

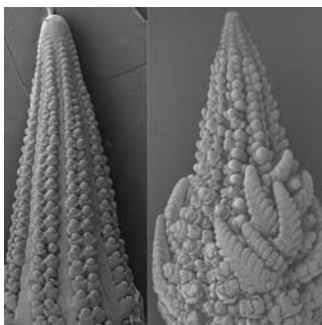
T H E  
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**ON THE COVER**



Grass seed (technically referred to as grain) are borne on axillary branches whose branching patterns dictate most of the variation in grass inflorescence architecture. Normal maize ears are unbranched, and tassels have long branches only at their base. The *ramosa2* (*ra2*) mutant of maize has increased branching, with short branches replaced by long, indeterminate ones. Bortiri et al. (pages 574–585) cloned *ra2* and report that it encodes a LOB domain transcription factor. The mutant phenotype and early expression pattern of *ra2* indicate that it functions in the patterning of stem cells in axillary meristems. The *ra2* expression pattern is conserved in rice, barley, sorghum, and maize, suggesting that *ra2* is critical for shaping the initial steps of grass inflorescence architecture. On the cover, a scanning electron microscopy image of a *ra2* mutant ear (right) compared to a normal ear (left) shows the loss of determinacy and branching in the *ra2* mutant.

**IN THIS ISSUE**

- Cytoplasmic Male Sterility and Fertility Restoration** 515  
Nancy A. Eckardt

**CURRENT PERSPECTIVE ESSAYS**

- Branching Out: The *ramosa* Pathway and the Evolution of Grass Inflorescence Morphology** 518  
Paula McSteen
- Insights into Nonhost Disease Resistance: Can They Assist Disease Control in Agriculture?** 523  
Jeff Ellis

**RESEARCH ARTICLES**

- High-Resolution Single-Copy Gene Fluorescence in Situ Hybridization and Its Use in the Construction of a Cytogenetic Map of Maize Chromosome 9** 529  
Chung-Ju Rachel Wang, Lisa Harper, and W. Zacheus Cande
- The *Arabidopsis-mei2-Like* Genes Play a Role in Meiosis and Vegetative Growth in *Arabidopsis*** 545  
Jagreet Kaur, Jose Sebastian, and Imran Siddiqi
- Analysis of the Transcription Factor WUSCHEL and Its Functional Homologue in *Antirrhinum* Reveals a Potential Mechanism for Their Roles in Meristem Maintenance** 560  
Martin Kieffer, Yaniv Stern, Holly Cook, Elena Clerici, Christoph Maulbetsch, Thomas Laux, and Brendan Davies
- ramosa2* Encodes a LATERAL ORGAN BOUNDARY Domain Protein That Determines the Fate of Stem Cells in Branch Meristems of Maize** 574  
Esteban Bortiri, George Chuck, Erik Vollbrecht, Torbert Rocheford, Rob Martienssen, and Sarah Hake
- Blind Homologous *R2R3 Myb* Genes Control the Pattern of Lateral Meristem Initiation in *Arabidopsis*** 586  
Dörte Müller, Gregor Schmitz, and Klaus Theres
- Arabidopsis* REGULATOR OF AXILLARY MERISTEMS1 Controls a Leaf Axil Stem Cell Niche and Modulates Vegetative Development** 598  
Thomas Keller, Jessica Abbott, Thomas Moritz, and Peter Doerner
- PLASTOCHRON2 Regulates Leaf Initiation and Maturation in Rice** 612  
Taiji Kawakatsu, Jun-Ichi Itoh, Kazumaru Miyoshi, Nori Kurata, Nena Alvarez, Bruce Veit, and Yasuo Nagato

