



ISSN 1001-4705  
CN 52-1066/S

# 种子

## SEED



第二届国家期刊奖百种重点期刊  
全国中文核心期刊  
中国科技核心期刊  
中国农业核心期刊  
中国期刊方阵双效期刊  
全国优秀科技期刊  
贵州省优秀期刊奖期刊

7  
2022  
7月 第41卷

主办：贵州农业职业学院 贵州省种子管理站

种子 2022年 第七期  
总第355期  
SEED 2022 No. 7  
Total No. 355

# 种子

(ZHONG ZI)

第 41 卷 第 7 期 2022 年 7 月

月刊(1981 年创刊 总第 355 期)

## 目 次

### 研究报告

鲁梅克斯 F<sub>2</sub> 代种子萌发及幼苗的生理生化特性研究

刘 丹,王丽娟,贺付蒙,徐永清,袁 强,冯 旭,李爱雨,王 雪,李翠婷,李凤兰 ..... (1)

基于六个高代回交群体玉米叶形结构相关性状的杂种优势研究

张全艳,杨得正,张培高,徐春霞,王 晶,刘 丽 ..... (9)

蒜芥茄染色体 5 SrDNA、18 SrDNA 和端粒序列位点检测及其核型分析

程 捷,龚亚菊,杜光辉,蔚亚楠,黎志彬,鲍 锐,桂 敏,吴丽艳 ..... (16)

烟草 *BBLc* 基因 CRISPR/Cas 9 载体构建与遗传转化

苏 龙,仆田秀南,杨 竞,万 克,王麟麒,刘 洋 ..... (21)

降香黄檀不同种源/家系种质差异研究

罗水兴,郭俊誉,孙 冰,裴男才,林明平,李小飞 ..... (27)

基于 SRAP 分子标记分析彩色马铃薯品种间遗传关系

谢 锐,金晓蕾,周继鸿,郭斌煜,郭景山,韩志刚 ..... (35)

采用 TMT 技术解析辣椒雄性不育关键蛋白研究

章 成,杨仕梅,罗希榕,李唐燕,李 靖,郭 娅,陀海燕,涂韦波,邱化荣 ..... (42)

龙葵 *SnAGAMOUS-Like47* 基因的克隆与功能分析

刘乐乐,栾思楠,周佳圆,王伏林,朴春兰,崔敏龙 ..... (51)

### 资源与利用

耐低温低氧水稻种质资源筛选

滕祥勇,王金明,李鹏志,林秀云,孙 强 ..... (58)

贵州 100 份芥菜型油菜种质资源表型鉴定及聚类分析

陈 丽,杨雯竹,高志宏,胡彩红,杜才富,雷绍林 ..... (65)

### 问题探讨

基于灰色关联度法评价适于矿区废弃地生长的高羊茅萌发期抗旱性

霍可以,刘 英,向仰州,岳雪娇,姚 斌 ..... (70)

## 不同新麦品系籽粒灌浆特性分析

周思远,杨丽娟,付亮,任星旭,李永珍,王映红,李晓航,王士坤,蒋志凯…………… (75)

## 酸枣种子生物学特性研究

武延生,滑梦玉,贡江燕,董晓霞,李欢,曹萌,王僧虎…………… (80)

## 芦笋两性株染色体的细胞学研究

李霞,包艳存,李保华,牛晓雪,路远,牟萌,杨林…………… (88)

## 基于主成分分析的苦瓜自交系萌发期耐热性评价

林春妹,廖道龙,刘子凡,符厚隆…………… (92)

## 模拟酸雨对三叶草种子萌发和幼苗生长的影响

岳雪娇,刘英,向仰州,黄沛,姚斌…………… (97)

## 不同鲜食玉米品种在缅甸的适应性分析

谢小东,曾媛,周行,周海宇,江禹奉,覃兰秋,谢和霞,程伟东…………… (102)

## 冠突散囊菌与哈茨木霉在百香果储藏中的应用研究

魏宗游,王宇,严云刚,董旋,赵懿琛…………… (107)

## 品种选育研究

### 玉米新品种金玉 2208 的选育实践与思考

王天宇,祝云芳,郭向阳,王安贵,吴迅,刘鹏飞,陈泽辉…………… (114)

## 新品种推广应用

### 盐碱地油用亚麻种质资源的鉴定与评价

夏尊民,曹洪勋,刘蕊,韩喜财,宋鑫玲,曹焜…………… (119)

## 种子检验

### 忽地笑种球分级及开花特性研究

姚曼,欧静,郭垚,支梅花,王聪,林世成…………… (125)

## 种子生产

### 橡胶树大筒苗培育方法 II——砧木材料的筛选

周珺,陈青,王新龙,林位夫,王军…………… (132)

## 应用技术

### 天宫石斛快繁技术研究

刘怡,王玥瑶,杨柳青,操赛雨,燕鑫,何碧珠,郭梨锦…………… (138)

## 学法与实践

### 浅析建立实质性派生品种制度的法律价值和意义——以新修订《种子法》为研究文本

庞新燕…………… (144)

# SEED

Vol.41 No.07 July 2022

Monthly(Founded in 1981 Total No.355)

