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ON THE COVER






According to the ABC(DE) model for flower development, C-genes are required for stamen and carpel development and floral determinacy, whereas D-genes were proposed to be required for ovule identity. Both C- and D-genes belong to the AGAMOUS subfamily of MADS box transcription factors. Heijmans et al. (pages 2305–2317) investigated the role of the two C-type and two D-type MADS box proteins in petunia (*Petunia hybrida*) and show that the C- and D-genes overlap functionally in determining ovule identity and in floral termination. In addition, the two C-genes overlap largely in stamen and carpel identity specification, unlike the pronounced subfunctionalization observed in other species. The cover image shows the inside of an ovary (ovary walls removed) of a triple mutant line in which the function of both D-genes (*FLORAL BINDING PROTEIN7* [*FBP7*] and *FBP11*) and one of the two C-genes (*PETUNIA MADS BOX GENE3*) has been disrupted, leading to the development of a giant ovary and the homeotic conversion of the ovules into carpel-like structures.

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