



目次

作物遗传育种·种质资源·分子遗传学

4781-4792 doi: 10.3864/j.issn.0578-1752.2022.24.001
水稻穗顶端退化突变体 *paa21* 的表型分析及基因克隆
赫磊 路凯 赵春芳 姚姝 周丽慧 赵凌 陈涛 朱镇 赵庆勇 梁文化 王才林 朱丽 张亚东

4793-4807 doi: 10.3864/j.issn.0578-1752.2022.24.002
甘蓝型油菜发育进程中赤霉素动态变化及其与产量的关系
谢伶俐 韦丁一 章子爽 徐劲松 张学昆 许本波

耕作栽培·生理生化·农业信息技术

4808-4822 doi: 10.3864/j.issn.0578-1752.2022.24.003
乙矮合剂对不同施氮量夏玉米根系形态构建和产量的影响
房孟颖 卢霖 王庆燕 董学瑞 闫鹏 董志强

4823-4839 doi: 10.3864/j.issn.0578-1752.2022.24.004
基于星-机光谱融合的棉花叶片 SPAD 值反演
王淑婷 孔雨光 张赞 陈红艳 刘鹏

植物保护

4840-4850 doi: 10.3864/j.issn.0578-1752.2022.24.005
柑橘黄化花叶病毒侵染性克隆构建及应用
蒋琪琪 许建建 苏越 张琦 曹鹏 宋晨虎 李中安 宋震

4851-4862 doi: 10.3864/j.issn.0578-1752.2022.24.006
牛筋草 EPSPS 酶联免疫试剂盒的研发及应用
李志玲 李香菊 崔海兰 于海燕 陈景超

土壤肥料·节水灌溉·农业生态环境

4863-4878 doi: 10.3864/j.issn.0578-1752.2022.24.007
氮肥减量施用对我国三大粮食作物产量的影响
杜文婷 雷肖肖 卢慧宇 王云凤 徐佳星 罗彩霞 张树兰

4879-4894 doi: 10.3864/j.issn.0578-1752.2022.24.008
灰水足迹视角下我国省域农业生态效率及其影响因素
邓远建 超博

园艺

4895-4911 doi: 10.3864/j.issn.0578-1752.2022.24.009
‘月月粉’月季 NAC 家族全基因组鉴定及皮刺发育相关成员的筛选
由玉婉 张雨 孙嘉毅 张蔚

4912-4926 doi: 10.3864/j.issn.0578-1752.2022.24.010
香水柠檬 *RHF2A* 的克隆与互作蛋白的筛选
李雨泽 朱嘉伟 林蔚 蓝茉莹 夏黎明 张艺粒 罗聪 黄桂香 何新华

食品科学与工程

4927-4942 doi: 10.3864/j.issn.0578-1752.2022.24.011
燕麦挂面制作过程中干燥工艺优化研究
刘振蓉 赵武奇 胡新中 贺刘成 陈月圆

畜牧·兽医

4943-4956 doi: 10.3864/j.issn.0578-1752.2022.24.012
垫料床对育肥羔羊生长性能和臭气排放的影响
车大璐 赵胤辰 程素彩 刘爱瑜 李晓宇 赵寿培 王健诚 王媛 高玉红 孙新胜

4957-4968 doi: 10.3864/j.issn.0578-1752.2022.24.013
鸡蛋与鸭蛋的蛋壳力学特性、超微结构及蛋壳组分的比较
张亚男 金永燕 庄智威 王爽 夏伟光 阮栋 陈伟 郑春田

研究简报

4969-4980 doi: 10.3864/j.issn.0578-1752.2022.24.014
低温胁迫对番茄幼苗不同叶龄叶片叶绿素荧光成像特性的影响
胡雪华 刘宁宁 陶慧敏 彭可佳 夏晓剑 胡文海

- 1 • 《中国农业科学》2022年(55卷)总目次
 - 31 • 《中国农业科学》2022年第55卷作者索引
 - 1 • 《中国农业科学》2022年度审稿专家
-

CONTENTS

CROP GENETICS & BREEDING·GERMPLASM RESOURCES·MOLECULAR GENETICS

4781-4792 doi: 10.3864/j.issn.0578-1752.2022.24.001

Phenotypic Analysis and Gene Cloning of Rice Panicle Apical Abortion Mutant *paa21*

HE Lei, LU Kai, ZHAO ChunFang, YAO Shu, ZHOU LiHui, ZHAO Ling, CHEN Tao, ZHU Zhen, ZHAO QingYong, LIANG WenHua, WANG CaiLin, ZHU Li, ZHANG YaDong

4793-4807 doi: 10.3864/j.issn.0578-1752.2022.24.002

Dynamic Changes of Gibberellin Content During the Development and Its Relationship with Yield of *Brassica napus* L.

