

农业工程

1
2018

AGRICULTURAL ENGINEERING

NONGYE GONGCHENG

第8卷 Vol.8

美诺  MENOBLE

技术创造价值 品质成就完美

中国青饲料收获专家

www.menoble.com



农机科技
领跑者



9265自走式青贮饲料收获机
(2017 重点推荐产品)

239kW



畜牧机械



马铃薯全程机械化装备



植保机械



免耕播种机械

ISSN 2095-1795



万方数据



中机美诺科技股份有限公司
MENOBLE CO., LTD

客户热线: 400-650-5252
E-mail: sale@maen.com.cn

 买农机, 选美诺!

农业工程

NONGYE GONGCHENG

2018 年 第 1 期(第 8 卷)

目 次

• 综述与评析 •

从 2017 汉诺威国际农机展看世界农机发展趋势 王艳红 赵 弢 常 蕊 (1)

• 装备与机械化 •

蔬菜穴盘育苗播种机研究现状及发展趋势 刘云强 赵郑斌 刘立晶 赵金辉 王俊友 (6)

北京市籽粒玉米旱作机械化集成技术应用效果
..... 熊 波 滕 飞 张 莉 常晓莲 李传友 李 震 刘京蕊 杨雅静 (13)

植物工厂自动立体栽培系统研发 赵 静 周增产 卜云龙 梁 磊 房相文 姚 涛 (18)

天津市武清区设施农业机械化技术发展现状及对策 邢 硕 (22)

• 信息与电气化 •

蓝莓种植环境自适应光照调控系统设计 张世昂 姚 鑫 黄伟锋 莫健添 黄焱哲 (25)

计算机技术在农业生产中的应用 朱 黎 (30)

基于单片机的温室大棚温湿度控制系统设计 原大明 (32)

基于物联网的智能农业温室控制系统设计 许洪军 (35)

农业物联网技术应用及创新发展策略 赵丽春 (37)

• 生物环境与能源 •

毕节市七星关区生态城市建设研究 鲍金星 (39)

基于半集中式理念的城市污水处理与回用
——德国 DEUS 21 示范项目介绍 董一麟 周凯迪 Marius Mohr (43)

鱼菜共生池塘生态养殖技术
——以重庆市九龙坡区为例 任泓旭 (48)

基于生态建筑的农业垂直建筑模式 李 燕 武彦生 (50)

国内外农村住宅建设比较 丑 洋 郭 琴 (53)

• 农副产品加工与贮藏 •

热泵辅助太阳能烘干鲜枣设备设计与试验 宁书臣 丁润锁 游国栋 孟令宇 孙 岩 (57)

烟叶烘烤相对失水速率数学模型 许 威 肖先仪 彭耀东 李有德 温永福 钟秋瓚 (62)

• 食品科学与工程 •

燕麦活性乳酸菌饮料研制 白 娜 尚世辉 郝麒麟 闫雅非 宿永强 孙 治 (68)

• 水土工程 •

基于层次分析-模糊综合评价法的水利枢纽灌区工程防汛风险评估 赖致轩 李 昭 (71)

农业节水灌溉技术及应用 杨立凡 马泽宇 余 思 潘彦冰 陈 超 (78)

陕西省榆林市榆阳区土壤养分含量变化趋势与对策 边永胜 (81)

• 设计制造及理论研究 •

一种履带拖拉机自动导航转向控制方法 付 拓 毛文华 张小超 贾 全 王丽丽 (84)

茄科蔬菜嫁接秧苗几何及力学特性试验研究 段玉振 王家胜 张峰峰 刘志波 (89)

设施农业用深耕松土机开发试验 庞俊杰 冯 磊 孙 岩 (93)

指轮式搂草机指轮盘设计与有限元分析 王俊跃 杨 莉 戴晓军 李志杰 鲍志亮 高晓宏 (97)

温室自走式多功能作业平台研制 李东星 周增产 姚 涛 梁 磊 吴建红 胡福生 (101)

