

简 历

个人信息			
姓名	贾瑞宗	性别	男
职称	教授		
研究所	中国热带农业科学院热带生物技术研究所		
电子邮箱	jiaruizong@itbb.org.cn		
地址	海南省海口市龙华区学院路4号		
电话	17733164715	传真	
研究方向			
<p>目前主要研究内容：基因工程与生物安全：</p> <p>(1) 基因工程技术应用于热带作物新种质的创制：开展番木瓜抗病毒分子育种，番木瓜抗 <i>Phytophthora palmivora</i> (疫霉菌) 分子育种，番木瓜性别决定基因研究与性别控制分子育种，番木瓜基因组测序。</p> <p>(2) 转基因植物环境安全监测研究：通过监测我国南繁育种区转基因植物（水稻、棉花、大豆、玉米）检测外源基因逃逸事件，转基因水稻生存竞争能力和转基因水稻田内节肢动物群落动态，监测转基因抗虫水稻对节肢动物和根际土壤细菌的影响、转基因抗虫水稻向海南野生稻的基因漂移风险、玉米外源基因漂移风险评估和控制技术，开发南繁区转基因抗虫水稻、抗虫玉米自然生态环境风险控制技术。综合评价转基因作物对土壤生态环境的影响，为在南繁育种区开展转基因植物环境安全评价提供支持。</p>			
学习&工作经历			
教育背景			
1999.09—2003.09 河北农业大学，生命科学学院，生物技术专业，河北保定			
2003.06—2009.06 中国农业大学，生物学院，微生物学，北京			
2008.01—2010.10 美国夏威夷大学，热带农业与人类资源学院，Honolulu, HI			
2010.10—2013.09 美国夏威夷农业研究中心, Waipahu, HI			
2013.09—至今 中国热带农业科学院热带生物技术研究所，海南海口			
代表性成果			
论文			
1、 Rui Zong Jia , et al. (2017). Use of RNAi technology to develop a PRSV-resistant transgenic papaya. <i>Scientific Reports</i> 7, 12636.			
2、 Rui Zong Jia , et al. (2013) Comparative Protein Expression of Two Papaya Cultivars Showing a Differential Response to the Root-Rot Pathogen, <i>Phytophthora palmivora</i> . <i>Journal of Plant Pathology</i> . 2013(doi: 10.4454/JPP.FA.2012.058)			
3、 Rui Zong Jia , et al. (2013) Effectiveness of different <i>Ensifer meliloti</i> strain-alfalfa cultivar combinations and their influence on nodulation of native rhizobia. <i>Soil Biology & Biochemistry</i> 2013, 5:960-963			
4、 Rui Zong Jia , et al. (2013) Genome-Wide Analysis of Nucleotide-Binding Site (NBS) Disease Resistance (R) Genes in Sacred Lotus (<i>Nelumbo nucifera</i> Gaertn.) Reveals Their Transition Role During Early Evolution of Land Plants. <i>Tropical plant biology</i> DOI 10.1007/s12042-013-9122-4			

5、 **Rui Zong Jia** et al. (2015) Identification and Classification of Rhizobia by Matrix-Assisted Laser Desorption/Ionization Time- Of-Flight Mass Spectrometry. J Proteomics Bioinform 8:098-107. doi: 10.4172/jpb.1000357

专著

- 1、寇建平, **贾瑞宗**, 赵辉 (2018). 番木瓜生物技术育种研究进展 (北京: 中国农业科学技术出版社).
- 2、 **Rui Zong Jia**, Wen Xin Chen and Jing Hui Liu. Highly Effective Rhizobia-Alfalfa-Grass Intercropping System in Alfalfa: Ecology, Production and Disease Management, Nova publisher
- 3、贾瑞宗, 陈丹 (2021) 火龙果种植管理技术(中英文版)(北京: 中国农业科学技术出版社)

标准

- 1、 **贾瑞宗**, 郭安平, 武靖棠, 魏卿, 黄启星, 张雨良, 赵辉, 孔华, 郭运玲, 郭静远 (2017). 海南名牌农产品 番木瓜 (DBHN/018-2016)

