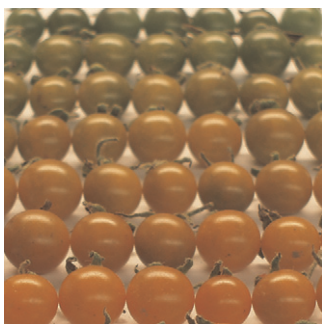


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ON THE COVER



The fleshy expansion and ripening of fruits make them attractive to seed-dispersing organisms, including humans. Using RNA interference gene repression and ectopic over-expression, Vrebalov et al. (pages 3041–3062) show that *TAGL1*, the tomato ortholog of *Arabidopsis SHATTER-PROOF (SHP)* MADS-box genes, is necessary for both ripening and fleshy expansion of tomato. *SHP1* and *SHP2* are necessary for silique shattering in *Arabidopsis*. This indicates broad functional conservation of these genes (a role in seed dispersal) among very different fruit types, but evolution of distinct molecular functions for these MADS-box orthologs in different species, namely fruit expansion and ripening in tomato and pod shatter in *Arabidopsis* (photo by Ryan McQuinn).

IN THIS ISSUE

- Tissue-Specific siRNAs That Silence *CHS* Genes in Soybean** 2983
Nancy A. Eckardt

IN BRIEFS

- OWL1 Is a Phytochrome A Signaling Component Dedicated to the Very Low Fluence Response** 2985
Nancy R. Hofmann
- Loss of an Exosome Complex Component Potentiates *R* Gene-Independent Cell Death in Barley** 2986
Jennifer Mach

RESEARCH ARTICLES

- A Population Genomics Study of the *Arabidopsis* Core Cell Cycle Genes Shows the Signature of Natural Selection** 2987
Roel Sterken, Raphaël Kiekens, Emmy Coppens, Ilse Vercauteren, Marc Zabeau, Dirk Inzé, Jonathan Flowers, and Marnik Vuylsteke
- Evolution of Allometry in *Antirrhinum*** 2999
Xianzhong Feng, Yvette Wilson, Jennifer Bowers, Richard Kennaway, Andrew Bangham, Andrew Hannah, Enrico Coen, and Andrew Hudson
- MOSAIC FLORAL ORGANS1, an *AGL6*-Like MADS Box Gene, Regulates Floral Organ Identity and Meristem Fate in Rice** 3008
Shinnosuke Ohmori, Mayumi Kimizu, Maiko Sugita, Akio Miyao, Hirohiko Hirochika, Eiji Uchida, Yasuo Nagato, and Hitoshi Yoshida
- Exocytosis Precedes and Predicts the Increase in Growth in Oscillating Pollen Tubes** 3026
Sylvester T. McKenna, Joseph G. Kunkel, Maurice Bosch, Caleb M. Rounds, Luis Vidali, Lawrence J. Winship, and Peter K. Hepler
- Fleshy Fruit Expansion and Ripening Are Regulated by the Tomato SHATTERPROOF Gene *TAGL1*** 3041
Julia Vrebalov, Irvin L. Pan, Antonio Javier Matas Arroyo, Ryan McQuinn, MiYoung Chung, Mervin Poole, Jocelyn Rose, Graham Seymour, Silvana Grandillo, James Giovannoni, and Vivian F. Irish
- Endogenous, Tissue-Specific Short Interfering RNAs Silence the Chalcone Synthase Gene Family in *Glycine max* Seed Coats** 3063
Jigyasa H. Tuteja, Gracia Zabala, Kranthi Varala, Matthew Hudson, and Lila O. Vodkin

