Suppression of growth of inflorescence leaves, or bracts, has evolved multiple times in diverse angiosperm lineages. Several genes involved in bract suppression have been identified in Arabidopsis, but it is not known whether homologs of these genes play a similar role in other plants with suppressed bracts. Whipple et al. (pages 565–578) identify maize Tsh1, which encodes a GATA zinc-finger protein that is involved in bract suppression in maize. They show that the bract suppression function of Tsh1 is conserved in the grass family, but not in the homologous Arabidopsis gene HAN, suggesting the evolution of distinct bract suppression mechanisms in these lineages. The cover shows an electron micrograph image of the inflorescence of a barley mutant featured in the article.
Apomictic and Sexual Ovules of *Boechera* Display Heterochronic Global Gene Expression Patterns

Timothy F. Sharbel, Marie-Luise Voigt, José M. Corral, Giulio Galli, Jochen Kuleimn, Christian Klukas, Falk Schreiber, Heiko Vogel, and Björn Rotter

Carbon Starved Anther Encodes a MYB Domain Protein That Regulates Sugar Partitioning Required for Rice Pollen Development

Hui Zhang, Wanqi Liang, Xijia Yang, Xue Luo, Ning Jiang, Hong Ma, and Dabing Zhang

The *Arabidopsis* Floral Homeotic Proteins APETALA3 and PISTILLATA Negatively Regulate the BANQUO Genes Implicated in Light Signaling

Chloe D. Mara, Tengbo Huang, and Vivian F. Irish

SHORT HYPOCOTYL UNDER BLUE1 Truncations and Mutations Alter Its Association with a Signaling Protein Complex in *Arabidopsis*

Yun Zhou and Min Ni

*MGOUN1* Encodes an *Arabidopsis* Type IB DNA Topoisomerase Required in Stem Cell Regulation and to Maintain Developmentally Regulated Gene Silencing

Philipp Graf, Alicia Dolzblasz, Tobias Würschum, Michael Lenhard, Ulrike Pfreundt, and Thomas Laux

The *Arabidopsis* Stem Cell Factor POLTERGEIST Is Membrane Localized and Phospholipid Stimulated

Jennifer M. Gagne and Steven E. Clark

Spatial Configuration of Transposable Element Ac Termi

Chuanhe Yu, Jianbo Zhang, Vinay Pulletikurti, David F. Weber, and Thomas Peterson

*Arabidopsis* Homologs of Nucleus- and Phragmoplast-Localized Kinase 2 and 3 and Mitogen-Activated Protein Kinase 4 Are Essential for Microtubule Organization

Martina Beck, George Komis, Jens Müller, Diedrik Menzel, and Jozef Sámaj

The Coiled-Coil Protein VIG1 Is Essential for Tethering Vacuoles to Mitochondria during Vacuole Inheritance of *Cyanidioschyzon merolae*


bZIP28 and NF-Y Transcription Factors Are Activated by ER Stress and Assemble into a Transcriptional Complex to Regulate Stress Response Genes in *Arabidopsis*

Jian-Xiang Liu and Stephen H. Howell

Internal Architecture of Mitochondrial Complex I from *Arabidopsis thaliana*

Jennifer Klodmann, Stephanie Sunderhaus, Manfred Nimtz, Lothar Jänsch, and and Hans-Peter Braun

ANKYRIN REPEAT-CONTAINING PROTEIN 2A Is an Essential Molecular Chaperone for Peroxisomal Membrane-Bound ASCORBATE Peroxidase3 in *Arabidopsis*

Guoxin Shen, Sundaram Kuppu, Sujatha Venkataramani, Jing Wang, Juqiang Yan, Xiaoyun Qiu, and Hong Zhang

RNAi Suppression of *Arogenate Dehydratase1* Reveals That Phenylalanine Is Synthesized Predominantly via the Arogenate Pathway in Petunia Petals

Hiroshi Maeda, Aij K Shasany, Jennifer Schnepp, Irina Orlova, Goro Taguchi, Bruce R. Cooper, David Rhodes, Eran Pichersky, and Natalia Dudareva

Genomic and Coexpression Analyses Predict Multiple Genes Involved in Triterpene Saponin Biosynthesis in *Medicago truncatula*

Marina A. Naoumkina, Luzia V. Modolo, David V. Huhman, Ewa Urbanczyk-Woźniak, Yuhong Tang, Lloyd W. Sumner, and Richard A. Dixon
Alkyresorcinol Synthases Expressed in Sorghum bicolor Root Hairs Play an Essential Role in the Biosynthesis of the Allelopathic Benzoquinone Sorgoleone


The Arabidopsis thaliana Myo-Inositol 1-Phosphate Synthase1 Gene Is Required for Myo-inositol Synthesis and Suppression of Cell Death

Janet L. Donahue, Shannon R. Alford, Javad Torabinejad, Rachel E. Kerwin, Aida Nourbakhsh, W. Keith Ray, Marcy Herrick, Xinyi Huang, Blair M. Lyons, Pyae P. Hein, and Glenda E. Gillaspy

High-Affinity Manganese Uptake by the Metal Transporter NRAMP1 Is Essential for Arabidopsis Growth in Low Manganese Conditions

Rémy Cailliatte, Adam Schikora, Jean-François Briat, Stéphane Mari, and Catherine Curie

Endosome-Associated CRT1 Functions Early in Resistance Gene–Mediated Defense Signaling in Arabidopsis and Tobacco

Hong-Gu Kang, Chang-Sik Oh, Masanao Sato, Fumiaki Katagiri, Jane Glaizebrook, Hideki Takahashi, Pradeep Kachroo, Gregory B. Martin, and Daniel F. Klessig

Promoters of the Barley Germin-Like GER4 Gene Cluster Enable Strong Transgene Expression in Response to Pathogen Attack

Axe Himmelbach, Luo Liu, Uwe Zierold, Lothar Altschmied, Helmut Maucher, CFranziska Beier, Doreen Müller, Gotz Hensel, Andreas Heise, Andres Schützendübel, Jochen Kumlehn, and Patrick Schweizer

Common Genetic Pathways Regulate Organ-Specific Infection-Related Development in the Rice Blast Fungus

Sara L. Tucker, Maria I. Besi, Rita Galhano, Marina Franceschetti, Stephan Goetz, Steven Lenhert, Anne Osbourn, and Ane Sesma

Innate Immune Responses Activated in Arabidopsis Roots by Microbe-Associated Molecular Patterns

Yves A. Millet, Cristian H. Danna, Nicole K. Clay, Wisuwat Songnuan, Matthew D. Simon, Danièle Werck-Reichhart, and Frederik M. Ausubel

CORRECTION


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