

# **Molecular Plant**

Published on behalf of CSPB and IPPE, SIBS, CAS

## Volume 13 Number 8 August 2020

VitisGDB: The Multifunctional Database

for Grapevine Breeding and Genetics

1095	Innovations in Agriculture and Food Supply in Response to the COVID-19 Pandemic	Robert Henry
Corre	spondence	

### Editor's Highlights

Editor's Highlights				
1101	Small Peptides Raising in Plants	Chun-Lin Shi		
1102	Tracing the Origins of Agricultural Products with Barcoded Microbial Spores	Xingliang Ma and Joanne R. Ashnest		
1103	Control of Insect Pests to Boost Crop Yield by a New Plant Strengthener	Ling Jiang		
1104	Gene Replacement and Knockin Made Easy in Plants	Oliver Xiaoou Dong		

Xiao Dong, Wei Chen, Zhenchang Liang, Xuzhen Li, Peter Nick,

Shanshan Chen, Yang Dong, Shaohua Li, and Jun Sheng

### **Spotlights**

opoligino			
1105	Anchor Root Development: A World within Worlds	José Manuel Pérez-Pérez	
1108	Gourds and Tendrils of Cucurbitaceae: How Their Shape Diversity, Molecular and Morphological Novelties Evolved via Whole-Genome Duplications	Josué Barrera-Redondo, Rafael Lira-Saade, and Luis E. Eguiarte	
1111	The Secret Life of Chloroplast Precursor Proteins in the Cytosol	Athina Hristou, Julia Grimmer, and Sacha Baginsky	
1114	From Fruit Omics to Fruiting Omics: Systematic Studies of Tomato Fruiting by Metabolic Networks	Takayuki Tohge	

### **Research Articles**

1117	Phylotranscriptomics in Cucurbitaceae Reveal Multiple Whole-Genome Duplications and Key Morphological and Molecular Innovations	Jing Guo, Weibin Xu, Yi Hu, Jie Huang, Yiyong Zhao, Lin Zhang, Chien-Hsun Huang, and Hong Ma
1134	ESCRT-I Component VPS23A Sustains Salt Tolerance by Strengthening the SOS Module in <i>Arabidopsis</i>	Lijuan Lou, Feifei Yu, Miaomiao Tian, Guangchao Liu, Yaorong Wu, Yujiao Wu, Ran Xia, Jose M. Pardo, Yan Guo, and Qi Xie
1149	Regulation of Leaf Longevity by DML3-Mediated DNA Demethylation	Lu Yuan, Dan Wang, Liwen Cao, Ningning Yu, Ke Liu, Yongfeng Guo, Susheng Gan, and Liping Chen

1162 A Kinase–Phosphatase–Transcription Factor Module Regulates Adventitious Root Emergence in *Arabidopsis* Root–Hypocotyl Junctions

1178 Global Dynamic Molecular Profiling of Stomatal Lineage Cell Development by Single-Cell RNA Sequencing Zechen Bai, Jing Zhang, Xin Ning, Hailong Guo, Xiumei Xu, Xiahe Huang, Yingchun Wang, Zhubing Hu, Congming Lu, Lixin Zhang, and Wei Chi

Zhixin Liu, Yaping Zhou, Jinggong Guo, Jiaoai Li, Zixia Tian, Zhinan Zhu, Jiajing Wang, Rui Wu, Bo Zhang, Yongjian Hu, Yijing Sun, Yan Shangguan, Weiqiang Li, Tao Li, Yunhe Hu, Chenxi Guo, Jean-David Rochaix, Yuchen Miao, and Xuwu Sun

### **Resource Articles**

1194 TBtools: An Integrative Toolkit Developed for Interactive Analyses of Big Biological Data

1203 MicroTom Metabolic Network: Rewiring Tomato Metabolic Regulatory Network throughout the Growth Cycle

1219 Efficient Gene Targeting in Maize Using Inducible CRISPR-Cas9 and Marker-free Donor Template

Chengjie Chen, Hao Chen, Yi Zhang, Hannah R. Thomas, Margaret H. Frank, Yehua He, and Rui Xia

Yan Li, Yang Chen, Lu Zhou, Shengjie You, Heng Deng, Ya Chen, Saleh Alseekh, Yong Yuan, Rao Fu, Zixin Zhang, Dan Su, Alisdair R. Fernie, Mondher Bouzayen, Tao Ma, Mingchun Liu, and Yang Zhang

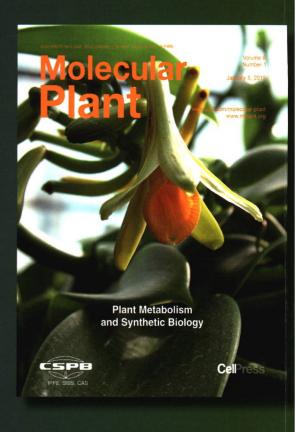
Pierluigi Barone, Emily Wu, Brian Lenderts, Ajith Anand, William Gordon-Kamm, Sergei Svitashev, and Sandeep Kumar



### On The Cover

The tree imitates the phylogeny of Cucurbitaceae, with flowers and fruits of representative cucurbits. Image by: Guo Jing, Weibin Xu, Yi Hu, Jie Huang, Yiyong Zhao, Lin Zhang, Chien-Hsun Huang, Hong Ma.

# Share your plant biology breakthroughs with the world



Give your plant biology research the global visibility and recognition it deserves. Share your breakthroughs with the world in *Molecular Plant*, now published by Cell Press. Submit your manuscript today!

Learn more and sign up for free e-Tables of Contents at www.cell.com/molecular-plant

Postal Delivery No.4-161 ¥ 210/Issue

**Cell**Press

