

T H E
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ON THE COVER



The plastid-localized methylerythritol phosphate (MEP) pathway synthesizes the isoprenoid precursors of essential photosynthesis-related compounds and hormones. Flores-Pérez et al. (pages 1303–1315) report on the *Arabidopsis* mutant *rif1* (*resistant to inhibition by FSM*), which has a lesion in a GTPase homolog required for ribosome assembly and plastid protein synthesis. As shown on the cover, the *rif1* mutant grows in the presence of the MEP pathway inhibitor fosmidomycin, which causes a developmental block and severe albino phenotype in the wild type. The authors show that the mutant has increased levels of the first two enzymes of the MEP pathway, resulting from their decreased degradation in mutant plastids, and that the stromal Clp protease complex is involved in this process. The results suggest that plastidial isoprenoid biosynthesis is finely adjusted by regulating the degradation of MEP pathway enzymes.

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