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NUTRITIVE VALUE OF MIKANIA WEED AND CONGOSIGNAL GRASS FOR RABBIT FEEDING

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The forage can be used as an important ingredient in the diet of rabbit to reduce the incidence of enteritis as well as cost of feeding. Moreover, fibre is a essential nutrient for rabbit and its requirement in the diet is 12 – 16 per cent (NRC, 1966). Therefore, a feeding trial on mikania *(Makania micrantha)* weed and congosignal *(Brachieria rosenensis)* grass was conducted in adult rabbits to study its nutritive value.

The experiment was laid out in factorial CRD with 4 treatemtns for the period of 28 days on 12 numbers each of adult male soviet chinchilla (SCH) and newzealand white (NZW) rabbits having body weights 2.4 – 2.6 kg. These 12 numbers NZW rabbits were distributed into 6-iron wire mesh cages. Similarly, 12 numbers SCH rabbits were also distributed in separate cages. The mikania weed and congosignal grass were taken as test fibre and fed as cut and carry method in *ad-lib* to NZW (T1 and T2) and SCH (T3 and T4) rabbits respectively during morning hours. The concentrate pellet feed was offered in *ad-lib* to all rabbits during evening hours. After preliminary feeding of 23 days, a digestion trial was conducted for the period of 5 days. The data of DM intake through pellet feed and roughage and its residue were recorded. The feed and roughage offered, residue and faeces voided were collected and analysed for proximate principles as per the procedure of AOAC, 1980. All data were analysed for test of significance by the use of F-test (Snedecor and Cochran, 1981).

Mikania is a common weed in the northeastern region (Gogoi, 1999). It is a creeper and having very good canopy coverage during the months of April to December with average yield of 14 - 20 t/h. It contain 9-10% DM and protein content ranged from 11-14 g/ l OOg DM. On the other hand, congosignal is promising cultivable forage of the region. It contains 13-14% protein and 23-24% fibre content (Table 1). The concentrate pellet fed to rabbit was having 19.55% protein and 7.96% fibre. The physical observation revealed better acceptability and palatability of mikania weed to rabbits due to its tenderness of leaf and stem portion and absence of any off odor. The higher DM consumption through herbage was recorded in SCH than NZW rabbits and maximum intake (g/d) was recorded 16.59±1.01 and 11.77±1.66 on Mikania whereas, 9.77±1.16 and 9.11±0.96 on congosignal in two breeds respectively. However, total DM intake was not significant (Table 1) and comparable to standard value as per NRC, 1966.

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The digestibility of DM and fibre was highest on mikania based feeding (Table 2). The breed had no significant effect on the utilization of these roughages. Similarly, the breed and fibre sources had no any significant effect on protein digestibility and it was almost 80%. Thus, the results indicate that mikania, an abundantly available obnoxious weed of northeastern hills, could be utilized up to 10% of total DM intake in rabbit feeding.

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Table 1. Composition of pellet feed and roughages

Source	DM(%)	Nutrient (g 100g DM)			
		Crude Protein	Crude Fibre	Either Extract	Total Ash
Pellet Feed	89.00	19.55	7.96	4.59	8.87
Mikania	11.00	13.93	23.36	1.18	11.27
Congosignal	18.75	13.24	26.41	2.08	9.98

Table 2. DM intake and digestibility coefficients of nutrient in rabbits fed roughages

Groups	Concentrate Intake (g/d)	Roughage intake (g/d)	Concentrate roughage intake ratio	Digestibility coefficient of nutrient		
				DM	Crude Protein	Crude Fibre
T1:NZW,	115.2±5.51	11.77	90.66	74.18b	80.57	34.07b
Mikania		±1.66	±1.48	±1.31	±1.15	±0.86
T2:NZW	106.8±2.57	9.11	92.14	68.49a	81.86	27.21a
Congosignal		±0.96	±0.87	±0.23	±2.74	±1.86
T3:SCH,	110.7±5.04	16.59	87.00	73.22b	81.04	30.85ab
Mikania		±1.01	±0.17	±1.10	±1.61	±1.25
T4:SCH,	112.7±1.73	9.77	92.04	73.97b	81.56	28.60a
Congosignal		±1.16	±1.33	±0.49	±1.77	±0.28