

EVALUATION OF SELECTED LEAVES OF TREES AND FOLIAGE OF SHRUBS AS FODDER IN RUMINANT PRODUCTION

O.A FASAE*, O.S. SOWANDE AND A.A. POPOOLA

Department of Animal Production and Health, University of Agriculture,
P.M.B. 2240, Abeokuta, Nigeria.

*Corresponding author: animalexp@yahoo.co.uk

ABSTRACT

The potentials of selected leaves of trees and foliage of shrubs as fodder in ruminant production system were evaluated using chemical composition and *in vitro* dry matter digestibility as indices. The selected trees were *Enterolobium cyclocarpum*, *Leucaena leucocephala*, *Moringa oleifera*, *Gliricidia sepium*, *Pterocarpus santalinoides*, and *Milletia grifoniana*, and shrubs were *Stylosanthes scabra*, *Tephrosia bracteolata* and *Lablab purpureus*. The results showed that the chemical compositions of leaves of trees and foliage of shrubs varied significantly ($p < 0.05$) among species. The crude protein (CP) content of the tree leaves ranged from 15.20 to 25.43% for *Pterocarpus santalinoides* and *Moringa oleifera* leaves, respectively, while CP in foliage of shrubs ranged from 21.63 and 26.67% for *Stylosanthes scabra*, and *Lablab purpureus*, respectively. The *in vitro* dry matter digestibilities of these leaves also varied significantly ($p < 0.05$) with the selected trees ranging from 40.80 to 74.75% for *Milletia grifoniana* and *Gliricidia sepium*, respectively while shrubs ranged from 50.35 to 61.24% for *Stylosanthes scabra*, and *Lablab purpureus*, respectively. Results indicated that these forages are highly digestible and their inherent nutrients are higher than the range recommended for maintenance in ruminant production. These fodders can be fed as supplements to low protein forage and can alleviate feed shortages experienced for ruminants in dry season.

Keywords: Ruminant, fodder, tree, shrub, chemical composition, *in vitro* digestibility