

ISSN 1009-2196

CN 46-1038/S

# 热带农业科学

REDAI NONGYE KEXUE

CHINESE JOURNAL OF TROPICAL AGRICULTURE

2022

第02期

Vol.42 No.02

中国农业核心期刊  
中国农业文献评价源刊、中国期刊方阵期刊  
中国学术期刊综合评价数据来源期刊  
中国学术期刊全文数据库全文上网期刊



## 巨大口蘑

[*Macrocybe gigantea* (Massee)  
Pegler & Lodge]

主要分布在华南、华东等地区。《中国生物多样性红色名录》，保护级别为近危。属高温型食用菌，现已能人工栽培。其味道鲜美，富含粗蛋白、粗脂肪、粗纤维及多种人体必需的氨基酸及矿质元素，具有抗肿瘤，降血压，抗辐射，抑制细菌、真菌、病毒等作用。



ISSN 1009-2196



9 771009 219229 02>

中國热带农业科学院

## 目 次

### 耕作与栽培

#### 十个不同生态型香蕉品种在云南主产区的田间评价及综合排名

- 王永芬 杨宝明 何平 曾莉 王永斌 郑泗军 (1)  
春留种与秋留种对春花生产量及品质的影响 黄金堂 郑国栋 陈海玲 龚岫 邱国清 唐永晖 (9)  
秀珍菇菌糠对红心火龙果产量、品质及土壤质量的影响 吉清妹 吴宇佳 雷菲 曾建华 符传良 张冬明 (15)  
药食两用植物五指毛桃扦插技术研究 邓丽丽 秦惠珍 熊忠臣 韦霄 史艳财 (23)  
石灰及生物炭对酸性砖红壤的改良效果比较 廖辉煌 陈敏忠 朱银玲 苏会荣 李进 段婷婷 (31)

### 品种资源

- 西藏墨脱热区野生植物资源利用与农业产业发展建议 丰明 朱荣杰 赵贯飞 (38)  
海南五指山保国村蝴蝶调查及区系分析 林树鹏 翁小理 李丽敏 韦锦宏 袁同贺 李麒麟 (42)  
鼎湖山野生彩叶植物资源调查与园林应用研究 陈丽晖 吴晓淇 黄家妍 叶卓盈 (48)

### 生物技术

- 南药牛大力组培苗生产技术规程 黄小华 聂天军 班兆丹 熊发前 韦荣昌 (56)  
提高番木瓜组培苗生根率的培养基配方优化 成镜 李季 戴雪梅 徐正伟 周权男 黄天带 (60)  
金果榄丛生芽增殖培养影响因素 黄芩芬 陆恒 谢圆圆 韦树根 韦天如 潘丽梅 (65)

### 植物生理生化

- 小粒种咖啡光强和 CO<sub>2</sub>响应曲线拟合模型筛选 杨雄 白学慧 马关润 周华 赵明珠 萧自位 (69)  
辣木叶多糖提取分离及其抗氧化研究 常雪飞 欧阳茜茜 王韵 孙国庆 田洋 (77)  
云南怒江不同海拔地区草果挥发性物质成分鉴定与分析 张天磊 吉训志 庞永青 闫林 秦晓威 何玉仙 (84)

### 植物保护

- 云南干热河谷区南繁芝麻加代主要病虫害调查及防控 苏银玲 杨双权 木万福 赵琼玲 吕维梧 杨子祥 (91)  
椰心叶甲扩散成灾机理与防控研究进展 张华峰 (96)

### 农业工程

- 基于 AT89C51 单片机的果蔬农药可回收喷洒系统设计与实现 杨勇 曲爱军 (102)  
基于层次分析法筛选广州地区立体绿化悬垂型植物的研究 张嘉琪 徐斌 余江勇 金生英 (109)  
云南省丘陵山地甘蔗全程机械化发展的研究进展 贾笛迩 高欣欣 刘高源 张顺生 郭家文 (115)

### 农业经济

- 中国与东盟国家热带水果产业竞争力比较研究 金琰 林紫华 刘海清 (121)  
广东援藏农产品质量提升研究 胡卫东 郭仙 (125)  
广东省区域水果产业集聚程度和竞争力评价 王少婷 赵俊伟 陈雪妍 (130)

[期刊基本参数]