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- Stage-Specific Regulation of *Solanum lycopersicum* Leaf Maturation by Class 1 KNOTTED1-LIKE HOMEBOX Proteins** [C](#) [W](#) [OA](#) 3078
Eilon Shani, Yogev Burko, Lilach Ben-Yaakov, Yael Berger, Ziva Amsellem, Alexander Goldshmidt, Eran Sharon, and Naomi Ori
- LYRATE Is a Key Regulator of Leaflet Initiation and Lamina Outgrowth in Tomato** [C](#) [W](#) [OA](#) 3093
Rakefet David-Schwartz, Daniel Koenig, and Neelima R. Sinha
- YABBYs and the Transcriptional Corepressors LEUNIG and LEUNIG_HOMOLOG Maintain Leaf Polarity and Meristem Activity in *Arabidopsis*** [W](#) 3105
Melissa I. Stahle, Janine Kuehlich, Lindsay Staron, Albrecht G. von Arnim, and John F. Golz
- Phenotypic Plasticity of Adventitious Rooting in *Arabidopsis* Is Controlled by Complex Regulation of AUXIN RESPONSE FACTOR Transcripts and MicroRNA Abundance** [W](#) 3119
Laurent Gutierrez, John D. Bussell, Daniel I. Păcurar, Josèli Schwambach, Monica Păcurar, and Catherine Bellini
- NO VEIN Mediates Auxin-Dependent Specification and Patterning in the *Arabidopsis* Embryo, Shoot, and Root** [W](#) 3133
Ryuji Tsugeki, Franck Anicet Ditengou, Yoshinori Sumi, William Teale, Klaus Palme, and Kiyotaka Okada
- Functional Analyses of *LONELY GUY* Cytokinin-Activating Enzymes Reveal the Importance of the Direct Activation Pathway in *Arabidopsis*** [W](#) [OA](#) 3152
Takeshi Kuroha, Hiroki Tokunaga, Mikiko Kojima, Nanae Ueda, Takashi Ishida, Shingo Nagawa, Hiroo Fukuda, Keiko Sugimoto, and Hitoshi Sakakibara
- Protein Phosphatases 2C Regulate the Activation of the Snf1-Related Kinase OST1 by Abscisic Acid in *Arabidopsis*** [W](#) 3170
Florina Vlad, Silvia Rubio, Americo Rodrigues, Caroline Sirichandra, Christophe Belin, Nadia Robert, Jeffrey Leung, Pedro L. Rodriguez, Christiane Laurière, and Sylvain Merlot
- Crosstalk between Cold Response and Flowering in *Arabidopsis* Is Mediated through the Flowering-Time Gene *SOC1* and Its Upstream Negative Regulator *FLC*** 3185
Eunjoon Seo, Horim Lee, Jin Jeon, Hanna Park, Jungmook Kim, Yoo-Sun Noh, and Ilha Lee
- DIE NEUTRALIS* and *LATE BLOOMER 1* Contribute to Regulation of the Pea Circadian Clock** [W](#) 3198
Lim Chee Liew, Valérie Hecht, Rebecca E. Laurie, Claire L. Knowles, Jacqueline K. Vander Schoor, Richard C. Macknight, and James L. Weller
- OWL1: An *Arabidopsis* J-Domain Protein Involved in Perception of Very Low Light Fluences** [W](#) 3212
Julia Kneissl, Volker Wachtler, Nam-Hai Chua, and Cordelia Bolle
- Domain Swapping to Assess the Mechanistic Basis of *Arabidopsis* Phototropin 1 Receptor Kinase Activation and Endocytosis by Blue Light** [C](#) [W](#) [OA](#) 3226
Eirini Kaiserli, Stuart Sullivan, Matthew A. Jones, Kevin A. Feeney, and John M. Christie
- The Photosystem II Light-Harvesting Protein Lhcb3 Affects the Macrostructure of Photosystem II and the Rate of State Transitions in *Arabidopsis*** [W](#) [OA](#) 3245
Jakob T. Damkjær, Sami Kereiche, Matthew P. Johnson, Laszlo Kovacs, Anett Z. Kiss, Egbert J. Boekema, Alexander V. Ruban, Peter Horton, and Stefan Jansson
- ARABIDOPSIS TRITHORAX-RELATED7* Is Required for Methylation of Lysine 4 of Histone H3 and for Transcriptional Activation of *FLOWERING LOCUS C*** [C](#) [W](#) 3257
Yosuke Tamada, Jae-Young Yun, Seung chul Woo, and Richard M. Amasino
- Arabidopsis* Decapping 5 Is Required for mRNA Decapping, P-Body Formation, and Translational Repression during Postembryonic Development** [W](#) 3270
Jun Xu and Nam-Hai Chua
- Transcript-Based Cloning of *RRP46*, a Regulator of rRNA Processing and *R* Gene-Independent Cell Death in Barley-Powdery Mildew Interactions** [W](#) [OA](#) 3280
Liu Xi, Matthew J. Moscou, Yan Meng, Weihui Xu, Rico A. Caldo, Miranda Shaver, Dan Nettleton, and Roger P. Wise

- Cotranslational Proteolysis Dominates Glutathione Homeostasis to Support Proper Growth and Development** [C](#) [W](#) 3296
Frédéric Frottin, Christelle Espagne, José A. Traverso, Caroline Mauve, Benoît Valot, Caroline Lelarge-Trouverie, Michel Zivy, Graham Noctor, Thierry Meinel, and Carmela Giglione
- CYP76M7 Is an *ent*-Cassadiene C11 α -Hydroxylase Defining a Second Multifunctional Diterpenoid Biosynthetic Gene Cluster in Rice** [W](#) [OA](#) 3315
Sivakumar Swaminathan, Dana Morrone, Qiang Wang, D. Bruce Fulton, and Reuben J. Peters
- The Ferroportin Metal Efflux Proteins Function in Iron and Cobalt Homeostasis in *Arabidopsis*** [W](#) [OA](#) 3326
Joe Morrissey, Ivan R. Baxter, Joohyun Lee, Liangtao Li, Brett Lahner, Natasha Grotz, Jerry Kaplan, David E. Salt, and Mary Lou Guerinot
- A Zinc Finger Transcription Factor ART1 Regulates Multiple Genes Implicated in Aluminum Tolerance in Rice** [C](#) [W](#) 3339
Naoki Yamaji, Chao Feng Huang, Sakiko Nagao, Masahiro Yano, Yutaka Sato, Yoshiaki Nagamura, and Jian Feng Ma
- Overexpression of Several *Arabidopsis* Histone Genes Increases *Agrobacterium*-Mediated Transformation and Transgene Expression in Plants** [W](#) 3350
Gabriela N. Tenea, Joerg Spantzel, Lan-Ying Lee, Yanmin Zhu, Kui Lin, Susan J. Johnson, and Stanton B. Gelvin
- Rin4* Causes Hybrid Necrosis and Race-Specific Resistance in an Interspecific Lettuce Hybrid** [W](#) 3368
Marieke J.W. Jeuken, Ningwen W. Zhang, Leah K. McHale, Koen Pelgrom, Erik den Boer, Pim Lindhout, Richard W. Michelmore, Richard G.F. Visser, and Rients E. Niks
- Sfp-Type 4'-Phosphopantetheinyl Transferase Is Indispensable for Fungal Pathogenicity** [W](#) 3379
Ralf Horbach, Alexander Graf, Fabian Weihmann, Luis Antelo, Sebastian Mathea, Johannes C. Liermann, Till Opatz, Eckhard Thines, Jesús Aguirre, and Holger B. Deising
- The O-Mannosyltransferase PMT4 Is Essential for Normal Appressorium Formation and Penetration in *Ustilago maydis*** [W](#) [OA](#) 3397
Alfonso Fernández-Álvarez, Alberto Elías-Villalobos, and José I. Ibeas

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