The maize transposable element Ds has been used extensively in gene tagging programs, but a large-scale collection of insertions has not been available to the maize community. In this issue (pages 1667–1685), Vollbrecht and colleagues position over 1500 Ds insertions throughout the maize genome. The vast majority of the insertions targeted gene-rich regions of the genome and preferentially inserted into exon and intron sequence when compared with the distribution of Mutator insertions. This collection will serve as a foundation for future gene tagging programs in maize. The cover shows the instability of a Ds insertion at the a1 locus. Excisions of the element restore gene function, resulting in multiple colored sectors in anthers and glumes of the tassel.
MOTHER OF FT AND TFL1 Regulates Seed Germination through a Negative Feedback Loop Modulating ABA Signaling in Arabidopsis

Wanyan Xi, Chang Liu, Xingliang Hou, and Hao Yu

Arabidopsis ROOT UVB SENSITIVE2/WEAK AUXIN RESPONSE1 Is Required for Polar Auxin Transport

L. Ge, W. Peer, S. Robert, R. Swarup, S. Ye, M. Prigge, J.D. Cohen, J. Friml, A. Murphy, D. Tang, and M. Estelle

Gravitropism of Arabidopsis thaliana Roots Requires the Polarization of PIN2 toward the Root Tip in Meristematic Cortical Cells

Abidur Rahman, Maho Takahashi, Kyohei Shibasaki, Shuang Wu, Takehito Inaba, Seiji Tsurumi, and Tobias I. Baskin

RAV-Like1 Maintains Brassinosteroid Homeostasis via the Coordinated Activation of BRI1 and Biosynthetic Genes in Rice

Byoung Il Je, Hai Long Piao, Soon Ju Park, Sung Han Park, Chul Min Kim, Yuan Hu Xuan, Su Hyun Park, Jin Huang, Yang Do Choi, Gynheung An, Hann Ling Wong, Shozo Fujikita, Min-Chul Kim, Ko Shimamoto, and Chang-deok Han

Arabidopsis RETINOBLASTOMA-RELATED Is Required for Stem Cell Maintenance, Cell Differentiation, and Lateral Organ Production

Lorenzo Borghi, Ruben Gutzat, Johannes Füttener, Ye'chan Laizet, Lars Hennig, and Wilhelm Gruissem

Phospholipase A2 Is Required for PIN-FORMED Protein Trafficking to the Plasma Membrane in the Arabidopsis Root

Ok Ran Lee, Soo Jin Kim, Hae Jin Kim, Jeum Kyu Hong, Stephen Beungtae Ryu, Sang Ho Lee, Anindya Ganguly, and Hyung-Taeg Cho

The Deubiquitinating Enzyme AMSH3 Is Required for Intracellular Trafficking and Vacuole Biogenesis in Arabidopsis thaliana

Erika Isono, Anthi Katsiarimpa, Isabel Karin Müller, Franziska Anzenberger, York-Dieter Sterhof, Niko Geldner, Joanne Chory, and Claus Schwuchheimer

Protection of Telomerases 1 Is Required for Telomere Integrity in the Moss Physcomitrella patens

Eugene V. Shakirov, Pierre-François Perroud, Andrew D. Nelson, Maren E. Cannell, Ralph S. Quatrano, and Dorothy E. Shippen

Crystal Structures of DNA-Whirly Complexes and Their Role in Arabidopsis Organelle Genome Repair

Laurent Cappadocia, Alexandre Maréchal, Jean-Sébastien Parent, Étienne Lepage, Jurgen Sygusch, and Normand Brisson

Myosin XI Is Essential for Tip Growth in Physcomitrella patens

Luis Vidali, Graham M. Burkart, Robert C. Augustine, Erin Kerdavid, Luis Vidali, Graham M. Burkart, Robert C. Augustine, Erin Kerdavid, Joanne Chory, and Claus Schwuchheimer

Class XI Myosins Are Required for Development, Cell Expansion, and F-Actin Organization in Arabidopsis

Valera V. Peremyslov, Alexey I. Prokhnevsky, and Valerian V. Dolja

The TOR Pathway Modulates the Structure of Cell Walls in Arabidopsis

Ruth-Maria Leiber, Florian John, Yves Verhertbruggen, Anouck Diet, J. Paul Knox, and Christoph Ringli

The Mg-Chelatase H Subunit of Arabidopsis Antagonizes a Group of WRKY Transcription Repressors to Relieve ABA-Responsive Genes of Inhibition

