



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

2023年第1期

nongye keji yu zhuangbei



ISSN 1674-1161

0.1>
9 771674 116236

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

2023年第1期
(总第313期)
1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 房 强 霍思甜
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 nykjyzb@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

声 如需转载本刊文章及图片,请注明摘
明 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

- 育苗盘规格对万寿菊发芽及幼苗生长的影响 陈强, 田凤鸣, 王永斌, 赵淑玲, 何九军 (01)
不同灌水量和秸秆还田量对玉米根系特性及产量的影响 向午燕, 董智, 王美文, 蔡倩, 冯晨 (04)

土肥与环境

- 不同施肥浓度对蝴蝶兰生长及开花的影响 车德影, 李霞 (06)
生物有机肥对苹果产量品质及化肥减施效果的影响 张娜 (09)
炭基肥与沼液配施对棉花叶绿素影响 苏之航, 王德胜, 董科阳 (12)
我国水稻不同产区施氮量与产量分析比较 闫聪硕, 杨莉莉, 周奇, 陈林, 支金虎 (17)

林学与植保

- 辽宁药用观赏植物品种选择 刘静, 徐鹏 (20)
不同化学封顶剂对棉花生长及冠层结构的影响 林熬, 邢植,
万亚楠, 李文君, 王冀川, 贾梦梦, 崔建强, 马丽, 胡宝 (23)
敌草快在向日葵播前及播后苗前封闭处理的安全性及除草效果 刘晓宏, 刘可杰, 依兵, 赵明珠, 王德兴, 刘金刚 (28)

农业工程

- 凌源地区玉米保护性耕作试验研究 樊禹铭 (31)
红地球葡萄日光温室壁挂热风炉设计与应用 常俊 (34)
基于粮食安全的辽宁省农业机械化发展研究 高希君 (37)
规模化稻蟹综合种养地块农用无人机作业效果及经济效益分析 马竞, 裴晓峰, 栾峰 (40)
水稻工厂化育苗关键技术装备研究 王福义 (43)
农户口粮稻谷储藏品质跟踪试验研究 刘盛华 (46)
鸭梨果渣酥性饼干加工工艺及品质分析 王岩, 翟硕莉, 王青华, 朱冰清, 彭蕊, 王芳芳 (48)

欢 迎 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

技术推广

- 紫苏种质资源及种植影响因素 樊志强 (52)
安徽地区小麦种业发展现状及种子处理技术 张磊 (54)
2BSM210型水稻种膜覆膜直播机结构与作业效果分析 程晋 (56)
正宁县紫苏产业发展现状与对策 付小会 (58)
玉米新品种东单1991的选育与制种 王东坡 (60)
人工智能技术发展历程及在农业机械上的应用 王梓鑫 (62)
北方地区玉米高效栽培技术要点 李兴华 (64)

论坛交流

- 农机强制性认证产品生产过程控制探讨 于丽杰 (66)
甘肃地区农业机械化发展现状及对策建议 李续东 (69)
辽宁省农产品加工集聚区发展初探 石倩 (71)
凌源花卉产业发展探索 付久侠 (74)
农业科研院所绩效管理工作探讨 张俊涛 (76)
农业科研单位综合管理执行力建设探讨
——以辽宁省经济作物研究所为例 刘丹 (78)
基于互联网平台的农产品销售路径探索 赵英艳 (80)
职业农民培养课程适应性探究 王静 (82)
高职院校服务农业产业链优化策略研究 邓正正, 提伟钢, 禹虹霞 (84)
辽宁绿色农业发展路径研究 王瑞林 (87)
应用能力培养目标下的《农村经济统计》课程改革研究
..... 施雯, 周艳波 (90)

AGRICULTURAL SCIENCE& TECHNOLOGY AND EQUIPMENT

NO.1,2023
(Total NO.313)
January 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

FANG Qiang, HUO Sitian

Address

No.90,DonglingRoad,Shenyang110161

Telephone(Fax)

024-88416286

E-mail

nykjyzb@163.com

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

CN 21-1559/S

ISSN 1674-1161

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



Contents

Variety and cultivation

Effects of Seedling Tray Specification on Germination and Seedling Growth CHEN Qiang, TIAN Fengming, WANG Yongbin, ZHAO Shuling, HE Juijun(01)

Effects of Different Irrigation and Straw Returning Amounts on Root Characteristics and Yield of Maize XIANG Wuyan, DONG Zhi, WANG Meiwén, CAI Qian, Feng Chen(04)