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Telephone: 301/251-0560, ext. 119  
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- The *Arabidopsis* SOMATIC EMBRYOGENESIS RECEPTOR-LIKE KINASE1 Protein Complex Includes BRASSINOSTEROID-INSENSITIVE1** [W](#) **626**  
Rumyana Karlova, Sjeff Boeren, Eugenia Russinova, José Aker, Jacques Vervoort, and Sacco de Vries
- FLOWERING LOCUS C Mediates Natural Variation in the High-Temperature Response of the *Arabidopsis* Circadian Clock** [W](#) **639**  
Kieron D. Edwards, Paul E. Anderson, Anthony Hall, Neeraj S. Salathia, James C.W. Locke, James R. Lynn, Martin Straume, James Q. Smith, and Andrew J. Millar
- Transcriptome Profiling, Molecular Biological, and Physiological Studies Reveal a Major Role for Ethylene in Cotton Fiber Cell Elongation** [W](#) [OA](#) **651**  
Yong-Hui Shi, Sheng-Wei Zhu, Xi-Zeng Mao, Jian-Xun Feng, Yong-Mei Qin, Liang Zhang, Jing Cheng, Li-Ping Wei, Zhi-Yong Wang, and Yu-Xian Zhu
- SUGAR-DEPENDENT1 Encodes a Patatin Domain Triacylglycerol Lipase That Initiates Storage Oil Breakdown in Germinating *Arabidopsis* Seeds** [W](#) **665**  
Peter J. Eastmond
- Cytoplasmic Male Sterility of Rice with Boro II Cytoplasm Is Caused by a Cytotoxic Peptide and Is Restored by Two Related PPR Motif Genes via Distinct Modes of mRNA Silencing** [W](#) **676**  
Zhonghua Wang, Yanjiao Zou, Xiaoyu Li, Qunyu Zhang, Letian Chen, Hao Wu, Dihua Su, Yuanling Chen, Jingxin Guo, Da Luo, Yunming Long, Yang Zhong, and Yao-Guang Liu
- The Free NADH Concentration Is Kept Constant in Plant Mitochondria under Different Metabolic Conditions** **688**  
Marina R. Kasimova, Jurgita Grigiene, Klaas Krab, Peter H. Hagedorn, Henrik Flyvbjerg, Peter E. Andersen, and Ian M. Møller
- The *Arabidopsis* Aux/IAA Protein Family Has Diversified in Degradation and Auxin Responsiveness** [W](#) **699**  
Kate A. Dreher, Jessica Brown, Robert E. Saw, and Judy Callis
- Vacuolar H<sup>+</sup>-ATPase Activity Is Required for Endocytic and Secretory Trafficking in *Arabidopsis*** [W](#) **715**  
Jan Dettmer, Anne Hong-Hermesdorf, York-Dieter Stierhof, and Karin Schumacher
- Arabidopsis* PEN3/PDR8, an ATP Binding Cassette Transporter, Contributes to Nonhost Resistance to Inappropriate Pathogens That Enter by Direct Penetration** [W](#) [OA](#) **731**  
Mónica Stein, Jan Dittgen, Clara Sánchez-Rodríguez, Bi-Huei Hou, Antonio Molina, Paul Schulze-Lefert, Volker Lipka, and Shauna Somerville
- The Chimeric *Arabidopsis* CYCLIC NUCLEOTIDE-GATED ION CHANNEL11/12 Activates Multiple Pathogen Resistance Responses** [W](#) [OA](#) **747**  
Keiko Yoshioka, Wolfgang Moeder, Hong-Gu Kang, Pradeep Kachroo, Khaled Masmoudi, Gerald Berkowitz, and Daniel F. Klessig
- Within-Species Flagellin Polymorphism in *Xanthomonas campestris* pv *campestris* and Its Impact on Elicitation of *Arabidopsis* FLAGELLIN SENSING2-Dependent Defenses** [W](#) **764**  
Wenxian Sun, F. Mark Dunning, Christine Pfund, Rebecca Weingarten, and Andrew F. Bent

[W](#) Online version contains Web-only data.

[OA](#) Open Access articles can be viewed online without a subscription.



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