Yi Shang, Lu Yan, Zhi-Qiang Liu, Zheng Cao, Chao Mei, Qi Xin, Fu-Qing Wu, Xiao-Fang Wang, Shu-Yuan Du, Tao Jiang, Xiao-Feng Zhang, Rui Zhao, Hai-Li Sun, Rui Liu, Yong-Tao Yu, and Da-Peng Zhang

The Conserved Splicing Factor SUA Controls Alternative Splicing of the Developmental Regulator ABI3 in Arabidopsis

Matteo Sugliani, Vittoria Brambilla, Emile J.M. Clerkx, Maarten Koomen, and Wim J.J. Soppe

The Molecular Basis for Distinct Pathways for Protein Import into Arabidopsis Chloroplasts

Hitoshi Inoue, Caleb Rounds, and Danny J. Schnell
EOBII, a Gene Encoding a Flower-Specific Regulator of Phenylpropanoid Volatiles’ Biosynthesis in Petunia

Ben Spitzer-Rimon, Elena Marhevka, Oren Barkai, Ira Marton, Ort Edelbaum, Tania Masci, Naveen-Kumar Prathapani, Elena Shklarman, Marianna Ovadis, and Alexander Vainstein

An Orange Ripening Mutant Links Plastid NAD(P)H Dehydrogenase Complex Activity to Central and Specialized Metabolism during Tomato Fruit Maturation

Shai Nashilevitz, Cathy Melamed-Bessudo, Yinon Izkovich, Ilana Rogachev, Sonia Osorio, Maxim Itkin, Avital Adato, Ilya Pankratov, Joseph Hirschberg, Alisdair R. Fernie, Shmuel Wolf, Björn Usadel, Avraham A. Levy, Dominique Rumeau, and Asaph Aharoni

Arabidopsis Small Ubiquitin-Like Modifier Paralogs Have Distinct Functions in Development and Defense

Harrold A. van den Burg, Ramachandra K. Kini, Robert C. Schuurink, and Frank L.W. Takken

Internalization of Flax Rust Avirulence Proteins into Flax and Tobacco Cells Can Occur in the Absence of the Pathogen

Maryam Rafiqi, Pamela H.P. Gan, Michael Ravensdale, Gregory J. Lawrence, Jeffrey G. Ellis, David A. Jones, Adrienne R. Hardham, and Peter N. Dodds

A Pseudomonas syringae ADP-Ribosyltransferase Inhibits Arabidopsis Mitogen-Activated Protein Kinase Kinases

Yujing Wang, Jifeng Li, Shuguo Hou, Xingwei Wang, Yuan Li, Dongtao Ren, She Chen, Xiaoyan Tang, and Jian-Min Zhou

A Vascular Arsenite Transporter Necessary for Arsenic Tolerance in the Arsenic Hyperaccumulating Fern Pteris vittata is Missing in Flowering Plants

Emily Indriolo, GunNam Na, Danielle Ellis, David E. Salt, and Jo Ann Banks

RNA-Seq Analysis of Sulfur-Deprived Chlamydomonas Cells Reveals Aspects of Acclimation Critical for Cell Survival

David González-Ballester, David Casero, Shawn Cokus, Matteo Pellegrini, Sabeeha S. Merchant, and Arthur R. Grossman

Sho1 and Msb2-Related Proteins Regulate Appressorium Development in the Smut Fungus Ustilago maydis

Daniel Lanver, Artemio Mendoza-Mendoza, Andreas Brachmann, and Regine Kahmann

Some figures in this article are displayed in color online but in black and white in the print edition.

Online version contains Web-only data.

Open Access articles can be viewed online without a subscription.
This information is current as of July 9, 2017

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>eTOCs</td>
<td>Sign up for eTOCs at: <a href="http://www.plantcell.org/cgi/alerts/ctmain">http://www.plantcell.org/cgi/alerts/ctmain</a></td>
</tr>
<tr>
<td>CiteTrack Alerts</td>
<td>Sign up for CiteTrack Alerts at: <a href="http://www.plantcell.org/cgi/alerts/ctmain">http://www.plantcell.org/cgi/alerts/ctmain</a></td>
</tr>
<tr>
<td>Subscription Information</td>
<td>Subscription Information for <em>The Plant Cell</em> and <em>Plant Physiology</em> is available at: <a href="http://www.aspb.org/publications/subscriptions.cfm">http://www.aspb.org/publications/subscriptions.cfm</a></td>
</tr>
</tbody>
</table>