



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

2022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

2022 年第 2 期
(总第 308 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 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

- 麦垄套种花生规范化种植技术 路向雨(01)
高油酸花生品种引进筛选初步研究 付 明, 李 非(03)
栽培因素对蒲公英品质的影响 刘 娜(06)
玉米沟播机械化作业技术规程 左爱华(08)

土肥与环境

- 基于水土保持的生态农业发展路径与对策 黄萍萍, 姜金龙(10)
遥感技术在自然资源调查监测中的应用
..... 张志刚, 李 明, 温 晖, 马磊超, 柳晓东(12)

林学与植保

- 化学封顶剂在棉花生产中的应用 林 熬, 王冀川, 胡 宝(14)
西天山保护区天山云杉林下植被多样性分析与评价
..... 陈 哲, 王振锡, 董 巍, 胡天祺, 郝康迪(17)
林业生态效益与经济效益平衡策略探析 昌惠敏(20)

农业工程

- 悬挂式旋转开沟机的设计 孙继东(22)
鱼池水温调节系统的设计研究
..... 王立宁, 齐松平, 李春生, 齐会斌, 李宝越(24)
空调控温储粮技术对稻谷品质的影响研究 陈 刚(26)
水产品中 ¹³⁷Cs 的不确定度评定
..... 张 君, 张宏宏, 王冬妍, 周长民, 穆姣姣(29)
板栗脱苞机具研发概况 周 宇(31)
农业机械中的自动控制技术应用 林长年(33)
水田肥沃耕层构建模式与机具选型 王 帅(35)
柏子仁中黄酮提取工艺研究 王琳榕, 钟 君, 陈方山, 郝成龙(37)
桑叶功效成分与作用的研究
..... 何德华, 王家佩, 次旺仁真, 许 青, 赵云帆, 杨 平(39)
不同干燥方法对枸杞品质的影响 王金丹(42)
脂肪替代物的研究进展
..... 魏新悦, 刘甜甜, 韩晓津, 胡良焱, 李 哲, 路 飞(44)

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

技术推广

- 厚朴酚与和厚朴酚的提取纯化工艺 吕 雪(47)
知母的炮制工艺及其对有效成分的影响研究 田 洋(49)
辽宁省马铃薯种植产业化发展探析 陈 良(51)
农机田间作业安全操作技巧与维修探析 王贤强(53)
农业机械管理质量提升探究 赵 乾(55)
岳西县茶叶生产全程机械化的探索与经验 余晓莉(57)

论坛交流

- 农业文化遗产与文化旅游产业融合发展研究 张 阳(59)
乡村振兴视域下直播助农的发展与对策探讨 安玉琪(61)
农村宅基地使用权流转的主要模式探析 胡 瑞,康涌泉(63)
乡村振兴背景下农村公共管理问题与对策探析 贾荣飞(65)
发酵食品工艺学理实一体化课程改革探讨
..... 孙天利,闫 荣,王虹玲(67)
光谱成像技术及其应用课程思政案例库建设探讨 田有文(69)
推进科技扶贫与乡村振兴有效衔接的思考
..... 李国威,崔玥晗,孙大为(71)
食品分析与检验课程信息化教学的探索与实践 董砚博(74)
新型农业经营主体参与乡村治理的制度探究 王川琦(76)
基于项目教学法的食用菌栽培学课程改革
..... 马 爽,邵 迪,王 双,王延森,李 文(79)
基于 OBE 理念下畜产食品工艺学教学改革探索
..... 王 宁,周 博,薛亚宁(81)

保护性耕作专栏

- 少耕播种保护性耕作技术与机具概述 聂 影(83)
抚顺市保护性耕作技术应用实践
..... 黄文忠,陈子新,陈英心,李 杰,王玉明(85)
农作物秸秆直接还田技术操作要点 张金辉(87)
玉米保护性耕作试验初报 盛晓东(89)
水稻秸秆还田秋翻技术模式实践 孟 欣(91)

AGRICULTURAL SCIENCE & TECHNOLOGY AND EQUIPMENT

NO.2,2022
(Total NO.308)
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

Ddputy Editor in Chief

LIU Xin,WANG Shuai

Address

No.90,Dongling Road,Shenyang 110161

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&TECHNOLO-
GY AND EQUIPMENT,please indicate the
source and send us a sample book.

欢 迎 赐 稿



Contents

Variety and Cultivation

- Standardized Planting Technology of Interplanting Peanut on Wheat Ridge *LU Xiangyu*(01)
 Preliminary Study on the Introduction and Screening of High Oleic Acid Peanut Varieties *FU Ming, LI Fei*(03)
 Effects of Cultivation Factors on Quality of Dandelion *LIU Na*(06)
 Technical Regulations for Mechanized Operation of Corn Furrow Sowing *ZUO Aihua*(08)

Soil-fertilizer and Environment

- Development Path and Countermeasures of Ecological Agriculture Based on Soil and Water Conservation *HUANG Pingping, JIANG Jinlong* (10)
 Application of Remote Sensing Technology in the Investigation and Monitoring of Natural Resources
 *ZHANG Zhigang, LI Ming, WEN Hui, MA Leichao, LIU Xiaodong*(12)