• 教学研究 •

陕西农村基础教育英语教师培训实效性评价体系构建 康燕茹 苟龙涛 (105)

• 农学与生物技术 •

磁化水灌溉对番茄生长及生理特性的影响
..... 张 佳 李海平 李灵芝 闫法乾 郭文忠 余礼根 卫如雪 (108)

烟草病虫害种类、产生原因及防治策略 唐 羽 张 颖 (113)

外来有害生物入侵现状与对策 黄 振 张 吉 张 鹏 (116)

• 农业经济管理 •

广西农业供给侧改革及农业产业集群发展 张原天 (119)

重庆烟区自动加煤机的应用 陈天才 肖 鹏 王振锋 丁 攀 王振国 耿红梅 尹朝先 (122)

农产品的配送方案与路径优化 徐文瑞 (125)

农业企业发展电子商务的重要性及相关建议 何 苗 (128)

古村落乡村旅游的合理开发 何 侠 (130)

城乡一体化背景下的美丽乡村建设 曹黎明 (132)

“互联网 + ” 对农业物流管理的影响 林 琳 (134)

• 行业动态 •

第八届全国现代物理农业工程技术发展研讨会在津圆满召开 王艳红 (前插一)

AGRICULTURAL ENGINEERING

Vol. 8 No. 1 2018

Contents

Review and Comments

Development Trend of Agricultural Machinery in the World from 2017 Hannover International

Agricultural Machinery Exhibition Wang Yanhong, Zhao Tao, Chang Rui (1)

Equipment and Mechanization

Research Status and Development Trend of Vegetable Plug Seedling Seeder

..... Liu Yunqiang, Zhao Zhengbin, Liu Lijing, Zhao Jinhui, Wang Junyou (6)

Application Effect of Mechanized Integrated Technology of Corn Dry Farming in Beijing

..... Xiong Bo, Teng Fei, Zhang Li, Chang Xiaolian, Li Chuanyou, Li Zhen, Liu Jingrui, Yang Yajing (13)

Research and Derelopment of Automatic Transmission System of Stereo Cultivation Bed

..... Zhao Jing, Zhou Zengchan, Bu Yunlong, Liang Lei, Fang Xiangwen, Yao Tao (18)

Development Status and Countermeasures of Facility Agriculture Mechanization Technology in

Wuqing District of Tianjin city Xing Shuo (22)

Information and Electrification

Design of Adaptive Lighting Control System for Blueberry Planting Environment

..... Zhang Shiang, Yao Xin, Huang Weifeng, Mo Jiantian, Huang Junzhe (25)

Application of Computer Technology in Agricultural Production Zhu Li (30)

Design of Temperature and Humidity Automatic Control System for Greenhouse Based on

Single Chip Yuan Daming (32)

Design of Intelligent Agricultural Greenhouse Control System Based on Internet of

Things Technology Xu Hongjun (35)

Agricultural Internet of Things Technology Application and Innovation Development Strategy Zhao Lichun (37)

Biological Environment and Energy

Construction Research on Ecological City in Qixingguan District of Bijie City Bao Jinxing (39)

Semi-Centralised Urban Wastewater Treatment and Reuse:

Introduction of DEUS 21 Dong Yilin, Zhou Kaidi, Marius Mohr (43)

Aquaponics Pond Ecological Breeding Technology:

Jiulongpo District in Chongqing City as an Example Ren Hongxu (48)

Agricultural Vertical Architecture Model Based on Ecological Architecture Li Yan, Wu Yansheng (50)

Comparison of Rural Residential Construction at Home and Abroad Chou Yang, Guo Qin (53)

Processing and Storage of Farm and Sideline Products

Design and Test of Heat Pump-assisted Solar Drying Equipment for Fresh Jujube

..... Ning Shuchen, Ding Runsuo, You Guodong, Meng Lingyu, Sun Yan (57)

Mathematical Model of Relative Water-loss Rate of Tobacco Curing

..... Xu Wei, Xiao Xianyi, Peng Yaodong, Li Youde, Wen Yongfu, Zhong Qiuzan (62)

