究 李志涛, 朱冰清, 刘海鹏, 马晓晴(35)
花生热风干燥工艺参数研究 林子木(37)
桂花板栗糕的研制 李 飞(40)
薏苡仁中有效成分提取工艺的研究发展 王金丹(43)
激光脉冲在橘子表皮打标的效果研究 周 博, 王 宁(46)
聚脲防渗材料在大海子水库放水涵洞工程中的应用 吕长征(48)
基于 Triz 理论的杏白兰地陈酿时间较长问题研究
..... 王雪松, 周晏起, 张素敏, 隋韶奕, 李 珂(50)

欢 迎 订 阅

中国学术期刊(光盘版)全文收录期刊
中文科技期刊数据库全文收录期刊

MU CI

自吸式精密排种器研究及展望

..... 刘忠泽,周伟艳,高红军,王宏亮,曹兴乔,孟 欣(52)

蔬菜清洗技术和杀菌剂发展研究 徐立伟(54)

植保无人机研发进展及行业发展探讨 丁 宁(56)

不同炮制方法对苍术中有效成分的影响 樊志强(59)

技术 推 广

基于制度经济理论的食品安全监管策略 ... 史铁嘉,郭德超,梁婧婧(61)

岫岩地区的奇异梅产业发展措施研究 戴运艳(63)

云南省甘蔗收获机械推广难点及策略分析 柏绍堂(65)

农业生产中气象信息服务的应用策略 戴海燕,依 航,张 黎(67)

辽宁省农机安全监理改进措施探讨 曹 磊(69)

基层农机化技术推广人员业务能力分析 王雪茹(71)

基于乡村振兴背景的新型职业农民培训问题探析

——以四川省某市 A 村为例 江雨曦,许佳颖(73)

辽西北地区农村合作经济发展对策探析——以彰武县为例

..... 赵佳鑫,郭文超,李含钰,邓雨心,刘雅雯(75)

辽宁农机服务组织建设探讨 赵 伟(78)

论 坛 交 流

农业院校电子信息应用型人才创新能力培养模式探析

..... 于丰华,许童羽,李征明,方晶晶,刘 强(80)

“互联网+”大学生创新创业问题研究 闫星竹,金星彤(82)

信息技术在食品分析教学中的运用和探讨 马 昕(85)

农产品质量检测技术课程的改革与实践 金 锋(87)

基于应用型人才培养的现代食品检测技术教学改革实践

..... 邓健康,张 辉(89)

职业院校微课程的开发与应用研究 田 洋(91)

AGRICULTURAL SCIENCE & TECHNOLOGY AND EQUIPMENT

NO.2,2021
(Total NO.302)
March 20
Bimonthly
(Started in April 1979)

Administered by

Liaoning Academy of Agricultural
Sciences

Sponsored by

Liaoning Province Agricultural
Mechanization Institute

Published and Distributed by

Journal of Agricultural S&T and
Equipment

Printed by

Shenyang DongShi Printing House

Editor in Chief

GAO Xijun

Deputy Editor in Chief

LIU Xin,WANG Shuai

Address

No.90,Dongling Road,Shenyang 110161

Telephone(Fax)

024-88416286

E-mail

nykjybz@163.com

<http://www.lnsnjs.com.cn>

CN 21-1559/S

ISSN 1674-1161

For reproduction of any articles and pictures
from AGRICULTURAL SCIENCE&TECHNOLO-
GY AND EQUIPMENT, please indicate the
source and send us a sample book.

