

简历

个人信息					
姓名	胡帅	性别	男		
职称	研究员				
研究所	中国热科院生物所				
电子邮箱	hushuai@itbb.org.cn				
地址	海南省三亚市崖州区南繁科技城中国热带农业科学院三亚研究院 206 室				
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研究方向					
本人主要从事植物激素相关的分子设计育种工作，研究对象为木薯和水稻等：①植物激素相关的农艺性状关键基因挖掘和农艺性状形成机理研究；②植物激素操控育种技术、表观修饰育种技术等新技术研发；③植物激素介导的干旱、高温等逆境适应性研究。研究旨在追求作物高抗、高产、稳产，以满足现代农业及气候变化需求。					
学习&工作经历					
学习经历					
2008.09-2012.07	湖南大学	生物学院	生物技术	学士	郭新红教授
2012.09-2015.07	湖南大学	生物学院	生化学	硕士	郭新红教授
2015.09-2020.08	清华大学	生命科学学院	生物学	博士	谢道昕院士
工作经历					
2020.09-2022.09	清华大学	生命科学学院	生物学	博后/助研	谢道昕院士
2022.09-2023.12	中国热科院	生物所/三亚院	分子设计育种	助研	研究室副主任
2024.01-至今	中国热科院	生物所/三亚院	分子设计育种	研究员	研究室副主任
代表性成果					
论文、专著、专利、品种、标准、承担项目、获奖成果等（每种代表性成果限 5 项）。					
代表论文					
1) Shuai Hu* , Fucui Wei*, Haoqiang He*, Xiaoling Wang, Yakun Wang, Qiyu Xia, Yingying Zhang, Xiaoxi Du, Hui-Liang Li, Lili Zhang, Shanshan Huo, Jinxing Zhang, Minghui Luo, Jinshan Zhang, Feng Li, Anping Guo, Changmian Ji#, Jian-Kang Zhu#, Hui Zhao#. An effective strategy for breeding tropical adapted <i>japonica</i> rice with high yield. <i>Plant Biotechnol J</i> , 2024, submitted.					
2) Shuai Hu* , Kaiming Yu, Jianbin Yan#, Xiaoyi Shan#, Daoxin Xie#. Jasmonate perception: ligand-receptor binding techniques, identification, regulation and evolution. <i>Mol Plant</i> , 2023, 16(1):23-42. (Q1, IF ₂₀₂₂ =27.5)					

- 3) Wenjun Xiao*, **Shuai Hu***, Keyao Yu*, Yongliang Li, Ruqiong Cai, Daolong Xie, Haiwen Zhou, Ziming Guo, Shucan Liu, Xiaoxiao Zou, Shunxing Ye, Anping Guo, Ruifeng Yao#, Hui Zhao#, Xinhong Guo#. Fine-tuning of MPK6/3 phosphorylation by a lectin receptor-like kinase LecRK-VIII.2 regulates seed development. *Plant Biotechnol J*, 2023, 21(12):2414-2416. (Q1, IF₂₀₂₂=13.8)
- 4) **Shuai Hu***, Haitao Yang*, Hua Gao, Jianbin Yan#, Daoxin Xie#. Control of seed size by jasmonate. *Sci China Life Sci*, 2021, 64(8): 1215-1226. (Q1, IF₂₀₂₁=10.372)
- 5) Wenjun Xiao*, **Shuai Hu***, Xiaoxiao Zou, Ruqiong Cai, Rui Liao, Xiaoxia Lin, Ruifeng Yao#, Xinhong Guo#. Lectin receptor-like kinase LecRK-VIII.2 is a missing link in MAPK signaling-mediated yield control. *Plant Physiol*, 2021, 187(1):303-320. (Q1, IF₂₀₂₁=8.005)

国家发明专利

- 1) **胡帅**, 谢道昕, 单晓映, 赵辉, 杨海涛, 杜晓希, 李辉亮, 纪长绵, 张金鑫, 郭安平. 一种有效提高拟南芥/水稻在节水或干旱条件下产量的蛋白及其编码基因的应用. 授权公告日: 2024.11.26, 授权公告号: CN118581146B.
- 2) **胡帅**, 韦福翠, 赵辉, 霍姗姗, 杜晓希, 纪长绵, 李辉亮, 贺浩强, 郭安平. 一种调控水稻氮素利用率的蛋白的应用和调控水稻氮素利用率的方法. 授权通知日: 2024.11.13, 公开号: CN118620951A.
- 3) **胡帅**, 郑在, 李辉亮, 赵辉, 杜晓希, 陈晓艳, 纪长绵, 贺萍萍, 郭安平. 碘化钾处理延缓木薯采后生理恶化及降低木薯超氧阴离子水平的方法. 授权公告日: 2024.11.26, 授权公告号: CN118680166B.
- 4) **胡帅**, 郑在, 李辉亮, 赵辉, 杜晓希, 陈晓艳, 纪长绵, 夏启玉, 郭安平. 氯化钴处理延缓木薯采后生理恶化的方法及氯化钴降低木薯超氧阴离子水平的方法. 授权公告日: 2024.11.26, 授权公告号: CN118696918B.
- 5) 郑在, **胡帅**, 李辉亮, 赵辉, 杜晓希, 陈晓艳, 纪长绵, 张丽丽, 郭安平. 菲洛嗪处理延缓木薯采后生理恶化及降低木薯超氧阴离子水平的方法. 授权通知日: 2024.12.08, 公告号: CN118648634A.

