Chemical Composition of Some Indigenous Feed Stuffs Eaten by Mithun

D. T. Pal and K. M. Bujarbaruah Animal Nutrition Section, National Research Centre on Mithun Iharnapani, Medziphema, Nagaland-797 106

Mithun rearing is practiced in north eastern hill region (NEH) of India under free range condition at various altitudes between 300m and 3000m msl. The animal thrives well on various tree leaves, grasses, fodders, herbs, shrubs and fruits. In spite of having great production ptentiality of mithun, no nutritional studies on mithun have been conducted. Most of the grasses, tree leaves, wild fruits, herbs and shrubs preferred by mithun have not been identified. Chemical composition of feed stuffs eaten by mithun has not so far been analysed. Again in order to combine various feed into rations that will meet the requirements of mithun, It is, necessary to have definite knowledge concerning their chemical composition.

A survey was conducted in Medziphema Mithun Farm along with mithun grazers to identify the tree leaves, grasses and herbs eaten by mithun. The individual feed samples were collected from different places within the farm, mixed thoroughly and then representative samples were taken for chemical analysed. The chemical composition of feed stuffs such as dry matter (DM), crude protein (CP), ether extract (EE) and total ash was estimated as per method of A.O.A.C. (1990) and the fibre components viz. Acid detergent fibre (ADF), Neutral detergent fibre (NDF) and hemicellulose were estimated as per the method of VanSoest and Wine (1967).

The DM content of all grasses varied from 17.43% to 35.00%, ash from 8.60% to 13.80%, CP from 5.60% to 11.63%, EE from 1.07% to 3.40%, NDF from 60.00% to 70.00%, ADF from 40% to 48% and hemicellulose from 13.00% to 34.00% Among the grasses, Tefunotse contained comparatively higher amount of DM, CP and EE.

The DM of tree leaves ranged 20.06% to 47.46% ash from 3.00% to 18.86%, CP from 9.83% to 21.00%, EE from 1.44% to 6.56%, NDF from 37.10% to 57.76%, ADF from 17.21% to 39.52% and Hemicellulose from 5.13% to 29.00%.

The Ash, NDF, ADF and hemicellulose contents were comparatively higher in grasses than tree leaves whereas crude protein content was higher in tree leaves. The results indicated that the fibre content was inversely related to the crude protein content.

Considering the crude protein as a criteria, the grasses like Tefunotse, Tophalha, Phiritsakhra and tree leaves like Ze, keromite, Kwira and Temichiede are nutritionally better quality feed stuffs and can be exploited in forest and farm area for the feeding of mithun.

REFERENCES

A.O.A.C.(1990). Official methods of analysis (14th Edn.). Association of Official Analytical Chemists. Washington, DC.

Van Soest, P.J. and Wine, R.H. (1967). J. Assoc. Chem. 50: 50-55.