Farmers' preference and nutritive value of selected indigenous plant feed materials for cattle in dry lands of south-eastern Kenya

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Abstract

This study was undertaken in the drylands of southeastern Kenya to identify and rank important indigenous plant feed materials for cattle. Through the use of a structured questionnaire administered at the household level, farmers were asked to identify and rank the plant feed materials. The households were selected through systematic sampling along road transects in three agroecological zones namely LM4, LM5 and IL5. Samples of edible plant parts of top ranked feed materials were collected and nutritional analysis done at University of Nairobi, Department of animal production nutrition laboratory. Farmers' preference, nutritional value rankings and climate variability were used to give the final ranking of the feed plant materials. The top ranked grass species were Cynodon plectostachys and Eragrostis superba. Other grass species included Cenchrus ciliaris and Panicum maximum. Among the browse species, Combretum exalatum and Duosperma- kilimandscharicum were the top ranked species. However, Acacia tortilis, Melia volkensii and Combretum apiculatum were also valuable browse plant species in the study area. The most important crop residues were from maize, pigeon peas and cow peas. However, maize stover may not be reliable especially with increasing aridity and hence more drought resistant cereal crops such as sorghum and millets should be promoted.