CN 46-1038/S \*1980\*m\*A4\*136\*zh\*P\* ¥ 30.0\*300\*22\*2022-02

## **CONTENTS**

### **Cultivation**

- Field Evaluation and Comprehensive Ranking of 10 Different Ecotype Banana Varieties in the Main Producing Areas of Yunnan ..... WANG Yongfen YANG Baoming HE Ping ZENG Li WANG Yongbin ZHENG Sijun ( 1 )  
Effects of Spring and Autumn Stock Seeds on Yield and Quality of Spring Peanuts ..... HUANG Jintang ZHENG Guodong CHEN Hailing GONG Shen QIU Guoqing TANG Yonghui ( 9 )  
Effects of the Fungal Residues of *Pleurotus geesteranus* on Yield and Quality of Red Pitaya and Soil Quality ..... JI Qingmei WU Yujia LEI Fei ZENG Jianhua FU Chuanliang ZHANG Dongming ( 15 )  
Cutting Propagation of Edible and Medicinal Plants of *Ficus hirta* Vahl ..... DENG Lili QIN Huizhen XIONG Zhongchen WEI Xiao SHI Yancai ( 23 )  
Amendment Effect of Biochar and Lime on Acidic Latosol ..... LIAO Huihuang CHEN Minzhong ZHU Yinling SU Huirong LI Jin DUAN Tingting ( 31 )

### **Variety Resources**

- Utilization of Wild Plant Resources and Development Suggestions of Agricultural Industry in Motuo Tropical Area of Tibet ..... FENG Ming ZHU Rongjie ZHAO Guanfei ( 38 )  
Survey and Fauna Analysis of Butterfly at Baoguo Village of Wuzhishan in Hainan ..... LIN Shupeng WENG Xiaoli LI Limin WEI Jinhong YUAN Tonghe LI Qilin ( 42 )  
Survey and Landscape Application of Wild Colored Foliage Plants in Dinghu Mountain ..... CHEN Lihui WU Xiaoqi HUANG Jiayan YE Zhuoying ( 48 )

### **Biotechnology**

- Technical Regulations on Propagation of *Callerya speciosa* via Tissue Culture ..... HUANG Xiaohua NIE Tianjun BAN Zhaodan XIONG Faqian WEI Rongchang ( 56 )  
Optimization of Rooting Medium for Tissue Culture of Papaya ..... CHENG Jing LI Ji DAI Xuemei XU Zhengwei ZHOU Quannan HUANG Tiandai ( 60 )  
Study on the Influence Factors of Cluster Bud Proliferation Culture of *Tinospora capillipes* Gagnep. ..... HUANG Qinfen LU Heng XIE Yuanyuan WEI Shugen WEI Tianru PAN Limei ( 65 )

### **Plant Physiology and Biochemistry**

- Selection of Models of Light Response and CO<sub>2</sub> Response Curves for *Coffea arabica* ..... YANG Xiong BAI Xuehui MA Guanrun ZHOU Hua ZHAO Mingzhu XIAO Ziwei ( 69 )  
Extraction and Isolation of Polysaccharides from *Moringa* Leaves and Their Antioxidant Activities ..... CHANG Xuefei OUYANG Qianqian WANG Yun SUN Guoqing TIAN Yang ( 77 )  
Identification and Analysis of Volatile Compounds from Amomum tsao-ko in the Areas of Different Elevations in Nujiang, Yunnan ..... ZHANG Tianlei JI Xunzhi PANG Yongqing YAN Lin QIN Xiaowei HE Yuxian ( 84 )

### **Plant Protection**

- Survey and Control of Main Diseases and Insect Pests of Sesame in Dry-hot Valley of Yunnan Province ..... SU Yinling YANG Shuangquan MU Wanfu ZHAO Qiongling LÜ Weiwu YANG Zixiang ( 91 )  
Research Advances in the Mechanisms Underlying the Successful Dispersion and the Integrated Management of *Brontispa longissima* Gestro ..... ZHANG Huafeng ( 96 )

### **Agricultural Engineering**

- Design and Implementation of Fruit and Vegetable Pesticide Recyclable Spraying System Based on an AT89C51 Single Chip Microcomputer ..... YANG Yong QU Aijun ( 102 )  
Screening of Pendulous Plants for Vertical Greening in Guangzhou Based on Analytic Hierarchy Process ..... ZHANG Jiaqi XU Bin YU Jiangyong JIN Shengying ( 109 )  
Research Progress in the Development of Sugarcane Mechanization in the Hilly and Mountainous Regions of Yunnan Province ..... JIA Di'er GAO Xinxin LIU Gaoyuan ZHANG Shunsheng GUO Jiawen ( 115 )

### **Agricultural Economy**

- Comparative Analysis of Competitiveness of Tropical Fruit Industry Between China and ASEAN Countries ..... JIN Yan LIN Zihua LIU Haiqing ( 121 )  
Improving the Quality of Agricultural Products by Aiding Tibet from Guangdong Province ..... HU Weidong GUO Xian ( 125 )  
Evaluation of the Agglomeration Degree and Competitiveness of Regional Fruit Industry in Guangdong Province ..... WANG Shaoting ZHAO Junwei CHEN Xueyan ( 130 )