

T H E  
**PLANT**  
C E L L

Volume 24 Number 6 June 2012

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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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*The Plant Cell* (ISSN 1040-4651, online ISSN 1532-298X) is published monthly (one volume per year) by the American Society of Plant Biologists, 15501 Monona Drive, Rockville, MD 20855-2768, and is produced by Dartmouth Journal Services, Waterbury, VT. The institutional price for the print and online versions is based on type of institution; contact [institution@aspb.org](mailto:institution@aspb.org). A subscription includes both *The Plant Cell* and *Plant Physiology*; single copies may be purchased for \$95 each, plus \$10 shipping (U.S.) or \$12 (outside U.S.). Members of the American Society of Plant Biologists may subscribe to *The Plant Cell* for \$240. Nonmember individuals may subscribe for \$375. For matters regarding subscriptions, contact Suzanne Cholwek, ASPB, 15501 Monona Drive, Rockville, MD 20855-2768; telephone 301/296-0926; fax 301/251-6740; e-mail [scholwek@aspb.org](mailto:scholwek@aspb.org). Notify ASPB in writing within 3 months (domestic) or 6 months (foreign) of issue date, and defective copies or copies lost in the mail will be replaced. Send all inquiries regarding display advertising to FASEB AdNet, 9650 Rockville Pike, Bethesda, MD 20814-3998; telephone 301/634-7791; fax 301/634-7153; e-mail [adnet@faseb.org](mailto:adnet@faseb.org). Periodicals postage paid at Rockville, MD 20850, and at additional mailing offices.

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