欢 迎 赐 稿



Contents

Variety and Cultivation	
Analysis of Causes Affecting the Quality of Red Nanguo Pear and Its Improvement Measures	WANG Yinghua(01)
Growth Characteristics and Cultivation Techniques of Mini Watermelon in Protected Areas	TANG Haihong(03)
Soil-fertilizer and Environment	
Study on Effect of Soil Improvement by Rice Leaving High Stubble Returning Technique	DAI Jiguang(05)
Study on the Effect of Water Soluble Organic Fertilizer on Early Maturation of Rice	ZHAO Qi(09)
Effects of Soil Organic Matter on Quality of Flue-cured Tobacco	SHI Qiang(12)
Forestry and Plant Protection	
Experiment of Effect of Controlling Weeds with Diquat Aqua	AN Futao, GAO Xijun, XU Guoqing, ZHANG Xudong, DONG Huaiyu, JIANG Yan(14)
Risk Analysis and Management of Codling Moth Spread in Liaoning Province	LU Xupeng(16)
Effects of Different Concentrations of Polymethyl Mixture on Agronomic Traits of Peanut	CHEN Jing(19)
Transplantation and Maintenance Management Technology of Landscaping Trees	SUN Wei(21)
Agricultural Engineering	
Design of A Portable Soil Detection Device	LI Hailong(23)
Design of Plough and Rake by Furrowing and Ridging Deep Fertilization	SUN Jidong(25)
Design of Arc Transition Feed Port and Its Hanging Mechanism for Green (Yellow) Forage Harvester	REN Yidi, SUN Lifeng, LI Qianxu, Alyn·Memetrsun(27)
Design and Performance Test of 2BMS-4 No-tillage Planter	WANG Rongxiang, DU Xiuguo(30)
Buried Pipe Drainage Technology And Equipment in Farmland	AN Hefeng(32)
Study on the Technology of Sausage Stuffing with Pleurotus Ostreatus	LI Zhitao, ZHU Bingqing, LIU Haipeng, MA Xiaoqing(35)
Study on Technological Parameters of Peanut Hot Air Drying	LIN Zimu(37)
Development of Osmanthus Chestnut Cake	LI Fei(40)
Research and Development of Extraction Technology of Effective Components from Coix Seed	WANG Jindan(43)
Study on the Effect of Laser Pulse Marking on Orange Epidermis	ZHOU Bo, WANG Ning(46)
Application of Polyurea Anti-Seepage Material in Drainage Culvert Project of Dahaizi Reservoir	LÜ Changzheng(48)
Study on the Longer Aging Time Apricot Blandly Based on Triz Theory	WANG Xuesong, ZHOU Yanqi, ZHANG Sumin, SUI Shaoyi, LI Ke(50)
Research and Prospect of Self-suction Precision Seed-metering Device	LIU Zhongze, ZHOU Weiyan, GAO Hongjun, WANG Hongliang, CAO Xingqiao, MENG Xin(52)
Development of Vegetable Cleaning Technology and Bactericide	XU Liwei(54)
Research on Development Progress and Industry Development of Plant Protection UAV	DING Ning(56)
Effects of Different Processing Methods on Active Ingredients in Atractylodes Lancea	FAN Zhiqiang(59)
Technology Extension	
Food Safety Supervision Strategy Based on Institutional Economic Theory	SHI Tiejia, GUO Dechao, LIANG Jingjing(61)
Study on Development Measures of Actinidia Berry Industry in Xiuyan Area	DAI Yunyan(63)
Analysis on Difficulties and Strategies in the Extension of Sugarcane Harvesting Machinery in Yunnan Province	BAI Shaotang(65)
Application Strategy of Meteorological Information Service in Agricultural Production	DAI Haiyan, YI Hang, ZHANG Li(67)
Discussion on Improvement Measures of Agricultural Machinery Safety Supervision in Liaoning Province	CAO Lei(69)
Analysis on Personnel Professional Ability of Agricultural Mechanization Technology Promoters at Grass-roots Level	WANG Xueru(71)
Analysis on the Training of New Vocational Farmers Based on the Background of Rural Revitalization——Take a Village in a Certain City in Sichuan Province as an Example	JIANG Yuxi, XU Jiaying(73)
Analysis on the Countermeasures of Rural Cooperative Economic Development in Northwest Liaoning Province——Taking Zhangwu County as an Example	ZHAO Jiaxin, GUO Wenchao, LI Hanyu, DENG Yuxin, LIU Yawen(75)
Discussion on Construction of Agricultural Machinery Service Organization in Liaoning	ZHAO Wei(78)
Forum and Communication	
Analysis on the Training Mode of Innovation Ability of Electronic Information Applied Talents in Agricultural Universities	YU Fenghua, XU Tongyu, LI Zhengming, FANG Jingjing, LIU Qiang(80)
Research on "Internet +" College Students' Innovation and Entrepreneurship	YAN Xingzhu, JIN Xingtong(82)
Application and Discussion of Information Technology in Food Analysis Teaching	MA Xin(85)
Reform and Practice of Technical Course on Quality Inspection of Agricultural Products	JIN Feng(87)
Teaching Reform Practice of Modern Food Testing Technology Based on the Training of Applied Talents	DENG Jiankang, ZHANG Hui(89)
Research on the Development and Application of Micro-course in Vocational Colleges	TIAN Yang(91)