

B-23: Nutritive value of non-conventional feeds and jak fruit for ruminants

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Nutritive value of several non-conventional feeds for ruminants was determined. The rind (peel) of the jak fruit was relatively high in digestibility. Jak fruit is commonly available but it is not fully utilized while a considerable portion of it is unedible. The present study as a first step was to obtain the basic nutritional information on it for ruminants. Proportion (g/100g DM) of different parts of the fruit were: fertile inflorescence (madulu 33.8), infertile inflorescence (iri 24.4) gelatinous envelope (sividi 4.2), horny testa (pothu 0.5), seeds without testa (11.0), peels or rind with thorny outer layer (peels 16.7) and rachis (wahalla 6.9). The ranges in proximate and cell wall composition and dry matter digestibilities (DMD) in g/100 g DM for different parts of the fruit were: CP -pothu 1.7 to seeds 9.5; Cf-seeds 3.3 to peels 19.3; EE -pothu 0.09 to peels 2.07; ash -madulu 3.4 to sividi 7.9; NDF -madulu 17.3 to pothu 78.9; ADF -madulu 4.6 to pothu 62.4; cellulose -madulu 4.4 to pothu 39.2; hemicellulose -peels 0.3 to pothu 16.5; ADL -madulu 0.2 to pothu 23.2; sividi 0.00 to peels 0.34; DMD -pothu 1.1 to madulu 92.1. Peels with a DMD of 57.0% was comparable to an average quality grass in that respect. Non edible and wasted iri, sividi and wahalla constituting a total of 35.5% of the fruit with DMD of 88.9%, 86.4% and 76.6% were superior sources of energy compared with the best locally available forages and can be considered as energy concentrates for ruminants.