

On the Cover: The leaf epidermis manifests some fascinating cell shapes. This rendering is based on a scanning electron micrograph of the epidermis of an Arabidopsis cotyledon and illustrates pairs of kidney-shaped guard cells (red) interspersed between pavement cells which form wavy shapes that interlock into a jigsaw puzzle pattern. The wavy cell contours are an orchestration of the cytoskeleton and cell wall mechanics within development. Image by: Amir J. Bidhendi and Anja Geitmann.

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^[OPEN]The Synthetic Biology Toolkit for Photosynthetic Microorganisms. *Konstantinos Vavitsas, Pierre Crozet, Marcos Hamborg Vinde, Fiona Davies, Stéphane D. Lemaire, and Claudia E. Vickers*

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^[CC-BY]Recovering Wind-Induced Plant Motion in Dense Field Environments via Deep Learning and Multiple Object Tracking. *Jonathon A. Gibbs, Alexandra J. Burgess, Michael P. Pound, Tony P. Pridmore, and Erik H. Murchie*

Deep learning combined with multiple object tracking detects ear tips in images and videos of field-grown wheat and can recover simple movement patterns caused by wind. 28

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^[OPEN]A Conserved Sequence from Heat-Adapted Species Improves Rubisco Activase Thermostability in Wheat. *Andrew P. Scafaro, Nadine Bautsoens, Bart den Boer, Jeroen Van Rie, and Alexander Gallé*

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^[OPEN]WRINKLED1 Regulates BIOTIN ATTACHMENT DOMAIN-CONTAINING Proteins that Inhibit Fatty Acid Synthesis. *Hui Liu, Zhiyang Zhai, Kate Kuczynski, Jantana Keereetaweep, Jorg Schwender, and John Shanklin*

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^[OPEN]Ectopic Defense Gene Expression Is Associated with Growth Defects in *Medicago truncatula* Lignin Pathway Mutants. Chan Man Ha, Dennis Fine, Anil Bhatia, Xiaolan Rao, Madhavi Z. Martin, Nancy L. Engle, Daniel J. Wherritt, Timothy J. Tschaplinski, Lloyd W. Sumner, and Richard A. Dixon

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^[OPEN]eIFiso4G Augments the Synthesis of Specific Plant Proteins Involved in Normal Chloroplast Function. Andrew D. Lellis, Ryan M. Patrick, Laura K. Mayberry, Argelia Lorence, Zachary C. Campbell, Johnna L. Roose, Laurie K. Frankel, Terry M. Bricker, Hanjo A. Hellmann, Roderick W. Mayberry, Ana Solis Zavala, Grace S. Choy, Dennis C. Wylie, Mustafa Abdul-Moheeth, Adeeb Masood, Amy G. Prater, Hailey E. Van Hoorn, Nicola A. Cole, and Karen S. Browning

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^[OPEN]Pectin Chemistry and Cellulose Crystallinity Govern Pavement Cell Morphogenesis in a Multi-Step Mechanism. Bara Altartouri, Amir J Bidhendi, Tomomi Tani, Johnny Suzuki, Christina Conrad, Youssef Chebli, Na Liu, Chithra Karunakaran, Giuliano Scarcelli, and Anja Geitmann

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[OPEN] A Vacuolar Phytosiderophore Transporter Alters Iron and Zinc Accumulation in Polished Rice Grains. Jing Che, Kengo Yokosho, Naoki Yamaji, and Jian Feng Ma

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[OPEN] Salt Enhances Disease Resistance and Suppresses Cell Death in Ceramide Kinase Mutants. Yu-Bing Yang, Jian Yin, Li-Qun Huang, Jian Li, Ding-Kang Chen, and Nan Yao

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[OPEN] The Tomato Translational Landscape Revealed by Transcriptome Assembly and Ribosome Profiling. *Hsin-Yen Larry Wu, Gaoyuan Song, Justin W. Walley, and Polly Yingshan Hsu*

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