Long-distance transport of endogenous gibberellins in Arabidopsis

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Plant hormones are small signaling compounds, often present at very low concentrations, which act either locally or near the site of synthesis, or in distant tissues. Gibberellins (GAs) are phytohormones controlling major aspects of plant growth and development. Although previous studies suggested the existence of a transport of GAs in plants, the nature and properties associated with this transport were unknown. By mixing old-style grafting with modern molecular genetics in *Arabidopsis*, we show that the GA_{12} precursor, although biologically inactive, is the chemical form of GA undergoing long- distance transport across plant organs. We propose that long-distance transport of GA_{12} across plant organs enables plants to adapt their growth and development in response to both endogenous and environmental inputs.