

# 简 历

个人信息			
姓名	廖文彬	性别	男
职称	研究员		
研究所	热带生物技术研究所		
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研究方向			
激素与肽激素信号调控薯类作物重要性状形成的机制研究			
学习&工作经历			
<b>【学习经历】</b>			
1996,09-2000,07: 华南热带农业大学, 本科			
2000,09-2003,07: 华南热带农业大学/中国热带农业科学院热带作物生物技术国家重点实验室, 硕士研究生			
2006,09-2009,07: 海南大学, 博士研究生			
<b>【工作经历】</b>			
2003,07-2004,07: 西南大学(原西南农业大学), 助教			
2004,08-2010,12: 中国热带农业科学院热带生物技术研究所, 助理研究员			
2011,01-2016,12: 中国热带农业科学院热带生物技术研究所, 副研究员			
2017,01-今: 中国热带农业科学院热带生物技术研究所, 研究员			
2013,08-2013,12: 美国夏威夷大学, 访问学者			
2015,02-2016,02: 美国加州大学河滨分校, 访问学者			

## 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）。

论文：

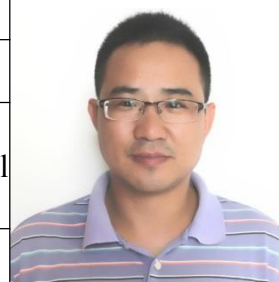
1. Bin Wang, Shuxia Li, Liangping Zou, Xin Guo, Jiixin Liang, Wenbin Liao and Ming Peng. Natural variation memyb108 associated with tolerance to stress-induced leaf abscission linked to enhanced protection against reactive oxygen species in cassava. *Plant Cell Rep.* 2022, 41(7), 1573-1587. doi: 10.1007/s00299-022-02879-6
2. Shi-man DONG, Liang XIAO, Zhi-bo LI, Jie SHEN, Hua-bing YAN, Shu-xia LI, Wen-bin LIAO, Ming PENG. A novel long non-coding RNA, DIR, increases drought tolerance in cassava by modifying stress-related gene expression. *Journal of Integrative Agriculture*, 2022,21(9): 2588-2602. DOI:10.1016/j.jia.2022. 07. 022.
3. L. Zou, D. Qi, S. Li, M. Zhai, Z. Li, X. Guo, M. Ruan, X. Yu, P. Zhao, W. Li, P. Zhang, Q. Ma, M. Peng, and W. Liao. The cassava (*Manihot-esculenta*Crantz)'s nitrate transporter NPF4.5, expressed in seedling roots, involved in nitrate flux and osmotic stress, *Plant Physiology and Biochemistry*, 2022, doi.org/10.1016/j.plaphy.2022.10.025
4. Wenbin Liao, Bin Wang, Yayun Li, Gan Wang and Ming Peng. Exposure to various abscission-promoting treatments suggests substantial ERF subfamily transcription factors involvement in the regulation of cassava leaf abscission. *BMC Genomics*, 2016,17:538.
5. Wenbin Liao, Gan Wang, Yayun Li, Bin Wang, Peng Zhang and Ming Peng. Reactive oxygen species regulate leaf pulvinus abscission zone cell separation in response to water deficit stress in cassava. *Sci. Rep.*, 2016, 6, 21542.

主持项目

1. 木薯逆境适应过程中离区脱落调控机制研究（NO. 322CXTD529），海南省创新研究团队，35 万元，2022-2025，在研，主持。
2. 一个新的木薯 AP2 转录因子促进叶柄离区分化影响叶片脱落的分子机制(31471551)，国家自然科学基金面上项目，89 万元，2015-2018，已结题，主持。
3. 木薯耐低温种质资源精准评价与基因发掘（2019YFD1000501），国家重点研发计划子课题，56 万，2019-2022，在研，主持。
4. 木薯逆境下叶片脱落与生长转换的分子基础（1630052020014），热带农业科学院基本科研业务费专项，10 万元，2020-2020，结题，主持。
5. 利用赤霉素信号途径相关基因改良棉花纤维品质（2009ZX08005-027B-3），转基因生物新品种培育科技重大专项子课题，40 万元，2009-2012，已结题，主持

