

實驗室主持人



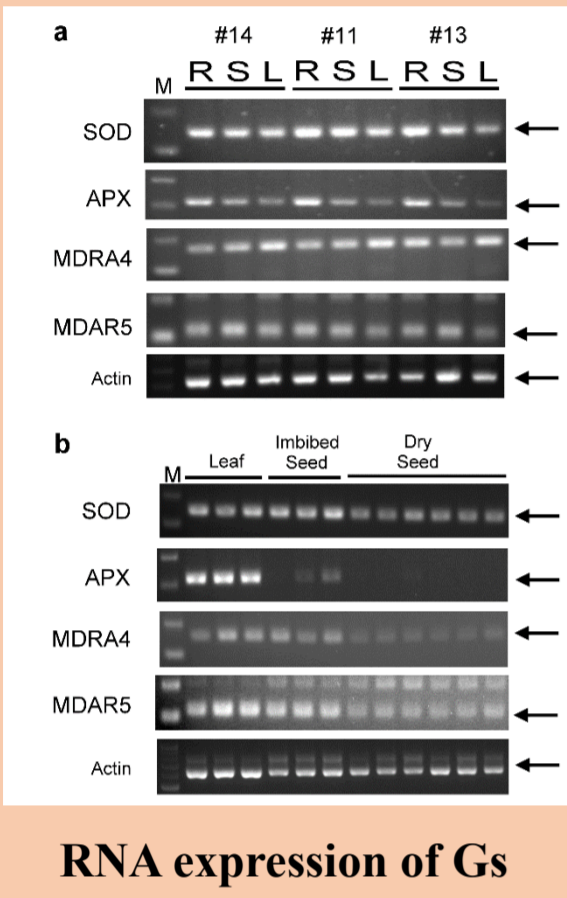
古新梅
(Hsin-Mei Ku)

Education :

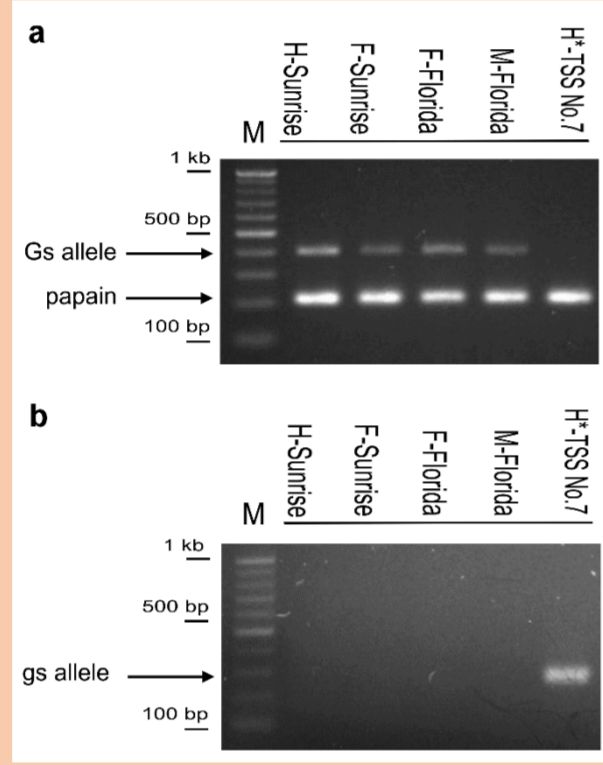
PhD in Plant Biology (Department of Plant Biology, Cornell University, USA)
BSc in Plant Pathology (Department of Plant Pathology, NCHU, Taichung, TAIWAN)