Forestry and Plant Protection

- Application of Chemical Capping Agent in Cotton *LIN Ao, WANG Jichuan, HU Bao*(14)
 Analysis and Evaluation of Vegetation Diversity under Spruce Forest in West Tianshan Nature Reserve
 *CHEN Zhe, WANG Zhenxi, DONG Wei, HU Tianqi, HAO Kangdi* (17)
 Exploration and Analysis on Strategy of Balance between Forestry Ecological Benefit and Economic Benefit *CHANG Huimin*(20)

Agricultural Engineering

- Design of Suspension Type Rotary Ditching Machine *SUN Jidong*(22)
 Research on Design of Water Temperature Regulation System for Fish Pond *WANG Lining, QI Songping, LI Chunsheng, QI Huibin, LI Baoyue* (24)
 Study on the Effect of Temperature Control with Air Conditioner Grain Storage Technology on Paddy Quality *CHEN Gang*(26)
 Uncertainty Assessment of 137Cs in Aquatic Products *HANG Jun, ZHANG Honghong, WANG Dongyan, ZHOU Changmin, MU Jiaojiao* (29)
 Overview of Research and Development of Chinese Chestnut Brack Stripping Machine *ZHOU Yu*(31)
 Application of Automatic Control Technology in Agricultural Machinery *LIN Changnian*(33)
 Fertile Tillage Layer Construction Mode and Machine Type Selection in Paddy Field *WANG Shuai*(35)
 Study on Extraction Technology of Flavonoids from Platycladi Seed *WANG Linrong, ZHONG Jun, CHEN Fangshan, HAO Chenglong*(37)
 Study on the Active Ingredient and Effects of Mulberry Leaves
 *HE Dehua, WANG Jiapeng, CIWANG Renzhen, XU Qing, ZHAO Yunfan, YANG Pin* (39)
 Research Progress on Effects of Different Drying Methods on Quality of Chinese Wolfberry *WANG Jindan*(42)
 Research Progress of Fat Substitutes *WEI Xinyue, LIU Tiantian, HAN Xiaojin, HU Liangyan, LI Zhe, LU Fei* (44)

Technology Extension

- Extraction and Purification Process of Magnolol and Honokiol *LÜ Xue*(47)
 Study on the Processing Technology of Anemarrhena and Its Effect on the Active Ingredients *TIAN Yang*(49)
 Analysis on Potato Planting Industrialization Development in Liaoning Province *CHEN Liang*(51)
 Analysis on Safe Operation Skills and Maintenance of Agricultural Machinery in Field Operation *WANF Xianqiang*(53)
 Exploration on Improvement of Agricultural Machinery Management Quality *ZHAO Qian*(55)
 Exploration and Experience of Whole Process Mechanization of Tea Production in Yuexi County *YU Xiaoli*(57)

Forum and Communication

- Research on the Integrated Development of Agricultural Cultural Heritage and Cultural Tourism Industry *ZHANG Yang*(59)
 Discussion on the Development and Countermeasures of Live Broadcast Assistance to Farming from the Perspective of Rural Revitalization
 *AN Yuqi*(61)
 Analysis on the Main Mode of Rural Homestead Use Right Circulation *HU Rui, KANG Yongquan*(63)
 Analysis on Problems and Countermeasures of Rural Public Management under the Background of Rural Revitalization *JIA Rongfei*(65)
 Discussion on the Reform of the Integration of Theory and Practice Course of Fermentation Food Technology
 *SUN Tianli, YAN Rong, WANG Hongding*(67)
 Discussion on the Construction of Ideological and Political Education Case Base of Spectral Imaging Technology and Its Application
 *TIAN Youwen*(69)
 Reflections on the Effective Connection Between Poverty Alleviation through Science And Technology and Rural Revitalization
 *LI Guowei, CUI Yuehan, SUN Dawei*(71)
 Exploration and Practice of Information-based Teaching of Food Analysis and Inspection Courses *DONG Yanbo*(74)
 Exploring on the System of New Agricultural Business Entities Participating in Rural Governance *WANG Chuanqi*(76)
 Course Reform of Edible Fungus Cultivation Based on Project Teaching Method ... *MA Shuang, SHAO Di, WANG Shuang, WANG Yensen, LI Wen* (79)
 Exploration on Teaching Reform of Livestock Food Technology Based on OBE Concept *WANG Ning, ZHOU Bo, XUE Yaning*(81)

Conservation Farming Column

- Overview of Conservation Tillage Technology and Machines for Less Tillage Sowing *NIE Ying*(83)
 Application And Practice of Conservation Village Technology in Fushun City
 *HUANG Wenzhong, CHEN Zixin, CHEN Yingxin, LI Jie, WANG Yuming*(85)
 Operating Points For Crop Straw Direct Returning to the Field Technology *ZHANG Jinhui*(87)
 Preliminary Report on Conservation Tillage Experiment in Maize *SHENG Xiaodong*(89)
 Practice of Autumn Plowing Technology Model of Rice Straw Returning to Field *MENG Xin*(91)