

Figure 2. In Vitro Rumen Degradation of Neutral Detergent Fibre (NDF)

Table 3 shows the rate and extent of *in vitro* gas production of five legumes. As expected, *L. leucocephala* had the highest gas production, followed by *C. pubescens* at almost all the incubation periods. It can be seen that both the of gas production at 72 hr incubation period and the potential extent of gas production (b) were significantly higher ($p < 0.05$) for *L. leucocephala* (12.37 and 16.85 ml/200 mg DM) than those of the other legumes. Findings were consistent with the result of *in vitro* dry matter degradation that the highest value was noted for *L. leucocephala* followed by *C. pubescens*.

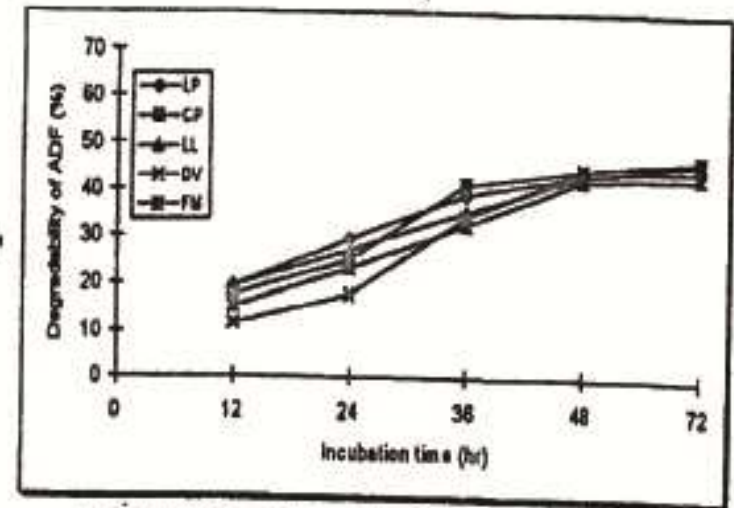


Figure 3. In Vitro Rumen Degradation of Acid Detergent Fiber (ADF)

This means that these legumes contained more degradable fractions than the other legumes which may have been fermented and thus resulted in much higher volatile fatty acids and gas production in agreement with Menke et al (1979) and Van Soest (1982), the extent of gas production was closely related with the matter digestibility.

Table 3. Characteristic of Gas Production (ml/200 mg DM) According to the Equation $Y=b(1-e^{-at})$

Legume species	Gas production	Potential gas prod.(b)	Rate of gas prod.(c)
<i>L. Purpureus</i>	8.50 ^{ab}	13.08 ^a	0.015 ^a
<i>C. Pubescens</i>	10.04 ^a	11.42 ^{ab}	0.029 ^b
<i>L. Leucocephala</i>	12.37 ^b	16.85 ^b	0.019 ^a
<i>D. Virgatus</i>	7.94 ^c	9.13 ^c	0.027 ^b
<i>F. Microphylla</i>	7.21 ^c	11.92 ^{bc}	0.014 ^a

a,b,c : p<0.05
*72 hour incubation