软件著作权

- 1、 **贾瑞宗**等 南繁区病毒基因数据库系统, 软件著作权登记号 2024SR0173518
- 2、 **贾瑞宗**等 南繁病害数据库, 软件著作权登记号 2024SR0174607
- 3、 **贾瑞宗**等 南繁生物安全动态数据展示, 软件著作权登记号 2024SR0174622
- 4、 **贾瑞宗**等 南繁生物安全积分商城, 软件著作权登记号 2024SR0174633
- 5、 **贾瑞宗**等 南繁区虫害数据库系统, 软件著作权登记号 2024SR0340685

国家发明专利

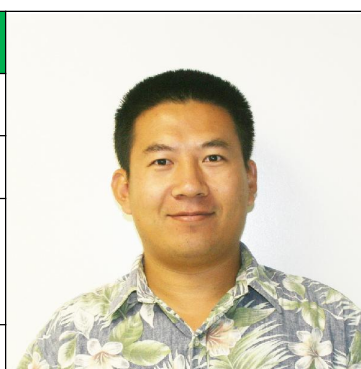
- 1、 **贾瑞宗**等 一种用于假高粱鉴定的 DNA 探针、试剂盒及方法, ZL2024 1 0196295.8
- 2、 **贾瑞宗**等 区分番木瓜环斑病毒抗性品种的 DNA 探针、试剂盒及方法, ZL 2024 1 0210664.4
- 3、 **贾瑞宗**等 一种防治水稻线虫病的杀线虫剂及其制备方法和应用, ZL 2024 1 1073151.X
- 4、 **贾瑞宗**等 一种根结水稻线虫病害的生态防治方法, ZL 2024 1 1088513.2
- 5、 **贾瑞宗**等 一种生防菌株、菌剂及应用, ZL 2024 1 1105826.4

实用新型专利

- 1、 **贾瑞宗**等 一种番木瓜蛋白酶提取用汁水收集装置, 实用新型专利证书-20241122100359
- 2、 **贾瑞宗**等 一种可控式木瓜蛋白酶提取用破碎机, 实用新型专利证书-20241017093106
- 3、 **贾瑞宗**等 一种木瓜蛋白酶快速分离纯化装置, 实用新型专利证书-20240809100714
- 4、 **贾瑞宗**等 一种番木瓜种植用全自动喷水清洗器, 实用新型专利证书-20240806190023
- 5、 **贾瑞宗**等 一种智能温控式番木瓜保鲜运输箱, 实用新型专利证书-20240809100714

CURRICULUM VITAE

Personal Information			
Name	Ruizong Jia	Gender	Male
Position Title	Professor/		
Institute	Institute of Tropical Bioscience and Biotechnology, Chinese Academy of Tropical Agriculture Sciences(ITBB, CATAS)		
Email	jiaruizong@itbb.org.cn		
Address	No. 4, Xueyuan Road, Longhua District, Haikou, Hainan, China, 571101		
Tel	17733164715	Fax	
Research Interest			
<p>Group leader (2019-now)in Nanfan Breeding Biosafety Laboratory</p> <p>Key researcher (2013-2019) in Nanfan Breeding Biosafety Laboratory</p> <p>Institute of Tropical Bioscience and Biotechnology, Chinese Academy of Tropical Agriculture Sciences(ITBB, CATAS).</p> <p>Application of genetic engineering technology in the creation of new germplasm for tropical crops: conducting molecular breeding for papaya virus resistance, molecular breeding for papaya resistance to Phytophthora palmivora, research on papaya sex determination genes and sex control molecular breeding, and papaya genome sequencing.</p> <p>Research on Environmental Safety Monitoring of Transgenic Plants: By monitoring the escape events of exogenous genes in transgenic plants (rice, cotton, soybean, corn) in the southern breeding area of China, the survival competitiveness of transgenic rice and the dynamics of arthropod communities in transgenic rice fields, monitoring the impact of transgenic insect resistant rice on arthropods and rhizosphere soil bacteria, the risk of gene drift from transgenic insect resistant rice to wild rice in Hainan, and the risk assessment and control technology of exogenous gene drift in corn, natural ecological risk control technology for transgenic insect resistant rice and insect resistant corn in the southern breeding area will be developed. Comprehensive evaluation of the impact of genetically modified crops on soil ecological environment, providing support for the environmental safety assessment of genetically modified plants in the southern breeding area.</p>			
Education & Working Experience			
<p>Post-doctoral researcher (2009-2013)</p> <p>Research on tropical plant disease resistance and molecular breeding, in Hawaii Agriculture Research Center, USA</p> <p>Visiting Scholar (2008-2009)</p> <p>Research on biological nitrogen fixation and micro-plant interaction, in University of Hawaii, USA</p> <p>EDUCATION AND DEGREES</p> <p>1999.09—2003.09 Bachelor in Hebei Agricultural University, Hebei, China,</p> <p>2003.06—2009.06 PhD in China Agricultural University, Beijing,China</p>			



