

目次

特稿·博鳌论坛

- 速生高抗林木新品种高效培育技术体系与产业化 张守攻, 齐力旺, 尹刚强(1)
我国苹果属(*Malus* Mill.)野生资源研究利用的现状分析 张新忠, 王 忆, 韩振海(8)

综 述

- 我国油菜生产潜力分析 殷 艳, 陈兆波, 余 健, 王汉中, 冯中朝(16)
提高花生产能, 确保油料供给安全 万书波, 单世华, 郭 峰(22)
植酸酶发展现状和研究趋势 丁 强, 杨培龙, 黄火清, 王亚茹, 姚 斌(27)
可食性果蔬纸的研究进展 王新伟, 孙秀秀, 贺连斌, 马中苏(34)
激素结构研究进展 李 唐, 曾洪梅, 邱德文(39)
转基因动物检测方法的研究进展 杨继山, 潘庆杰, 董 晓(45)
蜂蜜结晶的影响因素及评价指标 赵亚周, 田文礼, 国占宝, 彭文君(50)
畜禽液体粪便贮存过程中气体排放影响因素的研究现状 马瑞娟, 董红敏(56)
我国农村信息化建设现状及对策建议 张 博, 李思经(62)
我国农作物育种高技术研究发展历程及策略探讨 张 富, 高旺盛(67)

专栏:863 课题研究进展

- 花生 NBS-LRR 类抗病基因的克隆及原核表达
..... 刘 宇, 闫彩霞, 张廷婷, 李春娟, 郑奕雄, 单世华(73)
基于 CBERS 遥感的冬小麦长势分级监测 李卫国, 李正金, 杨 澄(79)
龙眼果实几何建模与生长过程模拟研究 王伟斌, 唐丽玉, 陈崇成, 林甲祥(84)
保水剂重复吸水性能的比较研究 白文波, 张浣中, 宋吉青(92)

研究报告

- 拟南芥 *DCL1* 启动子的分离及其表达特性分析 李微微, 李 川, 罗彦忠, 郁建平, 王 磊(98)
水稻培矮 64S(PA64S)基因组 BAC 文库的构建与分析 毛丹青, 罗美中(103)
冬季覆盖作物对南方稻田水稻生物学特性及产量性状的影响
..... 唐海明, 汤文光, 肖小平, 汤海涛, 杨光立(108)
不同光质对番茄穴盘苗质量的影响 蔡鸿昌, 崔海信, 崔金辉(114)
花生对土壤中铅和镉的吸收分配规律 蔡 葵, 于秋华, 赵征宇, 王文娇, 赵 明(119)
仿刺参养殖环境中溶藻弧菌和灿烂弧菌的 PCR 快速检测
..... 汪笑宇, 周遵春, 关晓燕, 姜 北, 陈 仲, 董 颖, 杨爱馥(125)
甘薯中 10 种元素含量分析 胡 燕, 李育明, 李 强, 孙成均(131)

前沿动态

- 世界首个人工生命结构诞生 / 首次发现可发育成卵的干细胞 /
一个水稻增产关键基因 *IPAI* 成功克隆 / 发现水稻纹枯病抗性遗传基因 /
野火过后促使植被恢复生长的 *karrikins* 化合物 (138)

信息交流

- “绿色超级稻新品种培育”重点项目启动 /
国家科技支撑计划农业领域食品产业共性关键技术研究取得阶段进展 (139)

- 作者投稿指南 (140)

CONTENTS

SPECIAL REPORT

- High Efficient Cultivation Technology System and Industrialization for New Fast-Growing and High Resistant Forest Tree Varieties ZHANG Shou-gong, QI Li-wang, YIN Gang-qiang(1)
- Analysis on Present Research and Utilization Status of Wild Apple Germplasm Resources (*Malus Mill.*) in China ZHANG Xin-zhong, WANG Yi, HAN Zhen-hai(8)

