

Table 3. Disappearance of dry matter and macro mineral at 72 hr incubation (%)

Forage species	Season	DM	Ca	P	Mg	S
Grass :						
<i>A. compressus</i>	Rainy	56.5	59.7	64.6	31.6	57.4
	Dry	54.4	55.4	58.0	29.7	56.6
<i>P. purpuphoides</i>	Rainy	68.0	70.4	85.5	45.1	65.7
	Dry	60.5	73.4	73.6	40.4	60.5
<i>P. maximum</i>	Rainy	59.2	77.4	65.7	78.1	57.4
	Dry	58.6	70.6	60.9	65.4	48.5
Legume :						
<i>C. pubescens</i>	Rainy	70.5	67.5	39.4	89.3	66.4
	Dry	69.5	73.5	47.6	85.6	65.5
<i>C. mucunoides</i>	Rainy	70.3	82.8	90.5	69.4	66.4
	Dry	65.9	77.5	75.4	56.0	62.6
<i>L. leucocephala</i>	Rainy	72.4	91.6	65.5	92.4	81.0
	Dry	69.5	86.7	55.5	90.3	80.5
<i>A. mangium</i>	Rainy	70.7	77.5	69.4	59.5	79.6
	Dry	68.4	66.6	70.7	54.6	60.8
Mean :	Grass	59.7 <sup>a</sup>	67.3 <sup>a</sup>	67.3 <sup>a</sup>	48.2 <sup>a</sup>	57.7 <sup>a</sup>
	Legume	69.8 <sup>b</sup>	77.9 <sup>b</sup>	64.3 <sup>a</sup>	74.6 <sup>b</sup>	70.3 <sup>b</sup>
Sig. of effect :	Species	**	***	***	***	ns
Grass	Season	ns	ns	**	**	**
	Spe. X Sea	ns	ns	*	*	ns
Legume	Species	ns	***	***	***	***
	Season	ns	**	**	***	***
	Spe. X Sea	ns	**	**	*	**

a,b : values in the same row with different superscripts are significantly differ ( $p < 0.05$ )

\*\*\* :  $P < 0.001$ ; \*\* :  $P < 0.01$ ; \* :  $P < 0.05$  and Ns : Non significant

Among the macro mineral observed, the highest average solubilization was occurred for Ca (77.9 %), while the lowest was found for P (64.3 %). Disappearance of Ca varied from 67.5 (*C. pubescens*) to 91.6 % (*L. leucocephala*), P from 39.4 (*C. pubescens*) to 90.5 % (*C. mucunoides*), Mg from 54.6 (*A. mangium*) to 92.4 % (*L. leucocephala*) and S from 62.6 (*C. mucunoides*) to 81.0 % (*L. leucocephala*), respectively. The values observed in the present study were similar to those of earlier reports that average DM disappearance of various forages incubated at 48 and 72 hr in the rumen was 73.4 % (temperate forages) and 69.9 % (subtropical forages), respectively (Emanuele and Staples, 1990; Ledoux and Martz., 1991), but it was higher than reported by Playne et al.(1978) at 72 hr even at 168 hr incubation periods. The differences might due to the differences in washing procedures (hand washing vs mechanical washing, amount of water used in rinsing) and maturity of forages used, in