---

## CONTENTS

### Research Reports

- Study on Rumex F<sub>2</sub> generation seed germination and seedlings' physiological and biochemical characteristics  
..... LIU Dan, WANG Lijuan, HE Fumeng, XU Yongqing, YUAN Qiang, FENG Xu,  
LI Aiyu, WANG Xue, LI Cuiting, LI Fenglan (1)
- Investigation into the heterosis of leaf morphological traits of using six advanced generation backcross populations in maize  
..... ZHANG Quanyan, YANG Dezheng, ZHANG Peigao, XU Chunxia, WANG Jing, LIU Li (9)
- Karyotype analysis and site detection of 5 SrDNA, 18 SrDNA and telomere sequence in the chromosom of *Solanum sisymbriifolium* Lam.  
..... CHENG Jie, GONG Yaju, DU Guanghui, YU Ya'nan, LI Zhibin, BAO Rui, GUI Min, WU Liyan (16)
- Construction and genetic transformation of tobacco *BBLc* gene CRISPR/Cas 9 gene editing vector  
..... SU Long, PU Tianxiunan, YANG Jing, WAN Ke, WANG Linqi, LIU Yang (21)
- Study on the differences of germplasm resources of *Dalbergia Odorifera* from different families  
..... LUO Shuixing, GUO Junyu, SUN Bing, PEI Nancai, LIN Mingping, LI Xiaofei (27)
- Genetic diversity research of color potato cultivars based on SRAP molecular markers  
..... XIE Rui, JIN Xiaolei, ZHOU Jihong, GUO Binyu, GUO Jingshan, HAN Zhigang (35)
- Analysis on key proteins of pepper male sterility by TMT technology  
..... QIN Cheng, YANG Shimei, LUO Xirong, LI Tangyan, LI Jing, GUO Ya, TUO Haiyan, TU Weibo, QIU Huarong (42)
- Cloning and functional analysis of *SnAGAMOUS-Like47* gene in *Solanum nigrum*  
..... LIU Lele, LUAN Sinan, ZHOU Jiayuan, WANG Fulin, PIAO Chunlan, CUI Minlong (51)

### Resources and Utilization

- Screening of low temperature and hypoxic resistance germplasm resources of rice  
..... TENG Xiangyong, WANG Jinming, LI Pengzhi, LIN Xiuyun, SUN Qiang (58)
- Phenotypic identification and cluster analysis of 100 different accessions of *Brassica juncea* germplasms in Guizhou province  
..... CHEN Li, YANG Wenzhu, GAO Zhihong, HU Caihong, DU Caifu, LEI Shaolin (65)

### Discussion

- Evaluation of drought resistance of *Festuca Arundinacea* varieties at seed germination period based on grey relational grade analysis  
..... HUO Keyi, LIU Ying, XIANG Yangzhou, YUE Xuejiao, YAO Bin (70)
- Analysis on grain filling characteristics of different Xinmai wheat lines  
..... ZHOU Siyuan, YANG Lijuan, FU Liang, REN Xingxu, LI Yongzhen, WANG Yinghong,  
LI Xiaohang, WANG Shikun, JIANG Zhikai (75)

Study on biological characteristics of wild jujube seeds

..... WU Yansheng, HUA Mengyu, GONG Jiangyan, DONG Xiaoxia, LI Huan, CAO Meng, WANG Senghu (80)

Cytological study on chromosome of andromonoecious plants in *Asparagus officinalis* L.

..... LI Xia, BAO Yancun, LI Baohua, NIU Xiaoxue, LU Yuan, MU Meng, YANG Lin (88)

Evaluation of heat resistance of bitter melon lines at germination stage based on principal component analysis

..... LIN Chunmei, LIAO Daolong, LIU Zifan, FU Houlong (92)

The effect of stimulated acid rain on seed germination and seedling growth of clover

..... YUE Xuejiao, LIU Ying, XIANG Yangzhou, HUANG Pei, YAO Bin (97)

Adaptability analysis of fresh maize varieties in Myanmar

..... XIE Xiaodong, ZENG Yuan, ZHOU Hang, ZHOU Haiyu, JIANG Yufeng, QIN Lanqiu, XIE Hexia, CHENG Weidong (102)

Research on application of *Trichoderma harzianum* and *Eurotium cristatum* in *Passiflora Edulis* Sims storage

..... WEI Zongyou, WANG Yu, YAN Yungang, DONG Xuan, ZHAO Yichen (107)

## Varieties Breeding and Research

Breeding practice and thinking of a new maize variety Jinyu 2208

..... WANG Tianyu, ZHU Yunfang, GUO Xiangyang, WANG Angui, WU Xun, LIU Pengfei, CHEN Zehui (114)

## Promotion and Application of New Varieties

Identification and evaluation of oil flax germplasm resources under saline-alkali land conditions

..... XIA Zunmin, CAO Hongxun, LIU Rui, HAN Xicai, SONG Xinling, CAO Kun (119)

## Seed Inspection

Research on seed bulb classification and flowering physiology of *Lycoris aurea*

..... YAO Man, OU Jing, GUO Yao, ZHI Meihua, WANG Cong, LIN Shicheng (125)

## Seed Production

Cultivation method of large rubber poly-tube-raised buddings II: screening of root-stock material

..... ZHOU Jun, CHEN Qing, WANG Xinlong, LIN Weifu, WANG Jun (132)

## Application Technologies

Study on rapid propagation technology of *Dendrobium aphyllum*

..... LIU Yi, WANG Yueyao, YANG Liuqing, CAO Saiyu, YAN Xin, HE Bizhu, GUO Lijin (138)

## Legal Learning and Practice

A brief analysis of the legal value and significance of establishing a substantial derivative system——take the newly revised “Seed Law” as the research text

..... PANG Xinyan (144)