REVIEWS

- Analysis of Potential for Rapeseed Production in China YIN Yan, CHEN Zhao-bo, YU Jian, WANG Han-zhong, FENG Zhong-chao(16)
- Improving Peanut Production Capacity to Ensure Oil Supply WAN Shu-bo, SHAN Shi-hua, GUO Feng(22)
- Development Status and Research Trends of Phytases DING Qiang, YANG Pei-long, HUANG Huo-qing, WANG Ya-ru, YAO Bin(27)
- Research Progress on Edible Fruit-vegetable Film WANG Xin-wei, SUN Xiu-xiu, HE Lian-bin, MA Zhong-su(34)
- Research Progress on Elicitins Structure LI Tang, ZENG Hong-mei, QIU De-wen(39)
- Research Progress in Detection Technique for Transgenic Animals YANG Ji-shan, PAN Qing-jie, DONG Xiao(45)
- Influencing Factor and Evaluation Criterion of Honey Crystallization ZHAO Ya-zhou, TIAN Wen-li, GUO Zhan-bao, PENG Wen-jun(50)
- Research Status about Main Factors Affecting Gas Emissions in Liquid Manure Storage MA Rui-juan, DONG Hong-min(56)
- Current Situation and Countermeasures for Informationization of Rural Areas in China ZHANG Bo, LI Si-jing(62)
- The Development Process and Strategy of High-tech Research on Crops Breeding in China ZHANG Fu, GAO Wang-sheng(67)

863 PROJECT PROGRESS

- Cloning and Prokaryotic Expression of Peanut NBS-LRR Resistant Gene LIU Yu, YAN Cai-xia, ZHANG Ting-ting, LI Chun-juan, ZHENG Yi-xiong, SHAN Shi-hua(73)
- Grading Monitoring of Winter Wheat Growth Condition by CBERS Satellite Image LI Wei-guo, LI Zheng-jin, YANG Cheng(79)
- Studies on Geometric Modeling and Growth Simulation of Longan Fruit WANG Wei-bin, TANG Li-yu, CHEN Chong-chen, LIN Jia-xiang(84)
- Comparative Studies on Repeated Water-Absorbing Capacity of Super-absorbent Polymers BAI Wen-bo, ZHANG Huan-zhong, SONG Ji-qing(92)

ARTICLES

- Separation and Characterisation of *DCL1* Promoter in *Arabidopsis thaliana* LI Wei-wei, LI Chuan, LUO Yan-zhong, YU Jian-ping, WANG Lei(98)
- Construction and Analysis of a BAC Library of Rice PA64S Genome MAO Dan-qing, LUO Mei-zhong(103)
- Effects of Different Winter Cover Plants on Biological Characteristics and Yield Traits of Rice in Southern China TANG Hai-ming, TANG Wen-guang, XIAO Xiao-ping, TANG Hai-tao, YANG Guang-li(108)
- Effects of Different Light Qualities on the Quality of Tomato Plug Seedlings CAI Hong-chang, CUI Hai-xin, CUI Jin-hui(114)
- Absorption and Distribution Rules of Peanut Pb and Cd in Soil CAI Kui, YU Qiu-hua, ZHAO Zheng-yu, WANG Wen-jiao, ZHAO Ming(119)
- Rapid PCR Detection for *Vibrio alginolyticus* and *Vibrio splendidus* in Sea Cucumber *Apostichopus japonicus* and its Culturing Environment WANG Xiao-yu, ZHOU Zun-Chun, GUAN Xiao-yan, JIANG Bei, CHEN Zhong, DONG Ying, YANG Ai-fu(125)
- Analysis of Ten Elements' Contents in Sweet Potato Hu Yan, LI Yu-ming, LI Qiang, SUN Cheng-jun(131)

RESEARCH HIGHLIGHTS (138)

COMMUNICATION (139)

INTRODUCTION TO AUTHORS (140)