ON THE COVER

LIPASE1 is induced by GA in the seed epidermis during germination and plays a role in fueling seedling growth until photosynthetic capacity is acquired. Rombolá-Caldentey et al. (pages 2905–2919) show that two HD-ZIP transcription factors, ATML1 and PDF2, play a role in the regulation of epidermal GA signaling. LIP1 is activated by GA due to the release of these HD-ZIP TFs from their inhibitory interaction with DELLLA proteins, an effect that is dependent on the L1-box sequence in the LIP1 promoter. The cover image shows results of in situ mRNA hybridization revealing that PDF2 mRNAs are specifically localized in the epidermis of the embryo axis (dark purple color) during this developmental stage, a location compatible with the proposed regulatory role.

IN BRIEF

Finding Dl2, the Dominant Gene That Specifies the Semideterminate Growth Habit in Soybean

Jennifer Lockhart

Unexpected Structure of Plant Promoters

Nancy A. Eckardt

Observe Them in Their Native Habitat: Atomic Force Microscopy of Photosynthetic Complexes in Thylakoid Membranes

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Polyploid Evolution of the Brassicaceae during the Cenozoic Era


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Identifies Arabidopsis Ca-Transporter Orthologs

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Dt2 Is a Gain-of-Function MADS-Domain Factor Gene That Specifies Semideterminacy in Soybean

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LNK1 and LNK2 Are Transcriptional Coactivators in the Arabidopsis Circadian Oscillator

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Arabidopsis DELLA and Two HD-ZIP Transcription Factors Regulate GA Signaling in the Epidermis through the L1 Box cis-Element

Belén Rombolá-Caldentey, Paloma Rueda-Romero, Raquel Iglesias-Fernández, Pilar Carbonero, and Luis Oñate-Sánchez

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The Cysteine Protease CEP1, a Key Executor Involved in Tapetal Programmed Cell Death, Regulates Pollen Development in Arabidopsis

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The Structure of the Catalytic Domain of a Plant Cellulose Synthase and Its Assembly into Dimers
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The Arabidopsis Malecin-Like Leucine-Rich Repeat Receptor-Like Kinase IOS1 Associates with the Pattern Recognition Receptors FLS2 and EFR and Is Critical for Priming of Pattern-Triggered Immunity

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