研究主題

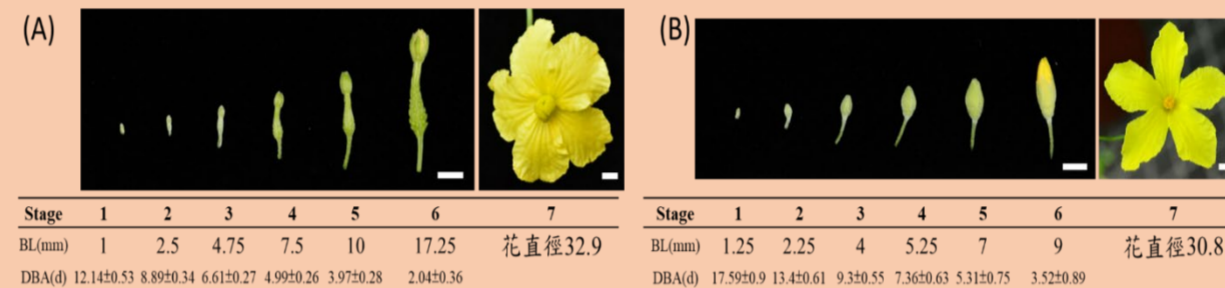
Flower sex determination



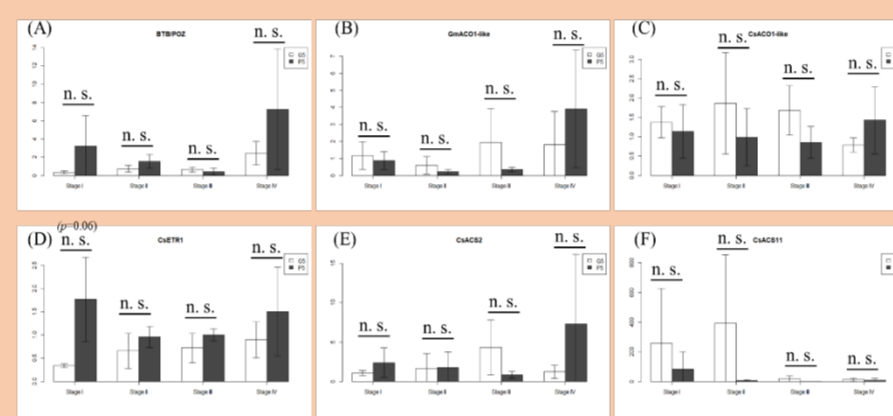
RNA expression of Gs



Genotyping papaya Gs locus

