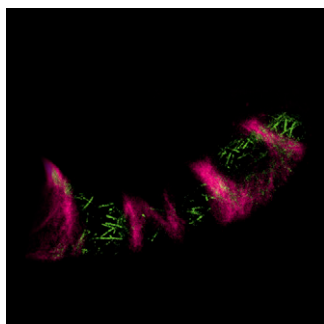


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ON THE COVER



Xylem vessels develop patterned secondary cell walls. Cortical microtubules are well known to guide the deposition of the secondary cell walls, yet knowledge about the proteins that directly regulate cortical microtubule dynamics is limited. Oda and Fukuda (pages 4439–4450) demonstrated that *Arabidopsis* Kinesin-13A is recruited to the future secondary pit area through the ROP11-MIDD1 pathway and locally depolymerizes cortical microtubules, which prevents secondary wall formation. The cover shows the cortex of differentiating cultured xylem cells expressing GFP-Kinesin-13A (green). Kinesin-13A is preferentially localized at the cortical microtubules in pits of the secondary walls (magenta).

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