

Note on Acid Detergent Fibre (ADF) and Acid Detergent Lignin (ADL) Values for Some Cattle Feeds

H. B. Desai and P. C. Shukla

Animal Nutrition Department, Gujarat Agri. Univ.,
Anand Campus, Anand — 388 110

WITH recognition of limitation of Weende analysis for carbohydrate analysis a new system of partitioning the feeds for the purpose of chemical evaluation has been suggested by Van Soest (1963). In order to obtain the values of ADF and ADL for some of the cattle feeds of Gujarat an attempt was made to analyse feed as per Van Soest (1963).

Various samples of cluster bean and pegionpea *gotars*, hybrid napier, mature pasture hay, groundnut cake and tapioca meal have been analysed as per Van Soest (1963) for ADF and ADL contents. Dry matter contents were determined by AOAC (1970) methods in order to calculate the values of ADF and ADL on DM basis.

Average ADF, ADL and C. fibre

values are given in the following Table for the different feedstuffs analysed.

Cluster bean *gotar* is usually better utilized than pegionpea *gotar* (Patel & Shukla 1973). Pegionpea *gotar* has higher, ADL values than cluster bean *gotar* so the estimation of ADF, ADL gives more clear picture of nutritive value. From the crude fibre values alone it is difficult to say the quality of two *gotars* since crude fibre is lower in pegionpea *gotar* compared to that of cluster bean *gotar*. It is suggested to find out in future, their *in vitro* digestibility together with ADF, ADL and C. fibre analysis in order to establish the correlation of these nutrients with digestibility of organic matter.

(Received on October 18, 1977)

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- Van Soest, P. J. 1963. Use of detergents in the analysis of fibrous feeds. *Assoc. off. Agri. Chem. J.* 46: 829-835.

TABLE 1

ADF, ADL and C. fibre values of cattle feeds (% on D. M. basis).

Name of feedstuff	ADF		ADL		C. fibre	
	Av.	SE	Av.	SE	Av.	SE
Cluster bean <i>gotar</i> (6)	38.09	± 1.58	6.19	± 0.56	25.50	± 0.97
Pegionpea <i>gotar</i> (3)	43.52	± 1.75	13.94	± 1.41	18.62	± 0.81
Hybrid napier (25)	43.10	± 0.55	6.53	± 0.24	27.18	± 0.43
Mature pasture hay (18)	53.44	± 0.68	9.61	± 0.29	38.13	± 2.22
Groundnut cake (9)	16.65	± 1.23	4.99	± 0.53	7.26	± 0.46
Tapioca meal (7)	22.11	± 1.36	6.25	± 0.33	10.34	± 0.42

Figure in parenthesis indicates the number of sample analysed.