



Screening *Miscanthus* for Energy Use

A number of annual and perennial C4 grasses, herbaceous crops, and trees - such as *Miscanthus*, switchgrass, willow, and sweet sorghum - have been identified as sources of lignocellulosic biomass. Although all of these crops possess the desirable traits of fast growth and abundant biomass yields, knowledge of the crops' chemical composition is critical to determining the ability and efficiency of conversion to bioenergy, biofuels, and renewable chemicals. The chemical composition of the most common *Miscanthus* genotype (*M. x giganteus* 'Illinois') has been determined, but novel *Miscanthus* genotypes must be screened prior to their establishment as new bioenergy candidates. Researchers B.K. Sharma and Kishore Rajagopalan of ISTC, along with J.A. Juvik (U of I Department of Crop Sciences and Illinois Plant Breeding Center), are trying to accelerate the process of screening novel *Miscanthus* biomass germplasm for desirable end use in various biofuels processes by using pyrolysis-GC-MS, TGA and NMR methods.



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