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ON THE COVER

Brachypodium distachyon is a temperate C₃ grass that has emerged as a plant biology model, suitable for laboratory studies to inform research on cereals, forage, and bioenergy crops. With a short seed-to-seed life cycle (~6 to 8 weeks), a small genome (~272 Mb), and a growing number of functional genetics resources, B. distachyon is accelerating fundamental studies of economically significant grasses. B. distachyon is also host for plant pathogens, including viruses. Mandadi and Scholthof (pages 71–85) characterize the genome-wide alternative splicing landscapes in B. distachyon infected with Panicum mosaic virus alone or with its satellite virus. Using next-generation RNA-sequencing and bioinformatics approaches, they discovered thousands of previously unannotated transcripts and alternative splicing of ~100 defense-related genes modulated during virus infection. The cover image shows mature 5-week-old B. distachyon plants.

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