

T H E  
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**ON THE COVER**



Leaf variegation in *Arabidopsis yellow variegated* (*var*) mutants is due to a defect in chloroplast FtsH proteases involved in degradation of chloroplast proteins. Miura et al. (pages 1313–1328) identify *trans*-acting factors that suppress leaf variegation in *Arabidopsis var* mutants. These second-site mutations, including *fug1* and *sco1*, encode proteins involved in chloroplast protein synthesis, leading the authors to propose that the balance between protein synthesis and degradation is one of the key factors determining the variegated phenotype in *Arabidopsis* leaves. The cover image shows an *Arabidopsis var2* mutant against a background of an electron micrograph of chloroplasts from a *var2 fug1* double mutant, which lacks variegation and shows chloroplast structures comparable to those of the wild type, unlike the *var2* single mutant in which thylakoids and chloroplasts in pale sectors do not develop. See also the accompanying In This Issue article on pages 1135–1138.

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