CURRICULUM VITAE

Personal Information			
Name	Shuai Hu	Gender	Male
Position Title	Research Professor		
Institute	ITBB, CATAS		
Email	hushuai@itbb.org.cn		
Address	Sanya Research Institute of CATAS, Yazhou Bay Science and Technology City, Sanya, Hainan, China		
Tel	+086-15210693088	Fax	
Research Interest			
<p>Dr. Hu is primarily interested in crop breeding by molecular design in Cassava and Rice, with an special focus on plant hormone pathway: i) Identifying functional genes in plant hormone pathways to reveal the underlying mechanisms how reproductive traits are regulated; ii) Developing new techniques on pytohormone signaling manipulation and epigenetic modification to improve reproductive traits; iii) Exploring how crop employs phytohormones to regulate its reproductive traits in adaptation to environmental stresses, such as drought and heat. His investigation is aimed at improving crop defense and yield performance under normal and stress conditions to meet the demand of modern agriculture as well as climate challenge.</p>			
Education & Working Experience			
Working Experience			
2024-present: Research professor, Institute of Tropical Bioscience and Biotchnology (ITBB), Chinese Academy of Tropical Agricultural Sciences (CATAS);			
2022-2024: Research associate, ITBB, CATAS;			
2020-2022: Postdoctoral researcher, School of Life Sciences, Tsinghua University;			
Education Experience			
2015-2020: Ph.D., School of Life Sciences, Tsinghua University;			
2012-2015: MSc., College of Biology, Hunan University;			
2008-2012: BSc., College of Biology, Hunan University.			
Representative Result			
Selected publications			
1) Shuai Hu* , Fucui Wei*, Haoqiang He*, Xiaoling Wang, Yakun Wang, Qiyu Xia, Yingying Zhang, Xiaoxi Du, Hui-Liang Li, Lili Zhang, Shanshan Huo, Jinxing Zhang, Minghui Luo, Jinshan Zhang, Feng Li, Anping Guo, Changmian Ji#, Jian-Kang Zhu#, Hui Zhao#.An effective strategy for breeding tropical adapted <i>japonica</i> rice with high yield. <i>Plant Biotechnol J</i> , December 2024, submitted.			

- 2) **Shuai Hu***, Kaiming Yu, Jianbin Yan#, Xiaoyi Shan#, Daoxin Xie#. Jasmonate perception: ligand-receptor binding techniques, identification, regulation and evolution. *Mol Plant*, 2023, 16(1):23-42. (Q1, IF₂₀₂₂=27.5)
- 3) Wenjun Xiao*, **Shuai Hu***, Keyao Yu*, Yongliang Li, Ruqiong Cai, Daolong Xie, Haiwen Zhou, Ziming Guo, Shucan Liu, Xiaoxiao Zou, Shunxing Ye, Anping Guo, Ruifeng Yao#, Hui Zhao#, Xinhong Guo#. Fine-tuning of MPK6/3 phosphorylation by a lectin receptor-like kinase LecRK-VIII.2 regulates seed development. *Plant Biotechnol J*, 2023, 21(12):2414-2416. (Q1, IF₂₀₂₂=13.8)
- 4) **Shuai Hu***, Haitao Yang*, Hua Gao, Jianbin Yan#, Daoxin Xie#. Control of seed size by jasmonate. *Sci China Life Sci*, 2021, 64(8): 1215-1226. (Q1, IF₂₀₂₁=10.372)
- 5) Wenjun Xiao*, **Shuai Hu***, Xiaoxiao Zou, Ruqiong Cai, Rui Liao, Xiaoxia Lin, Ruifeng Yao#, Xinhong Guo#. Lectin receptor-like kinase LecRK-VIII.2 is a missing link in MAPK signaling-mediated yield control. *Plant Physiol*, 2021, 187(1):303-320. (Q1, IF₂₀₂₁=8.005)

Selected Patents

- 1) **Shuai Hu**, Daoxin Xie, Xiaoyi Shan, Hui Zhao, Haitao Yang, Xiaoxi Du, Huiliang Li, Changmian Ji, Jinxin Zhang, Anping Guo. A coding gene improving Rice/Arabidopsis yield under drought or water-saving conditions, CN118581146B, 2024-11-26;
- 2) **Shuai Hu**, Fucui Wei, Hui Zhao, Shanshan Huo, Xiaoxi Du, Changmian Ji, Huiliang Li, Haoqiang He, Anping Guo. A functional protein in regulation of rice nitrogen use efficiency and its applications, CN118620951A, 2024-11-13;
- 3) **Shuai Hu**, Zai Zheng, Huiliang Li, Hui Zhao, Xiaoxi Du, Xiaoyan Chen, Changmian Ji, Pinpin He, Anping Guo. Potassium iodide prevents the occurrence of post-harvest physiological deterioration and reduces the level of superoxide anions in cassava tubers. CN118680166B, 2024-11-26.
- 4) **Shuai Hu**, Zai Zheng, Huiliang Li, Hui Zhao, Xiaoxi Du, Xiaoyan Chen, Changmian Ji, Qiyu Xia, Anping Guo. Cobalt chloride prevents the occurrence of post-harvest physiological deterioration and reduces the level of superoxide anions in cassava tubers. CN118696918B, 2024-11-26.
- 5) Zai Zheng, **Shuai Hu**, Huiliang Li, Hui Zhao, Xiaoxi Du, Xiaoyan Chen, Changmian Ji, Lili Zhang, Anping Guo. Ferrozine prevents the occurrence of post-harvest physiological deterioration and reduces the level of superoxide anions in cassava tubers. CN118648634A, 2024-12-08.

