ON THE COVER

Stomata are formed through a series of differentiation events mediated by a trio of basic-helix-loop-helix (bHLH) proteins: SPEECH-LESS (SPCH), MUTE, and FAMA. Through characterization of a dominant mutant, scream-D (scrm-D), which produces an epidermis consisting entirely of stomata, Kanaoka et al. (pages 1775–1785) identified two paralogous Arabidopsis bHLH proteins, SCRM and SCRM2, that partner with SPCH, MUTE, and FAMA to drive initiation, proliferation, and terminal differentiation of stomata. The cover shows the rosette leaf epidermis of a mute scrm-D double mutant, which is composed of triangular stomatal precursor cells called meristemoids and their sister cells. Surprisingly, SCRM is ICE1, a key upstream regulator of cold-induced gene expression, therefore suggesting a link between the transcriptional regulation of environmental adaptation and development.

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CORRECTION


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