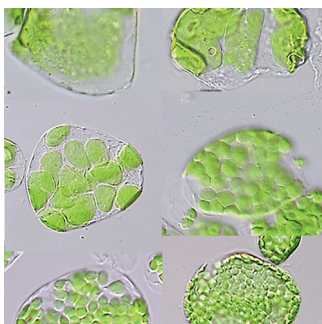


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ON THE COVER



Chloroplasts multiply by division, which is accomplished by constriction of envelope membranes at the division site. Okazaki et al. (663–674) show that PLASTID DIVISION1 (PDV1) and PDV2 proteins interact specifically with phosphatidylinositol 4-phosphate (PI4P) and PI4P negatively regulates chloroplast division. The cover image shows chloroplasts in single mesophyll cells of *Arabidopsis pdv1 pdv2* (upper left), *pdv1* (upper right), *pdv2* treated with PI4K inhibitor (middle left), the wild type (middle right), the wild type treated with PI4K inhibitor (lower left), and a *PDV2*- and *DRP5B*-overexpressing plant treated with PI4K inhibitor (lower right).

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