Food Science and Engineering

Preparation of Oats Lactic Acid Bacteria Beverage
..... Bai Na, Shang Shihui, Hao Qilin, Yan Yafei, Su Yongqiang, Sun Zhi (68)

Water-soil Engineering

Flood Risk Assessment of Irrigation District of Water Conservancy Project Based on Analytic Hierarchy
Process and Fuzzy Comprehensive Evaluation Lai Zhixuan, Li Zhao (71)

Technology and Application of Agricultural Water-saving Irrigation
..... Yang Lifan, Ma Zeyu, She Si, Pan Yanbing, Chen Chao (78)

Soil Nutrient Content Change Trend and Countermeasures in Yuyang District of Yulin City,
Shaanxi Province Bian Yongsheng (81)

Design, Manufacture and Theoretical Research

Steering Control Method of Caterpillar Tractor Fitted with Automatic Navigat System
..... Fu Tuo, Mao Wenhua, Zhang Xiaochao, Jia Quan, Wang Lili (84)

Experimental Research on Geometrics and Mechanics of Solanceous Vegetable Seedlings for Grafting
..... Duan Yuzhen, Wang Jiasheng, Zhang Fengfeng, Liu Zhibo (89)

Development of Deep Cultivator for Facility Agriculture Pang Junjie, Feng Lei, Sun Yan (93)

Design and Finite Element Analysis of Finger Wheel of Finger-wheel Rake
..... Wang Junyue, Yang Li, Dai Xiaojun, Li Zhijie, Bao Zhiliang, Gao Xiaohong (97)

Development of Self Propelled Multifunction Platform in Greenhouse
..... Li Dongxing, Zhou Zengchan, Yao Tao, Liang Lei, Wu Jianhong, Hu Fusheng (101)

Research on Teaching

Evaluation System Construction of Effectiveness in English Teacher Training of
Shaanxi Rural Elemantary Education Kang Yanru, Gou Longtao (105)

Agronomy and Biotechnology

Effects of Magnetized Water Irrigation on Growth and Physiological Characteristics of Tomato
..... Zhang Jia, Li Haiping, Li Lingzhi, Yan Faqian, Guo Wenzhong, Yu Ligen, Wei Ruxue (108)

Species, Causes and Control Strategies of Tobacco Diseases and Insect Pests Tang Yu, Zhang Ying (113)

Current Status and Countermeasures for Invasion from Adventives Huang Zhen, Zhang Ji, Zhang Peng (116)

Management of Agricultural Economy

Agricultural Supply Side Reform and Agricultural Industry Cluster Development in
Guangxi Autonomous Region Zhang Yuantian (119)

Application of Automatic Stoker in Chongqing Tobacco Area
... Chen Tiancai, Xiao Peng, Wang Zhenfeng, Ding Pan, Wang Zhenguo, Geng Hongmei, Yin Chaoxian (122)

Distribntion Scheme and Route Optimization of Agricultural Products Xu Wenrui (125)

Importance of Agricultural Enterprises’ Development of E-commerce and Relevant Suggestions He Miao (128)

Rational Development of Ancient Village Tourism He Xia (130)

Beautiful Rural Construction Under Background of Urban-Rural Integration Cao Liming (132)

Impact of ‘ Internet + ’ on Agriculture Logistics Management Lin Lin (134)

2018

农业工程

AGRICULTURAL ENGINEERING

ISSN 2095-1795
CN 11-6025/S

中国科技核心期刊

跟踪前沿研究 关注行业发展 报道创新成果 促进推广应用



扫描二维码

了解更多
万方数据

2018年月刊 全年定价240元

地址: 北京德胜门外北沙滩1号16信箱 邮编: 100083 电话: 010-64882380/3625
传真: 010-64870803 邮箱: nygc_2011@163.com d1ae2011@126.com

欢迎投稿 订阅 刊登广告

www.d1ae.com