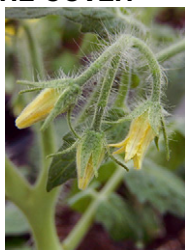


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**ON THE COVER**



Jasmonates are known as defense hormones, but are also involved in regulation of flower development as shown by the phenotype of jasmonate-insensitive mutants such as the *Arabidopsis* mutant *coi1-1* and the tomato mutant *jai1-1*, which are male and female sterile, respectively. Schubert et al. (pp. 1043–1062) show that ovules of *jai1-1* exhibit tremendous alterations in morphology and transcript profiles. The transcription factor SIMYB21 is highly expressed in wild type ovules and almost not expressed in *jai1-1*. Using a range of approaches, the authors demonstrate that SIMYB21 plays an important role in partially mediating jasmonate function in ovule and flower development. It is involved in the regulation of JA biosynthesis and action of auxin and gibberellin. The cover shows flower buds of the mutant *Slmyb21-3* showing abnormal flower development and female sterility. Photo by Ramona Schubert, Leibniz Institute of Plant Biochemistry, Halle, Germany.

**IN BRIEF**

- The Future is Now: Gene Expression Dynamics at Single Cell Resolution**<sup>[OPEN]</sup> 933  
Rachel Shahan
- Loss of Function, a Strategy for Adaptation in *Arabidopsis***<sup>[OPEN]</sup> 935  
Céline Caseys
- Cell Wall Polymers: The Importance of Deacetylation**<sup>[OPEN]</sup> 936  
Nancy R. Hofmann

**LARGE-SCALE BIOLOGY ARTICLES**

- Metabolome-Scale Genome-Wide Association Studies Reveal Chemical Diversity and Genetic Control of Maize Specialized Metabolites** 937  
Shaoqun Zhou, Karl A. Kremling, Nonoy Bandillo, Annett Richter, Ying K. Zhang, Kevin R. Ahern, Alexander B. Artyukhin, Joshua X. Hui, Gordon C. Younkin, Frank C. Schroeder, Edward S. Buckler, and Georg Jander
- A Comprehensive Map of Intron Branchpoints and Lariat RNAs in Plants**<sup>[OPEN]</sup> 956  
Xiaotuo Zhang, Yong Zhang, Taiyun Wang, Ziwei Li, Jinping Cheng, Haoran Ge, Qi Tang, Kun Chen, Li Liu, Chenyu Lu, Junqiang Guo, Binglian Zheng, and Yun Zheng
- High Temporal-Resolution Transcriptome Landscape of Early Maize Seed Development**<sup>[OPEN]</sup> 974  
Fei Yi, Wei Gu, Jian Chen, Ning Song, Xiang Gao, Xiangbo Zhang, Yingsi Zhou, Xuxu Ma, Weibin Song, Haiming Zhao, Eddi Esteban, Asher Pasha, Nicholas J. Provart, and Jinsheng Lai

**RESEARCH ARTICLES**

- Dynamics of Gene Expression in Single Root Cells of *Arabidopsis thaliana*** 993  
Ken Jean-Baptiste, José L. McFaline-Figueroa, Cristina M. Alexandre, Michael W. Dorrity, Lauren Saunders, Kerry L. Bubb, Cole Trapnell, Stanley Fields, Christine Queitsch, and Josh T. Cuperus