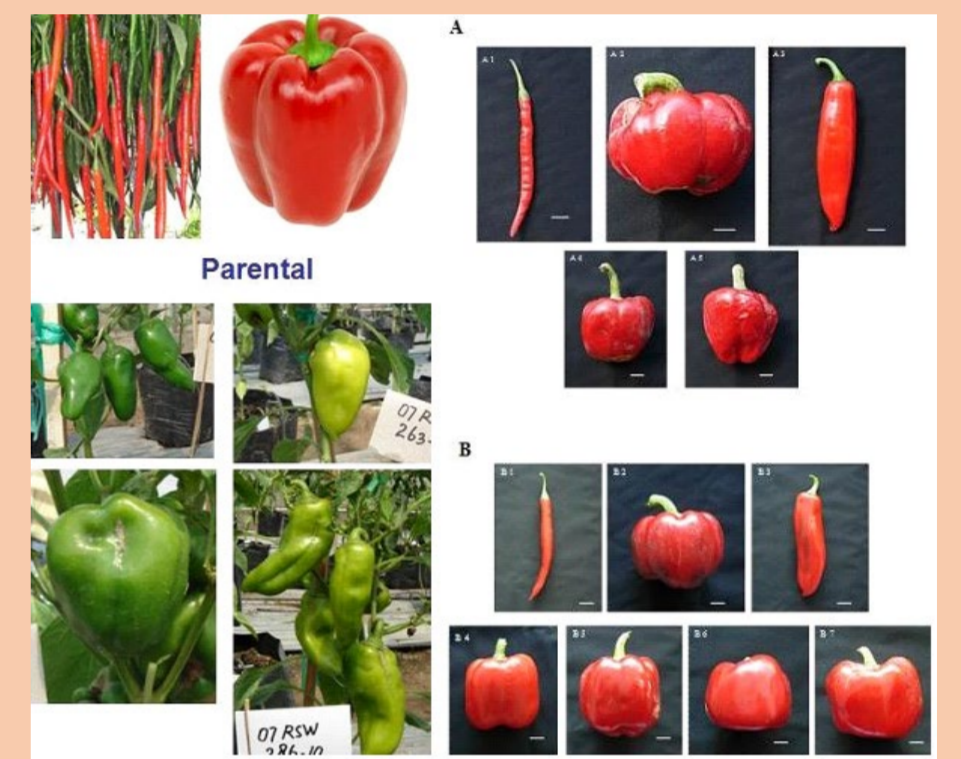


Flower development of bitter melon



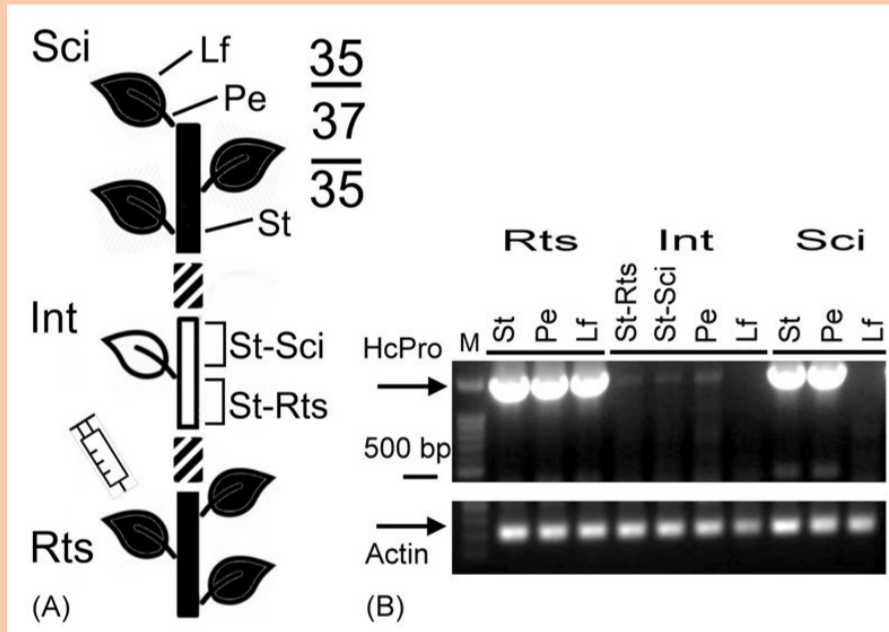
Gene expression candidates during flower development in bitter melon

