Transition from meiotic to mitotic divisions directly leads to the onset of embryogenesis in animals. By contrast, plant meiospores first develop into the haploid generation of the gametophyte, requiring additional mitotic divisions. On pages 4974–4991, Juranic et al. report that a protein homologous to a key animal protein regulating meiosis–mitosis transition is required to organize the second meiotic and first mitotic spindle apparatus in maize. Silencing of the germ line–specific MATH-BTB domain gene MAB1 causes defects in spindle organization together with chromosome loss during meiotic divisions and failure to establish germ cell fate during the first asymmetric mitotic divisions in both germ lines. The cover image shows a tetrad of maize microspores with fluorescently labeled microtubules and DAPI-stained nuclei.
The R2R3-MYB–Like Regulatory Factor EOB1, Acting Downstream of EOBII, Regulates Scent Production by Activating ODO1 and Structural Scent-Related Genes in Petunia

Ben Spitzer-Rimon, Moran Farhi, Boaz Albo, Alon Cna’an, Michal Moyal Ben Zvi, Tania Masci, Ort Edelbaum, Yixun Yu, Elena Shkilerman, Marriana Ovadis, and Alexander Vainstein

UBIQUITIN-SPECIFIC PROTEASE16 Modulates Salt Tolerance in Arabidopsis by Regulating Na+/H+ Antiport Activity and Serine Hydroxymethyltransferase Stability

Huapeng Zhou, Jinfeng Zhao, Yongqing Yang, Changxi Chen, Yanfen Liu, Xuehua Jin, Limei Chen, Xueyong Li, Xing Wang Deng, Karen S. Schumaker, and Yan Guo

Pipelicolic Acid, an Endogenous Mediator of Defense Amplification and Priming, Is a Critical Regulator of Inducible Plant Immunity

Hana Návarová, Friederike Bernsdorff, Anne-Christin Döring, and Jürgen Zeier

Relocalization of Late Blight Resistance Protein R3a to Endosomal Compartments Is Associated with Effector Recognition and Required for the Immune Response

Stefan Engelhardt, Petra C. Boevink, Miles R. Armstrong, Maria Brisa Ramos, Ingo Hein, and Paul R.J. Birch

In Planta Stage-Specific Fungal Gene Profiling Elucidates the Molecular Strategies of Fusarium graminearum Growing inside Wheat Coleoptiles

Xiao-Wei Zhang, Lei-Jie Jia, Yan Zhang, Gang Jiang, Xuan Li, Dong Zhang, and Wei-Hua Tang

Natural Variation in Small Molecule–Induced TIR-NB-LRR Signaling Induces Root Growth Arrest via EDS1- and PAD4-Complexed R Protein VICTR in Arabidopsis

Tae-Houn Kim, Hans-Henning Kunz, Saikat Bhattacharjee, Felix Hauser, Jiyoung Park, Cawas Engineer, Amy Liu, Tracy Ha, Jane E. Parker, Walter Gassmann, and Julian I. Schroeder

CORRECTION


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