Proceedings of AHAT/BSAS International Conference:

Integrating Livestock-Crop Systems to Meet the Challenges of Globalisation

Volume 2

Editors:

Rowlinson, P., Wachirapakorn, C., Pakdee, P. and Wanapat, M.

November 14-18, 2005, Khon Kaen, Thailand

Hosted by Tropical Feed Resources Research and Development Center
Khon Kaen University, Thailand

Published by British Society of Animal Science

ISBN: 0906562 1 1

The potency o*f Asystasia gangetica* and ***Passiflora foetica*** L for goat feed

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Introduction

Asystasiu gangetica (AG) and *Passiflora foetica* L (PF) are kind of wild plants that usually grow in area such as rubber, palm oil plantation, or in any other area like a long the side *ofpadi* field, a long the road. Reid (1990) mentioned that mostly there are 10,000 species of wild grass. These. might be part of those species. Physiologically these plants can be classified as roughage. Therefore, these might be potentially, used as feed ruminant feed, in Jambi. Indonesia. few$_r$ farmers have fed these plants to goat, cow and buffalo as animal feed but it was not optimal. The.! objective of this study was to examine the nutrient content of AG and PF and the palatability 01, these plants fed to the *kacang* goat (local coat) (KG).

Materials and Methods

The nutrient content o! ACi and PF was determined by proximate analysis. The palatability of AC and PF was studied using three KCJs sveiglued between 35.5 and 41.5 kg, aged about 3 years old KG was housed in pens (1.25 *x* 1.75 m) with 7 feed boxes. Each boxes contained different feed, one box for ACi or PF and the rest of boxes for *Impernta cvlindricall* (1C), *Pennisetur,: />iirpiireit>n* (PP), *Setana spfidCL'laiii* (SS). *l.enciicihi lcucoclic[hihi* (LL). *Munihoi ntilisimii* (Ml[1].) and *Calopogonium inucnnoides* (CM;. The goats have free access to chose feed in each box containing the same amount of feed sample. Boxes were randomly put into the pens. The goa's were adapted to the feed for 7 days before observation. Data collection was done in 5 days an i collected in 3 hours per day. Parameter was consumption of feed sample per 3 hours observation. Feed samples were collected as below: (1) 1C was harvested when it was in 30 cm height and chopped in 15 cm length, (2) PP harvested when it was 40 days old and chopped in 15 CTi length, (3) SS was harvested when it was in 30 cm height and chopped in 15 cm length. (4) CL was cut 30 cm from leaf top and chopped in 15 cm length, (5) LL leaf was collected from live branch winch was in 1 cm diameter, (6) PF and AG were cut 30 cm from leaf top and chopped m 15 cm length. The experimental design was Completely Randomized Design with 7 treatments and 3 replications.

Results

During adaptation period goat tried to smell each feed sample and then start to eat. During this study the temperature was between 3land 33°C. Feed consumption was significantly different (PO.05) among feed samples (Table 1 and 2). The nutrient content of AG and PF can be seen in Table 3

Table 1. Mean of feed consumption of AG compared to other feed

Feed treatment	Feed consumption	
	g FW/head/ 3 hours	g DM/head/ 3 hours
1C	56.67[a]	14.85[a]
PP	264.67[c]	76.75[b]
SS	158. 67[b]	19.52[a]
AG	413.20[d]	107.43[C]
LL	380.67[d]	98.97[C]
MU	364.67[d]	125.11[d]
CM	146.00[h]	29.93[a]

Mean with the same superscript within a column are not significantly different
FW fresh weight DM Dry matter

Tahle 2. Mean of feed consumption PF compared to other feed

Feed treatment	Feed consumption	
	g FW/head/ 3 hours	g DM/head/ 3 hours
1C	21.33"	5.58[a]
PP	151.33[l]	38.08[c]
SS	S0.66[b]	12.30ab
AG	77.33[h]	20.49[b]
LL	320.66[d]	83.37[d]
MU	370.66°	117.49[C]
CM	60.00[ab]	9.9 l[a]

Mean with the same superscript within a column are not significantly different
FW fresh weisht DM Dry matter

Table 3. Nutrient content of AG and PF (%)

Feed	Dry matter	Crude Protein	Crude fibre	Crude fat	Ash
AG	25.20	21.03	•n i) ;	2 30	14.60
PF	23.53	14.51	17.65	5.51	6.33

Conclusion

In terms of nutritional and palatability aspect, it might be concluded that AG and PF can be used as source of roughage for ruminant especially goat.

Acknowledgement

Financial support was grateful to Anggaran Rutin Jambi University.

References

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