The plant stress hormone ethylene inhibits cell elongation in the hypocotyl and apical hook of seedlings grown in the dark. The scanning electron micrograph shows this ethylene-mediated phenotype in an Arabidopsis seedling (diameter ~0.3 millimeter at base of image). Mutational analysis of the response has led to the identification of genes in the ethylene signal transduction pathway. See page 667. In this special issue are collected News stories, Articles, and Reports on various topics in emerging plant science. [Image: J. R. Ecker, G. Ahlstrand, and J. Hayden]