Land plants synthesize a family of flavonoid metabolites that provide pigmentation in flowers, fruits, and seeds to attract pollinators and seed dispersers. The cover image illustrates the accumulation of anthocyanin, the major flavonoid pigment, in the blooming flowers and developing siliques of Arabidopsis species. Zhang et al. (pages 1157–1174) discovered a crucial proteolytic regulator, a Kelch domain-containing F-box (KFB) protein, in the model plant Arabidopsis, which specifically interacts with chalcone synthase in the flavonoid biosynthetic pathway and mediates its stability in response to the development cues and environmental stimuli, thereby coordinately controlling flavonoid production. This work deepens our mechanistic understanding of the molecular regulation of flavonoid pigment synthesis and provides us with a molecular tool for engineering flavonoid accumulation in plants. Photo by Roger Stoutenburgh.
Tissue-Specific Transcriptomics Reveals an Important Role of the Unfolded Protein Response in Maintaining Fertility upon Heat Stress in Arabidopsis

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KNOTTED1 Cofactors, BLH12 and BLH14, Regulate Internode Patterning and Vein Anastomosis in Maize

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The Mitochondrial DNA-Associated Protein SWIB5 Influences mtDNA Architecture and Homologous Recombination

Jonas Blomme, Olivier Van Aken, Jelle Van Leene, Teddy Jégou, Riet De Rycke, Michel De Bruyne, Jasmien Vercruysse, Jonah Nolf, Twiggie Van Dalee, Liesbeth De Mide, Mattias Vermeersch, Catherine Colas des Francs-Small, Geert De Jaeger, Moussa Benhamed, A. Harvey Millar, Dirk Inzé, and Nathalie Gonzalez
A Proteolytic Regulator Controlling Chalcone Synthase Stability and Flavonoid Biosynthesis in Arabidopsis

Xuebin Zhang, Carolina Abraham, Thomas A. Colquhoun, and Chang-Jun Liu

CORRECTION


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