

T H E  
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**ON THE COVER**



Impaired *AP1/FUL* activity affects leaf, flower, and fruit development in tomato. Burko et al. (pages 2070–2083) show that tomato *AP1/FUL* genes are negative targets of CIN-TCP transcription factors in leaf development. The cover shows the leaf, fruit, and flower phenotypes of tomato plants expressing a dominant-negative form of the tomato *AP1/FUL* gene *MBP20*, in comparison to a wild-type leaf and flower.

**IN BRIEF**

- Surviving the Onslaught: Salicylic Acid Regulates Plasmodesmata Closure During Pathogen Attack in *Arabidopsis*** 1911  
Jennifer Lockhart
- Twist of Fate: RID1, a DEAH-box RNA Helicase Involved in Pre-mRNA Splicing, Is Crucial for Development** 1912  
Jennifer Lockhart
- AUGMIN Subunit8 Participates in Microtubule Reorientation in *Arabidopsis* Hypocotyls** 1913  
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- Whole-Genome Analysis of the Journey from Phytopathogen to Biocontrol Agent** 1914  
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- A New Mechanism for Starch Dephosphorylation: Insight from the Structure of LIKE SEX FOUR2** 1915  
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**REVIEW**

- Data Integration through Proximity-Based Networks Provides Biological Principles of Organization across Scales** <sup>W</sup> 1917  
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**LARGE-SCALE BIOLOGY ARTICLES**

- Hierarchical Nuclear and Cytoplasmic Genetic Architectures for Plant Growth and Defense within *Arabidopsis*** <sup>CW</sup> 1929  
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- The Transition from a Phytopathogenic Smut Ancestor to an Anamorphic Biocontrol Agent Deciphered by Comparative Whole-Genome Analysis** <sup>W|OPEN</sup> 1946  
François Lefebvre, David L. Joly, Caroline Labbé, Beate Teichmann, Rob Linning, François Belzile, Guus Bakkeren, and Richard R. Bélanger
- Genome-Scale Transcriptomic Insights into Early-Stage Fruit Development in Woodland Strawberry *Fragaria vesca*** <sup>CW</sup> 1960  
Chunying Kang, Omar Darwish, Aviva Geretz, Rachel Shahan, Nadim Alkharouf, and Zhongchi Liu

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## RESEARCH ARTICLES

- Formation of a Functional Maize Centromere after Loss of Centromeric Sequences and Gain of Ectopic Sequences** [C](#)[W](#) 1979  
Bing Zhang, Zhenling Lv, Junling Pang, Yalin Liu, Xiang Guo, Shulan Fu, Jun Li, Qianhua Dong, Hua-Jun Wu, Zhi Gao, Xiu-Jie Wang, and Fangpu Han
- The *Arabidopsis* SWR1 Chromatin-Remodeling Complex Is Important for DNA Repair, Somatic Recombination, and Meiosis** [W](#)[OPEN](#) 1990  
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- The euAP1 Protein MPF3 Represses *MPF2* to Specify Floral Calyx Identity and Displays Crucial Roles in Chinese Lantern Development in *Physalis*** [C](#)[W](#) 2002  
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- Evolution of a Complex Locus for Terpene Biosynthesis in *Solanum*** [W](#)[OPEN](#) 2022  
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<sup>C</sup>Some figures in this article are displayed in color online but in black and white in the print edition.

<sup>W</sup>Online version contains Web-only data.

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