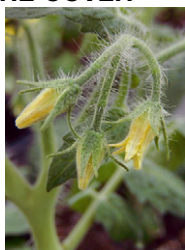


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**ON THE COVER**



Jasmonates are known as defense hormones, but are also involved in regulation of flower development as shown by the phenotype of jasmonate-insensitive mutants such as the *Arabidopsis* mutant *coi1-1* and the tomato mutant *jai1-1*, which are male and female sterile, respectively. Schubert et al. (pp. 1043–1062) show that ovules of *jai1-1* exhibit tremendous alterations in morphology and transcript profiles. The transcription factor SIMYB21 is highly expressed in wild type ovules and almost not expressed in *jai1-1*. Using a range of approaches, the authors demonstrate that SIMYB21 plays an important role in partially mediating jasmonate function in ovule and flower development. It is involved in the regulation of JA biosynthesis and action of auxin and gibberellin. The cover shows flower buds of the mutant *Slmyb21-3* showing abnormal flower development and female sterility. Photo by Ramona Schubert, Leibniz Institute of Plant Biochemistry, Halle, Germany.

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