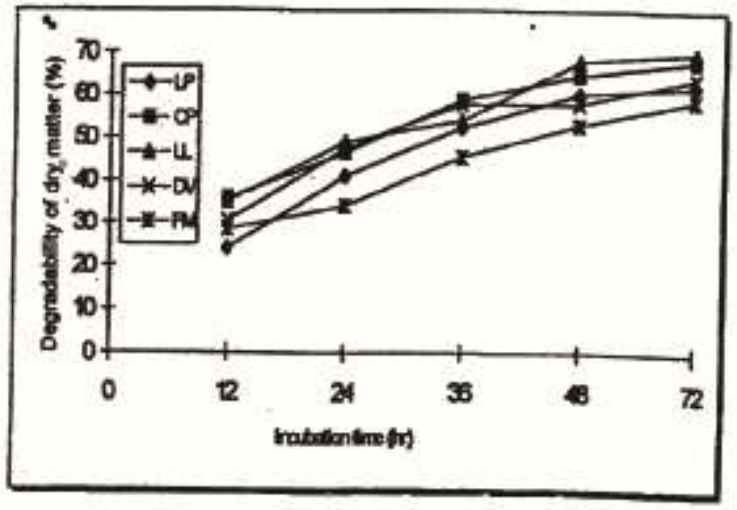

Figure 1. *In Vitro* Rumen Degradation of Dry Matter

Figures 2 and 3 show the patents of rumen degradation of NDF and ADF. It can be seen that with the exception of ND degradation of *F. macrophylla*, the degradabilities of NDF and ADF ware not significantly different among the species of legumes. Howaver, after 24 hr incubation period, there was a tendency that *C. pubescens* had higher NDF degradation values. Consistent with dry matter, both NDF and ADF degradation values of *F. macrophylla* were relatively lower than those of other legumes. These differences were due primarily to a lower undegraded fraction, and are likely to be the result of differences in the phenological fiber characteristics of *F. macrophylla* and the other legumes.

Table 2. *In Vitro* Rumen Degradation Characteristics of Dry Matter, NDF, ADF and Cellulose

Item	72 h*	a	b	a+b	C
	%				Frach/hr
Dry matter					
L. Purpureus	62.18^{a}	-9.83^{a}	75.33^{a}	65.50^{a}	0.049^{a}
C. Pubescens	68.38^{b}	13.64^{b}	59.86^{b}	73.50^{b}	0.037^{b}
L. Leucocephala	70.36^{b}	15.25^{b}	62.92^{b}	64.17^{b}	0.031^{b}
D. Virgatus	64.08^{a}	-4.99^{a}	69.16^{c}	7513^{a}	0.060^{a}
F. Macrophyla	59.03^{a}	1479^{b}	60.34^{b}	75.13^{b}	0.019^{d}
NDF					
L. Purpureus	51.61^{ab}	6.75^{a}	61.43^{a}	54.68	0.046^{c}
C. Pubescens	53.57^{b}	-11.50^{b}	70.18^{b}	58.68	0.042^{a}
L. Leucocephala	52.12^{ab}	4.93^{c}	53.47^{a}	58.40	0.030^{b}
D. Virgatus	52.11^{ab}	-7.87^{a}	66.05^{b}	58.18	0.035^{b}
F. Macrophyla	48.^{11b}	4.13^{c}	53.68^{a}	57.81	0.026^{b}
ADF					
L. Purpureus	44.74	-2.80^{ab}	50.25^{a}	47.45^{a}	0.047^{a}
C. Pubescens	46.87	-5.16^{ab}	56.76^{b}	51.60^{a}	0.040^{a}
L. Leucocephala	46.36	4.92^{b}	49.28^{a}	54.20^{ab}	0.027^{b}
D. Virgatus	46.81	-9.63^{a}	68.03^{c}	58.40^{c}	0.027^{b}
F. Macrophyla	43.11	-2.53^{a}	52.44^{ab}	49.9^{1a}	0.032^{b}
Cellulose					
L. Purpureus	54.84^{ab}	12.32^{a}	53.57^{a}	65.69^{a}	0.022^{a}
C. Pubescens	57.14^{a}	-1.26^{b}	62.30^{b}	61.05^{b}	0.039^{b}
L. Leucocephala	53.19^{ab}	7.47^{a}	47.34^{c}	54.81^{c}	0.045^{b}
D. Virgatus	52.50^{b}	2.26^{b}	66.48^{d}	70.74^{d}	0.019^{a}
F. Macrophyla	53.42^{ab}	11.73^{ab}	62.58^{b}	74.31^{d}	0.015^{a}

A,b,c,d : p<0.05

The pattern of rumen degradability of cellulose is given in Figure 4. At 72 hr incubation period, rumen degradability of cellulose varied from 52.50 % (*D. virgatus*) to 57.14 % (*C. pubescens*). Furthermore, the rate of cellulose degradation was highest for *L leucocephala* (0.045 fract. /hr), followed by *C.pubescens* (0.039 fract/hr).