XIE LingLi, WEI DingYi, ZHANG ZiShuang, XU JinSong, ZHANG XueKun, XU BenBo

TILLAGE & CULTIVATION·PHYSIOLOGY & BIOCHEMISTRY·AGRICULTURE INFORMATION TECHNOLOGY

4808-4822 doi: 10.3864/j.issn.0578-1752.2022.24.003

Effects of Ethylene-Chlormequat-Potassium on Root Morphological Construction and Yield of Summer Maize with Different Nitrogen Application Rates

FANG MengYing, LU Lin, WANG QingYan, DONG XueRui, YAN Peng, DONG ZhiQiang

4823-4839 doi: 10.3864/j.issn.0578-1752.2022.24.004

SPAD Value Inversion of Cotton Leaves Based on Satellite-UAV Spectral Fusion

WANG ShuTing, KONG YuGuang, ZHANG Zan, CHEN HongYan, LIU Peng

PLANT PROTECTION

4840-4850 doi: 10.3864/j.issn.0578-1752.2022.24.005

Construction and Application of Infectious Clone of Citrus Yellow Mosaic Virus

JIANG QiQi, XU JianJian, SU Yue, ZHANG Qi, CAO Peng, SONG ChenHu, LI ZhongAn, SONG Zhen

4851-4862 doi: 10.3864/j.issn.0578-1752.2022.24.006

Development and Application of ELISA Kit for Detection of EPSPS in *Eleusine indica*

LI ZhiLing, LI XiangJu, CUI HaiLan, YU HaiYan, CHEN JingChao

SOIL & FERTILIZER·WATER-SAVING IRRIGATION·AGROECOLOGY & ENVIRONMENT

4863-4878 doi: 10.3864/j.issn.0578-1752.2022.24.007

Effects of Reducing Nitrogen Application Rate on the Yields of Three Major Cereals in China

DU WenTing, LEI XiaoXiao, LU HuiYu, WANG YunFeng, XU JiaXing, LUO CaiXia, ZHANG ShuLan

4879-4894 doi: 10.3864/j.issn.0578-1752.2022.24.008

Provincial Agricultural Ecological Efficiency and Its Influencing Factors in China Province from the Perspective of Grey Water Footprint

DENG YuanJian, CHAO Bo

HORTICULTURE

4895-4911

doi: 10.3864/j.issn.0578-1752.2022.24.009

Genome-Wide Identification of NAC Family and Screening of Its Members Related to Prickle Development in *Rosa chinensis* Old Blush

YOU YuWan, ZHANG Yu, SUN JiaYi, ZHANG Wei

4912-4926

doi: 10.3864/j.issn.0578-1752.2022.24.010

Cloning and Interaction Protein Screening of *RHF2A* Gene from Xiangshui Lemon

LI YuZe, ZHU JiaWei, LIN Wei, LAN MoYing, XIA LiMing, ZHANG YiLi, LUO Cong, HUANG Gui Xiang, HE XinHua

FOOD SCIENCE AND ENGINEERING

4927-4942

doi: 10.3864/j.issn.0578-1752.2022.24.011

Optimization of Drying Process in Oat Noodle Production

LIU ZhenRong, ZHAO WuQi, HU XinZhong, HE LiuCheng, CHEN YueYuan

ANIMAL SCIENCE·VETERINARY SCIENCE

4943-4956

doi: 10.3864/j.issn.0578-1752.2022.24.012

Effect of Litter Bed on Growth Performance and Odor Emission in Fattening Lamb

CHE DaLu, ZHAO LiChen, CHENG SuCai, LIU AiYu, LI XiaoYu, ZHAO ShouPei, WANG JianCheng, WANG Yuan, GAO YuHong, SUN XinSheng

4957-4968

doi: 10.3864/j.issn.0578-1752.2022.24.013

Comparison of Shell Mechanical Property, Ultrastructure and Component Between Chicken and Duck Eggs

ZHANG YaNan, JIN YongYan, ZHUANG ZhiWei, WANG Shuang, XIA WeiGuang, RUAN Dong, CHEN Wei, ZHENG ChunTian

RESEARCH NOTES

4969-4980

doi: 10.3864/j.issn.0578-1752.2022.24.014

Effects of Chilling on Chlorophyll Fluorescence Imaging Characteristics of Leaves with Different Leaf Ages in Tomato Seedlings

HU XueHua, LIU NingNing, TAO HuiMin, PENG KeJia, XIA Xiaojian, HU WenHai