ABSTRACT

This study evaluated the nutritional value and chemical composition of five selected fodders; Boma Rhodes, lucerne, greenleaf Desmodium, chicory and sweet potato vines which were collected from the farm in Bomet County and taken for chemical analysis in the Animal Nutrition laboratory in Animal Science department at Egerton University. These fodder species were analysed for their proximate composition, metabolisable energy, van Soest composition and *in vitro* digestibility. All these analyses were done on a dry matter basis. For proximate the following were analysed, dry matter, moisture content, ash, crude protein, crude fat, and crude fibre. On van soest analysis the following were analysed, NDF, ADF, and ADL. *In vitro,* gas production helped us to evaluate, organic matter digestibility, and short-chain fatty acid. All these results were analysed at $P<0.05$.

Keywords: Chemical composition, van Soest, proximate analysis, *in vitro* gas production , Metabolisable energy, Friesian Cow