

Eastern Gamagrass Forage Quality as Influenced by Harvest Management

Eastern gamagrass (*Tripsacum dactyloides* L.) is a palatable digestible perennial warm season grass which can be used for hay, haylage and in managed pastures. The forage quality of eastern gamagrass was evaluated at Corning, NY in 1997 and 1998 for CP, NDF, ADF, lignin, IVTD and dig. NDF. The cv 'Pete' was evaluated at three 1st cutting dates, starting 6/13/97 and 5/28/98 and taken at three, weekly intervals and three second cutting intervals (4, 5 and 6 weeks). Reproductive and vegetative tillers of six gamagrass clones plus cv 'Pete' were evaluated for three 1st cutting dates. There were significant differences between the genotypes for vegetative tillers for all variables measured except for ADF in 1997 and for lignin in 1998. For reproductive tillers only NDF and lignin were not significantly different in 1998. This variability indicates the potential for forage quality improvement of eastern gamagrass by plant breeding.

Forage quality decreased with later cutting dates. There were significant differences between cutting dates for genotypes of both tiller types in both years as well as whole plant samples of cv 'Pete'. There was better forage quality with the shorter second cutting interval. The average of the 1st cuttings on 6/13/97 and 6/4/98 was 14.7, 70.7, 32.5, 3.0, 80.7 and 73.6 percent for CP, NDF, ADF, lignin, IVTD and dig. NDF respectively. Although the percent fiber as measured by NDF was high the digestibility of that fiber and the total digestibility was very high.

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