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Light exerts multiple levels of influence on the Arabidopsis wound response
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The effect of competition from neighbours on stomatal conductance in lettuce and tomato plants
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The role of class A1 heat shock factors (HSFA1s) in response to heat and other stresses in Arabidopsis
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Expression of a Brassica napus heme oxygenase confers plant tolerance to mercury toxicity
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The rate-limiting step for CO2 assimilation at different temperatures is influenced by the leaf nitrogen content in several C3 crop species
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Complexation of Hg with phytochelatins is important for plant Hg tolerance

δ13C of leaf-respired CO2 reflects intrinsic water-use efficiency in barley


Ultra-small TiO2 nanoparticles disrupt microtubular networks in Arabidopsis thaliana
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Changes to the proteome and targeted metabolites of xylem sap in Brassica oleracea in response to salinity stress

The water–water cycle in leaves is not a major alternative electron sink for dissipation of excess excitation energy when CO2 assimilation is restricted
S. M. Davis & N. R. Baker

Toward the mechanism of NH4+ sensitivity mediated by Arabidopsis GDP-mannose pyrophosphorylase
C. F. Kempinski, R. Haffar & C. Barth

Sequential depolarization of root cortical and stelar cells induced by an acute salt shock: implications for Na+ and K+ transport into xylem vessels
L. H. Wegner, G. Stafeno, L. Shabala, M. Rossi, S. Mancuso & S. Shabala

Development of a hydrothermal time model that accurately characterises how thermoinhibition regulates seed germination
M. S. Watt, M. Bilbowley & W. E. Finch-Savage

Nanoparticles and microtubules

Cover caption: Confocal micrograph of hypocotyl epidermal cells of a transgenic Arabidopsis thaliana seedling expressing tubulin β fused to GFP (green) treated with titanium dioxide alizarin red S nanoconjugates (red). The image shows the absence of cortical microtubules that have been disassembled in response to nanoconjugate exposure. Wang et al. (pp. 811–820) show that TiO2 nanoparticles caused reorganization and elimination of microtubules in Arabidopsis.

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