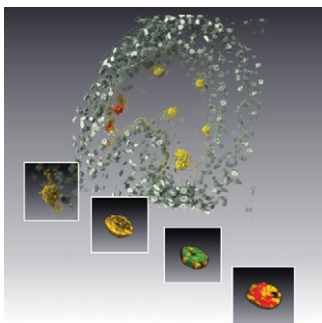


T H E  
**PLANT**  
C E L L

Volume 19 Number 6 June 2007

The electronic form of this issue, available at [www.plantcell.org](http://www.plantcell.org), is the journal of record.

**ON THE COVER**



The endosperm of flowering plants is a triploid nutritious seed tissue surrounding the embryo. Baroux et al. (pages 1782–1794) found an atypical chromatin organization in endosperm nuclei, which responds to imbalanced parental dosage. The main image shows a three-dimensional reconstruction of a young *Arabidopsis* seed stained in whole mount for DNA. The endosperm nuclei (yellow) fill the seed inside the sporophytic seed coat (green), while the zygote has just divided once (two nuclei; orange). The insets from left to right show various aspects of endosperm nuclei: (1) they appear very large compared with sporophytic nuclei and are surrounded by mitochondria, (2) their chromatin shows atypical interspersed heterochromatin foci, (3) their euchromatin is enriched in the heterochromatic H3K9me1 mark (green), and (4) their chromosome territories are expanded (red). The image was created with Imaris 5.7 (Bitplane).

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*The Plant Cell* (ISSN 1040-4651, online ISSN 1531-298X) 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 \$75 each, plus \$7 shipping (U.S.) or \$9 (outside U.S.). Members of the American Society of Plant Biologists may subscribe to *The Plant Cell* for \$160. Nonmember individuals may subscribe for \$325. For matters regarding subscriptions, contact Suzanne Cholwek, ASPB, 15501 Monona Drive, Rockville, MD 20855-2768; telephone 301/251-0560, ext. 141; 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 Susan Mergenhagen, FASEB AdNet, 9650 Rockville Pike, Bethesda, MD 20814-3998; telephone 301/634-7103; fax 301/634-7153; e-mail [smergenhagen@faseb.org](mailto:smergenhagen@faseb.org). Periodicals postage paid at Rockville, MD 20850, and at additional mailing offices.

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