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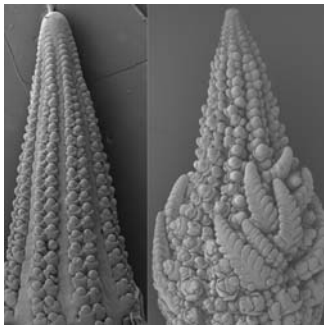
ON THE COVER



Grass seed (technically referred to as grain) are borne on axillary branches whose branching patterns dictate most of the variation in grass inflorescence architecture. Normal maize ears are unbranched, and tassels have long branches only at their base. The *ramosa2* (*ra2*) mutant of maize has increased branching, with short branches replaced by long, indeterminate ones. Bortiri et al. (pages 574–585) cloned *ra2* and report that it encodes a LOB domain transcription factor. The mutant phenotype and early expression pattern of *ra2* indicate that it functions in the patterning of stem cells in axillary meristems. The *ra2* expression pattern is conserved in rice, barley, sorghum, and maize, suggesting that *ra2* is critical for shaping the initial steps of grass inflorescence architecture. On the cover, a scanning electron microscopy image of a *ra2* mutant ear (right) compared to a normal ear (left) shows the loss of determinacy and branching in the *ra2* mutant.

IN THIS ISSUE

CURRENT PERSPECTIVE ESSAYS

RESEARCH ARTICLES

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