Lignins are highly complex polymers in plant cell walls formed by precursor monolignols. Peroxidases are known to be involved in lignin polymerization. Now, Berthet et al. (pages 1124–1137) show using mutational analysis that two laccases, LAC4 and LAC17, participate in the polymerization of lignins in Arabidopsis stems. These findings suggest that the genetic engineering of lignin-specific laccases is a potential tool for the fine-tuning of lignin content and structure. The cover shows a cross section from wild-type Arabidopsis stem tissue stained with Maüle reagent to show syringyl lignin content.
PlaNet: Combined Sequence and Expression Comparisons across Plant Networks Derived from Seven Species

Marek Mutwil, Sebastian Klie, Takayuki Tohge, Federico M. Giorgi, Olivia Wilkins, Malcolm M. Campbell, Alisdair R. Fernie, Björn Usadel, Zoran Nikoloski, and Staffan Persson

The Predicted Arabidopsis Interactome Resource and Network Topology-Based Systems Biology Analyses

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