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## ON THE COVER

The century-old maize *salmon silks* (*sm*) mutation produces salmon-colored silks, as shown in this image. This mutation is linked to the absence of maysin, a C-glycosyl flavone that confers natural resistance to the corn earworm (*Helicoverpa zea*), one of the most damaging pests of maize. Previous genetic analyses predicted the transcription factor Pericarp Color1 (P1) to be epistatic to *sm*, and subsequent studies identified two loci, *sm1* and *sm2*, that confer the *sm* phenotype. Casas et al. (pages 1297–1309) describe the molecular identification of the *Sm1* and *Sm2* gene products. *Sm1* encodes a UDP-rhamnose synthase and *Sm2* encodes a rhamnosyl transferase, both direct targets of P1. This work completes the molecular characterization of the maysin biosynthetic pathway, providing powerful tools for engineering tolerance to corn earworm in maize and other plants.

## IN BRIEF



## BREAKTHROUGH REPORT



## RESEARCH ARTICLES

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