

ABSTRACT

Sorghum is a potential fodder crop for an alternative source of livestock feed in Kenya. A study was done to determine the levels of prussic acid, lignin and cellulose content in potential fodder sorghum varieties at Egerton University Field Station in Kenya. Twenty-five sorghum genotypes were grown in a randomized complete block design (RCBD) and replicated three times. The genotypes were sampled at 3-leaf stage and analyzed for prussic acid, lignin and cellulose. The data were subjected to statistical analysis of variance and correlation using Statistical Analysis System (SAS) program version 9.1. Prussic acid levels were significantly different even at an early stage, with local varieties producing more. Lignin and cellulose had an inverse relationship with respect to concentration. Fodder sorghum genotypes varied significantly in prussic acid, lignin and cellulose, even at an early growth stage.

Key words: Food security, prussic acid, lignin, cellulose, fodder sorghum, livestock.