Male sterility

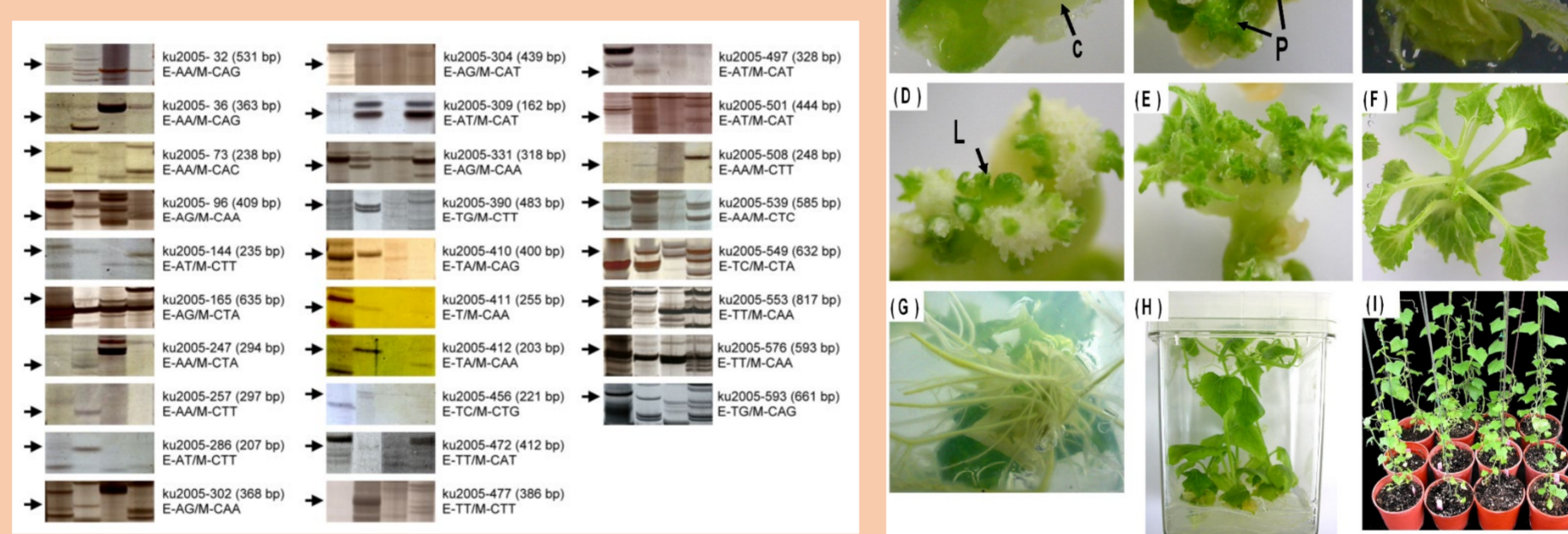


Conversion of pepper GMS to CMS using ms-linked molecular markers

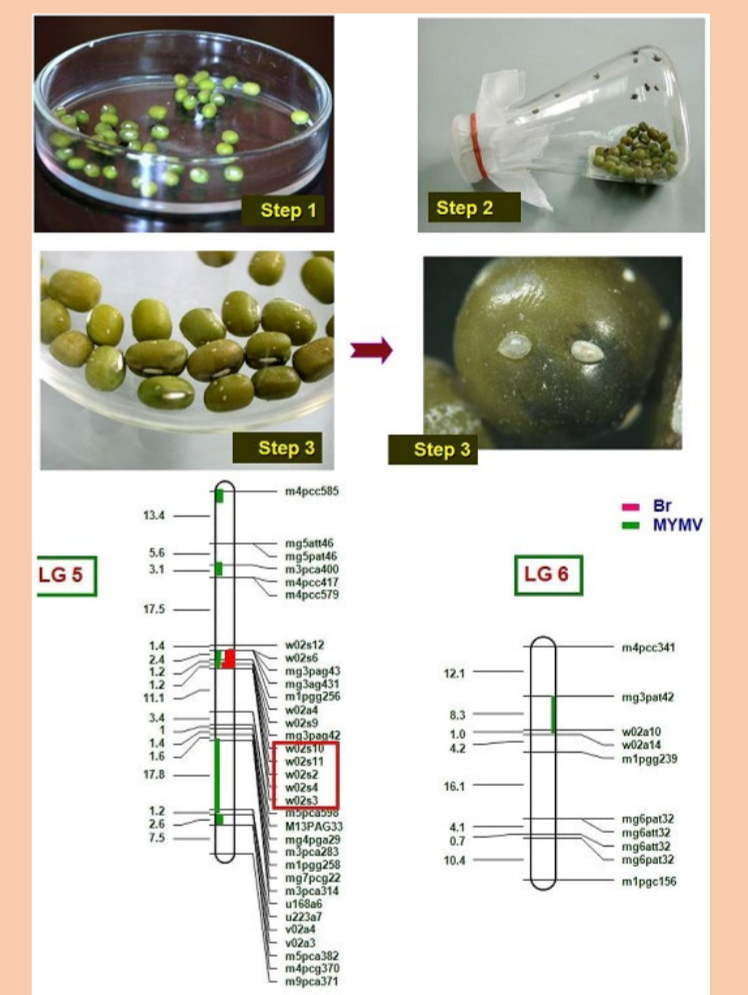
Molecular Marker Development & Functional genetics