Representative Result

Publications

1. **Rui Zong Jia**, et al. (2017). Use of RNAi technology to develop a PRSV-resistant transgenic papaya. *Scientific Reports* 7, 12636.
2. **Rui Zong Jia**, et al. (2013) Comparative Protein Expression of Two Papaya Cultivars Showing a Differential Response to the Root-Rot Pathogen, *Phytophthora palmivora*. *Journal of Plant Pathology*. 2013(doi: 10.4454/JPP.FA.2012.058)
3. **Rui Zong Jia**, et al. (2013)Effectiveness of different *Ensifer meliloti* strain-alfalfa cultivar combinations and their influence on nodulation of native rhizobia. *Soil Biology & Biochemistry* 2013, 5:960-963
4. **Rui Zong Jia**, et al. (2013)Genome-Wide Analysis of Nucleotide-Binding Site (NBS) Disease Resistance (R) Genes in Sacred Lotus (*Nelumbo nucifera* Gaertn.) Reveals Their Transition Role During Early Evolution of Land Plants. *Tropical plant biology* DOI 10.1007/s12042-013-9122-4
5. **Jia RZ**, et al. (2015) Identification and Classification of Rhizobia by Matrix-Assisted Laser Desorption/Ionization Time- Of-Flight Mass Spectrometry. *J Proteomics Bioinform* 8:098-107.

Books:

1. Kou Jian-Pin, **Jia Ruizong**, Zhao Hui (2018). *Perspective of Papaya Biotechnology Breeding* (Beijing: China Agricultural Science and Technology Press).
2. **Rui Zong Jia**, Wen Xin Chen and Jing Hui Liu. *Highly Effective Rhizobia-Alfalfa-Grass Intercropping System in Alfalfa: Ecology, Production and Disease Management*, Nova publisher
3. Zhang Honliang, **Jia Ruizong**, Chen Dan (2021) *Dragon Fruit Plantation and Management Technology* (Chinese and English)(Beijing: China Agricultural Science and Technology Press)

Standards

1. **Jia Ruizong**, Guo Anping, Wu Jingtang, Wei Qing, Huang Qixing, Zhang Yuliang, Zhao Hui, Kong Hua, Guo Yunling, Guo Jingyuan (2017) *Hainan Famous Agricultural Product Papaya* (DBHN/018-2016)

Software copyright

1. **Jia Ruizong et al.** Nanfan District Virus Gene Database System, Registration number 2024SR0173518
2. **Jia Ruizong et al.** Nanfan Disease Database, software copyright registration number 2024SR0174607
3. **Jia Ruizong et al.** Nanfan Biosafety Dynamic Data Display, Registration number 2024SR0174622
4. **Jia Ruizong et al.** Nanfan Biosafety Points Mall, Registration number 2024SR0174633
5. **Jia Ruizong et al.** Pest control database system in Nanfan District, Registration number 2024SR0340685

National Invention Patent

1. **Jia Ruizong et al.** A DNA probe, kit, and method for identifying fake sorghum, ZL2024 1 0196295.8
2. **Jia Ruizong et al.** A DNA probes, kits, and methods to differentiate PRSV resistant, ZL 2024 1 0210664.4
3. **Jia Ruizong et al.** A nematode agent of rice nematode disease, ZL 2024 1 1073151.X
4. **Jia Ruizong et al.** An ecological control method for rice nematode diseases, ZL 2024 1 1088513.2
5. **Jia Ruizong et al.** A biocontrol bacterial strain, agent, and application, ZL 2024 1 1105826.4

Utility Model Patent

1. **Jia Ruizong et al.** A juice collection device for papain extraction, Patent -20241122100359
2. **Jia Ruizong et al.** A controllable papain extraction crusher, Patent -20241017093106
3. **Jia Ruizong et al.** A rapid separation and purification device for papain, Patent -20240809100714
4. **Jia Ruizong et al.** A automatic water cleaning device for papaya cultivation, Patent -20240806190023
5. **Jia Ruizong et al.** An intelligent temperature controlled papaya preservation and transportation box, Patent -20240809100714