

## Forage yield and quality of kenaf (*Hibiscus cannabinus* L.) for consumption as ruminant feed

### ABSTRACT

This study was carried out to evaluate 40 kenaf accessions for forage yield and quality at Universiti Putra Malaysia in 2009. Forage yield and quality traits were measured at the initial flowering stage. The kenaf accessions showed highly significant variation for most of trait studied. Plant dry matter yield ranged from 5286 kg ha<sup>-1</sup> (Everglade 41) to 16801 kg ha<sup>-1</sup> (IX51). Crude protein content of the leaf ranged from 13.6% (G46) to 22.3% (75-71) and it was higher than stem which is ranged from 2.7 % (FDW-75-8) to 7.5 % (K465/117). Leaf ADF were significantly different among the accessions, where FDW 75-82 gave the highest (24.7%) while C74 gave the lowest (16%). Broad-sense heritability was highest for days to flowering ( $h_B^2 = 97.6\%$ ) and lowest for CP of stem ( $h^2 = 11.2\%$ ). In conclusion IX51, Cuba2032 (with high yield), 75-71 and Everglade 41 (with high CP content), were the most superior among the 40 kenaf accessions evaluated and were found highly potential for forage. These accessions can therefore be utilized in further breeding programs to produce new kenaf varieties with high feed value for ruminant consumption.

**Keyword:** Kenaf; Forage; Crude protein (CP); Acid detergent fiber (ADF); Ruminant feed