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- Adaptation and Phenotypic Diversification in Arabidopsis through Loss-of-Function Mutations in Protein-Coding Genes<sup>[OPEN]</sup>** 1012  
Yong-Chao Xu, Xiao-Min Niu, Xin-Xin Li, Wenrong He, Jia-Fu Chen, Yu-Pan Zou, Qiong Wu, Yong E. Zhang, Wolfgang Busch, and Ya-Long Guo
- OsSH11 Regulates Plant Architecture Through Modulating the Transcriptional Activity of IPA1 in Rice<sup>[OPEN]</sup>** 1026  
Erchao Duan, Yihua Wang, Xiaohui Li, Qibing Lin, Ting Zhang, Yupeng Wang, Chunlei Zhou, Huan Zhang, Ling Jiang, Jiulin Wang, Cailin Lei, Xin Zhang, Xiuping Guo, Haiyang Wang, and Jianmin Wan
- Tomato MYB21 Acts in Ovules to Mediate Jasmonate-Regulated Fertility<sup>[OPEN]</sup>** 1043  
Ramona Schubert, Susanne Dobritzsch, Cornelia Gruber, Gerd Hause, Benedikt Athmer, Tom Schreiber, Sylvestre Marillonnet, Yoshihiro Okabe, Hiroshi Ezura, Ivan F. Acosta, Danuse Tarkowska, and Bettina Hause
- Genetic Regulation of Ethylene Dosage for Cucumber Fruit Elongation<sup>[OPEN]</sup>** 1063  
Tongxu Xin, Zhen Zhang, Shuai Li, Shu Zhang, Qing Li, Zhong-Hua Zhang, Sanwen Huang, and Xueyong Yang
- Rice qGL3/OsPPKL1 Functions with the GSK3/SHAGGY-Like Kinase OsGSK3 to Modulate Brassinosteroid Signaling** 1077  
Xiuying Gao, Jia-Qi Zhang, Xiaojun Zhang, Jun Zhou, Zhisheng Jiang, Peng Huang, Zhengbin Tang, Yongmei Bao, Jinping Cheng, Haijuan Tang, Wenhua Zhang, Hongsheng Zhang, and Ji Huang
- Glycome and Proteome Components of Golgi Membranes Are Common between Two Angiosperms with Distinct Cell-Wall Structures** 1094  
Ikenna O. Okekeogbu, Sivakumar Pattathil, Susana M. González Fernández-Niño, Uma K. Aryal, Bryan W. Penning, Jeemeng Lao, Joshua L. Heazlewood, Michael G. Hahn, Maureen C. McCann, and Nicholas C. Carpita
- Arabinosyl Deacetylase Modulates the Arabinoxylan Acetylation Profile and Secondary Wall Formation** 1113  
Lanjuan Zhang, Chengxu Gao, Frederic Mentink-Vigier, Lu Tang, Dongmei Zhang, Shaogan Wang, Shaoxue Cao, Zuopeng Xu, Xiangling Liu, Tuo Wang, Yihua Zhou, and Baocai Zhang
- The bZIP1 Transcription Factor Regulates Lipid Remodeling and Contributes to ER Stress Management in *Chlamydomonas reinhardtii*** 1127  
Yasuyo Yamaoka, Seungjun Shin, Bae Young Choi, Hanul Kim, Sunghoon Jang, Masataka Kajikawa, Takashi Yamano, Fantao Kong, Bertrand Légeret, Hideya Fukuzawa, Yonghua Li-Beisson, and Youngsook Lee
- The Chromatin-Associated Protein PWO1 Interacts with Plant Nuclear Lamin-like Components to Regulate Nuclear Size<sup>[OPEN]</sup>** 1141  
Pawel Mikulski, Mareike L. Hohenstatt, Sara Farrona, Cezary Smaczniak, Yvonne Stahl, Kalyanikrishna, Kerstin Kaufmann, Gerco Angenent, and Daniel Schubert
- The Transcription Factors TCP4 and PIF3 Antagonistically Regulate Organ-Specific Light Induction of SAUR Genes to Modulate Cotyledon Opening during De-Etiolation in Arabidopsis<sup>[OPEN]</sup>** 1155  
Jie Dong, Ning Sun, Jing Yang, Zhaoguo Deng, Jingqiu Lan, Genji Qin, Hang He, Xing Wang Deng, Vivian F. Irish, Haodong Chen, and Ning Wei

**Identification of Molecular Integrators Shows that Nitrogen Actively Controls the Phosphate Starvation Response in Plants**

1171

Anna Medici, Wojciech Szponarski, Pierre Dangeville, Alaeddine Safi, Indeewari Madhubhashini Dissanayake, Chorpet Saenchai, Amélie Emanuel, Vicente Rubio, Benoît Lacombe, Sandrine Ruffel, Milos Tanurdzic, Hatem Rouached, and Gabriel Krouk

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