Grafting analysis virus resistance in horned melon



cDNA AFLP and Functional genetics of virus resistance in horned melon



Marker development for bruchid- and virus-resistance in mungbean

Disease resistance

研究成果

- Jen-Ren Chen, Hiroki Ueno, Hideo Matsumura, Naoya Urasaki, Chen-Yu Lee, Fure-Chyi Chen, Shih-Wen Chin, Chun-Chi Liu, Chan-Tai Chiu, Kazuhiko Tarora, Jing-Yi Li, Chieh Ying Lee, and Hsin-Mei Ku* (2021) Genomic characterization of a rare *Carica papaya* X chromosome mutant reveals a candidate monodehydroascorbate reductase 4 gene involved in all-hermaphrodite phenomenon. *Mol Gen Genet* 296(6), 1323-1335 (SCI)
- Jen-Ren Chen, Shang-Ling Ou, Ting-Iun Nieh, Chih-Yu Lu, Hsin-Mei Ku* (2020) Molecular dissection of *Cucumis metuliferus* resistance against Papaya ringspot virus by grafting. *Plants* 9, 1666 (SCI)
- Shu-Yun Chen, Mei-Hsiu Su, Karl A. Kremling, Nicholas K. Lepak, M. Cinta Romay, Qi Sun, Peter J. Bradbury, Edward S. Buckler and Hsin-Mei Ku* (2020) Identification of miRNA-eQTLs in Maize Mature Leaf by GWAS. *BMC Genomics* 21:689 (SCI)
- Jen-Ren Chen, Naoya Urasaki, Hideo Matsumura, I-Cheng Chen, Mei-Juan Lee, Hui-Ju Chang, Wen-Chuan Chung and Hsin-Mei Ku* (2019) Dissecting the all-hermaphrodite phenomenon of a rare X chromosome mutant in papaya (*Carica papaya* L.). *Mol Breed* 39(1): 14 (SCI)
- Wei-Ting Liu, Peng-Wen Chen, Li-Chi Chen, Chia-Chun Yang, Shu-Yun Chen, GuanFu Huang, Tzu-Che Lin, Hsin-Mei Ku* and Jeremy J.W. Chen* (2017) Suppressive Effect of MicroRNA319 Expression on Rice Plant Height. *Theor Appl Genet* 130(7):1507-1518 (SCI)
- Chia-Wei Lin, Mei-Hsiu Su, Yu-Tsung Lin, Chien-Hung Chung and Hsin-Mei Ku* (2015) Functional Characterization of *Cucumis metuliferus* Proteinase Inhibitor Gene (CmSPI) in Potyviruses Resistance. *Viruses* 7: 3816-3834 (SCI)
- Mulyantoro, Shang-Ling Ou, Shu-Yun Chen, Szu-Chien Liu, Tzu-Chuan Lo, Andi Wahyono, Sz-Yun Chen and Hsin-Mei Ku* (2014) Conversion of genic male sterility (GMS) system of bell pepper (*Capsicum annum* L.) to cytoplasmic male sterility (CMS). *Plant Breeding* 133(2):291-297(SCI)
- Yu-Tsung Lin, Fuh-Jyh Jan, Chia-Wei Lin, Tzu-Chuan Lo, Chien-Hung Chung, Jo-Chu Chen, Hsiang-Hao Su, Shy-Dong Yeh, and Hsin-Mei Ku* (2013) Differential Gene Expression in Response to Papaya ringspot virus Infection in *Cucumis metuliferus* using cDNA- Amplified Fragment Length Polymorphism Analysis. *PLOS ONE* 8(7) e68749 July (SCI)