Soil-fertilizer and Environment

Effect of Different Fertilization Concentrations on the Growth and Flowering of Phalaenopsis Orchid CHE Deying, LI Xia(06)

Effect of Bio-organic Fertilizer on Apple Yield, Quality and Reducing Fertilizer ZHANG Na(09)

Effects of Combined Application of Carbon-based Fertilizer and Biogas Slurry on Chlorophyll of Cotton SU Zhihang, WANG Desheng, DONG Keyang(12)

Analysis and Comparison of Nitrogen Application Rate and Yield in Different Rice Production Areas in China YAN Congshuo, YANG Lili, ZHOU Qi, CHEN Lin, ZHI Jinhua(17)

Forestry and Plant Protection

Variety Selection of Medicinal Ornamental Plants in Liaoning LIU Jing, XU Peng(20)

Effects of Different Chemical Capping Agents on Cotton Growth and Canopy Structure LIN Ao, XING Zhi, WAN Ya'nan, LI Wenjun, WANG Jichuan, JIA Mengmeng, CUI Jianqiang, MA Li, HU Bao(23)

Safety and Weeding Effect of Sealing Treatment of Diquat before and after Seeding of Helianthus LIU Xiaohong, LIU Kejie, YI Bing, ZHAO Mingzhu, WANG Dexing, LIU Jingang(28)

Agricultural Engineering

Experimental Study on Conservation Tillage of Maize in Lingyuan Area FAN Yuming(31)

Design and Application of Wall-mounted Hot Air Furnace in Greenhouse Planted Red Globe Grape CHANG Jun(34)

Research on Development of Agricultural Mechanization in Liaoning Province Based on Food Security GAO Xijun(37)

Analysis on the Operation Effect and Economic Benefit of Agricultural UAV in Large-scale Rice-crab Integrated Planting and Breeding

Plots MA Jing, PEI Xiaofeng, LUAN Feng(40)

Research on Key Technology and Equipment of Rice Industrialized Seedling Cultivation WANG Fuyi(43)

Study on Tracking Experiment of Ration Rice Storage Quality for Peasant Household LIU Shenghua(46)

Analysis of Processing Technology and Quality of Pear Pomace Crisp Biscuit WANG Yan, ZHAI Shuoli, WANG Qinghua, ZHU Bingqing, PENG Rui, WANG Fangfang(48)

Technology Extension

Germplasm Resources and Planting Factors of Perilla Frutescens FAN Zhiqiang(52)

Development Status and Seed Treatment Technology of Wheat Seed Industry in Anhui Area ZHANG Lei(54)

Analysis of Structure and Operation Effect of 2BSM210 Type Rice Seed Film Mulching Direct Seeding Machines CHENG Jin(56)

Development Status and Countermeasures of Perilla Industry in Zhengning County FU Xiaohui(58)

Breeding and Seed Production of a New Maize Variety Dongdan 1991 WANG Dongpo(60)

Development Process of Artificial Intelligence Technology and Its Application in Agricultural Machinery WANG Zixin(62)

Key Points of High-efficiency Cultivation Technology of Maize in Northern Area LI Xinghua(64)

Forum and Communication

Discussion on Production Process Control of Agricultural Machinery Compulsory Certification Products YU Lijie(66)

Agricultural Mechanization Development Present Situation and Countermeasure Suggestions in Gansu area LI Xudong(69)

Preliminary Study on the Development of Agricultural Product Processing Agglomeration Area in Liaoning Province SHI Qian(71)

Exploration on the Development of Flower Industry in Lingyuan FU Jiuxia(74)

Discussion on the Performance Management of Agricultural Scientific Research Institutes ZHANG Juntao(76)

Discussion on the Construction of General Management Execution Force of Agricultural Scientific Research Institutions

-- A case study of Liaoning Research Institute of Cash Crop LIU Dan(78)

Exploration of agricultural product sales way based on Internet platform ZHAO Yingyan(80)

Study on Curriculum Adaptability of Vocational Farmer Training WANG Jing(82)

Study on the Optimization Strategy of Higher Vocational Colleges Serving Agricultural Industry Chain

..... DENG Zhengzheng, TI Weigang, YU Hongxia(84)

Study on Development Path of Green Agriculture in Liaoning Province WANG Ruilin(87)

Research on the Curriculum Reform of Rural Economic Statistics under the Goal of Application Ability Training

..... SHI Wen, ZHOU Yanbo(90)