# CURRICULUM VITAE

Personal Information			
Name	Wenbin Liao	Gender	Male
Position Title		Researcher	
Institute		Institute of Tropical Bioscience and Biotechnology, Chinese Academy of Tropical Agricultural Sciences	
Email	liaowenbin@itbb.org.cn		
Address	No.4 Xueyuan Road, Longhua District, Haikou City, Hainan , P. R. China		
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Research Interest			
Study on the mechanism of phytohormone and peptide hormone signal regulating the formation of important traits in tuber crops			
Education & Working Experience			
<p><b>[Education Experience]</b>            1996,09-2000,07: South China Tropical Agricultural University, Undergraduate            2000,09-2003,07: South China University of Tropical Agriculture/National Key Laboratory of Tropical Crop Biotechnology, Chinese Academy of Tropical Agricultural Sciences, Master            2006,09-2009,07: Hainan University, Ph.D</p> <p><b>[Working Experience]</b>            2003,07-2004,07: Southwest University (former Southwest Agricultural University), Assistant            2004,08-2010,12: Institute of Tropical Biotechnology, Chinese Academy of Tropical Agricultural Sciences, Assistant Researcher            2011-01-2016,12: Institute of Tropical Biotechnology, Chinese Academy of Tropical Agricultural Sciences, Associate Researcher            2017,01-present: Institute of Tropical Biotechnology, Chinese Academy of Tropical Agricultural Sciences, Researcher            2013,08-2013,12: University of Hawaii, Visiting scholar            2015,02-2016,02: University of California, Riverside, Visiting Scholar</p>			



## Representative Result

### Publication:

1. Bin Wang, Shuxia Li, Liangping Zou, Xin Guo, Jiixin Liang, Wenbin Liao and Ming Peng. Natural variation memyb108 associated with tolerance to stress-induced leaf abscission linked to enhanced protection against reactive oxygen species in cassava. *Plant Cell Rep.* 2022, 41(7), 1573-1587. doi: 10.1007/s00299-022-02879-6
2. Shi-man DONG, Liang XIAO, Zhi-bo LI, Jie SHEN, Hua-bing YAN, Shu-xia LI, Wen-bin LIAO, Ming PENG. A novel long non-coding RNA, DIR, increases drought tolerance in cassava by modifying stress-related gene expression. *Journal of Integrative Agriculture*, 2022,21(9): 2588-2602. DOI:10.1016/j.jia.2022. 07. 022.
3. L. Zou, D. Qi, S. Li, M. Zhai, Z. Li, X. Guo, M. Ruan, X. Yu, P. Zhao, W. Li, P. Zhang, Q. Ma, M. Peng, and W. Liao. The cassava (*Manihot-esculenta*Crantz)'s nitrate transporter NPF4.5, expressed in seedling roots, involved in nitrate flux and osmotic stress, *Plant Physiology and Biochemistry*, 2022, doi.org/10.1016/j.plaphy.2022.10.025
4. Wenbin Liao, Bin Wang, Yayun Li, Gan Wang and Ming Peng. Exposure to various abscission-promoting treatments suggests substantial ERF subfamily transcription factors involvement in the regulation of cassava leaf abscission. *BMC Genomics*, 2016,17:538.
5. Wenbin Liao, Gan Wang, Yayun Li, Bin Wang, Peng Zhang and Ming Peng. Reactive oxygen species regulate leaf pulvinus abscission zone cell separation in response to water deficit stress in cassava. *Sci. Rep.*, 2016, 6, 21542.

### Hosted the projects:

1. Research on the regulation mechanism of cassava leaf abscission in the process of stress adaptation (No. 322CXTD529), Hainan Provincial Innovation Research Team, 350000 yuan, 2022-2025, under research, hosted.
2. A new molecular mechanism of cassava AP2 transcription factor promoting the differentiation of petioles and affecting leaf abscission (No. 31471551), a program of the National Natural Science Foundation of China, 890000 yuan, 2015-2018, concluded, hosted.
3. Precise evaluation and gene discovery of cassava low-temperature resistant germplasm resources (No. 2019YFD1000501), a sub project of national key research and development plan, 560000 yuan, 2019-2022, under research, hosted.

4. Molecular basis of cassava leaf abscission and growth transformation under stress (No. 1630052020014), special fund for basic scientific research and business of the Academy of Tropical Agricultural Sciences, 100000 yuan, 2020-2020, concluded, hosted.

5. Improving cotton fiber quality by using genes related to gibberellin signal pathway (No. 2009ZX08,005-027B-3), a major sub project of science and technology for breeding new varieties of transgenic organisms, 400,000 yuan, 2009-2012, concluded, hosted.