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**On the Cover:** Cell-cell communication is essential for proper development and physiological function. To characterize genes that function to coordinate later leaf development, a screen was performed to identify mutants that develop sectors with reduced chloroplast pigmentation that violate cell lineage boundaries in maize leaves. In this issue, Braun et al. (pp. 1511–1522) characterize the *tie-dyed1* (*tdy1*) mutant that develops stable, nonclonal variegated leaf sectors. During sector formation, regions of leaf tissue hyperaccumulate photo-assimilates and subsequently undergo chlorosis, suggesting that TDY1 regulates carbohydrate partitioning. The cover picture shows the phenotype of *tdy1* in a genetic background in which anthocyanins accumulate exclusively in sectors with elevated carbohydrate levels. Cover photo by David Braun.

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<sup>[C]</sup> Some figures in this article are displayed in color online but in black and white in the print edition.

<sup>[W]</sup> Indicates Web-only data.

<sup>[OA]</sup> Open Access articles can be viewed online without a subscription.