

Cattle preference for 4 warm-season grasses in La Pampa, Argentina

N Stritzler ^{1,2}, C Rabortnikof ², C Ferri ², J Pagella ², V Jouve ²

¹INTA Anguil Area Producción Animal, CC 11, 6326 Anguil La Pampa ; ²Facultad de Agronomía, UNLPam, CC 300, 6300 Santa Rosa, La Pampa, Argentina

Cattle preference for different forage species is one of the most important components of beef production under free-ranging conditions of semiarid and arid zones. In the present work, preference for 4 perennial warm-season grasses, and its relationship with nutritive value were studied.

Four adult Holstein-Friesian steers were used to evaluate the following species : *Tetrachne dregeii* (Td), *Panicum virgatum* cv Pathfinder (Pv), *Panicum coloratum* Selection 75 (Pc) and *Eragrostis curvula* cv Tanganyka (Ec). Ec was taken as a reference, since it has been widely tested in the region. The plants were distributed in field plots within a complete randomized design. Three groups (B1, B2, and B3) of 20 plots each were used in the experiment. Each group included 5 replications per species. B1 was grazed in spring (S) and the regrowth in summer (SmR) and winter (WR), B2 was grazed in summer (Sm) and the regrowth in winter (WRR) and B3 was grazed only in winter (W). Each animal was watched by one observer. Observations continued until the animals showed clear signs of no grazing preference. Grazing time lasted for 20 minutes (WR and WRR), 25 min (S) and 60 min (Sm, W and SmR). Visit sequence and grazing time

was recorded for each species. Half of each plot was cut before grazing in order to determine dry matter yield, *in vitro* dry matter digestibility (IVDMD), crude protein (CP), neutral detergent fiber (NDF), acid detergent fiber (ADF) and lignin (L). Residual herbage was harvested and subjected to the same chemical analysis and dry matter intake (DMI) was estimated by difference.

Significant differences ($P < 0.05$) between species were found for all grazing dates (SmR, WR, Sm, WRR, and W) but S, when no clear preference for any grass was observed. Td was the most preferred species for W, WR and WRR. Grazing time of the regrowth was associated to % of CP by the following equation : $y = 229.4 - 144.7 x + 33.0 x^2$ ($R^2 = 0.61$, $SE = 116.8$)

where : y = grazing time of the regrowth
 x = % CP

No other relationship between time spent on grazing and quality parameters of forage could be detected.

Tetrachne dregeii is a highly preferred warm-season grass when it is consumed during winter. Nonetheless, Td did not show difference with the other species in spring.

Species	Grazing time (in seconds)					
	S	Sm	W	SmR	WRR	WR
Td	166 ^a	1143 ^a	1893 ^a	786 ^{ab}	433 ^a	500 ^a
Pv	435 ^a	1038 ^{ab}	42 ^b	1035 ^a	77 ^b	28 ^b
Pc	308 ^a	314 ^{bc}	119 ^b	62 ^c	203 ^{ab}	108 ^b
Ec	299 ^a	236 ^c	37 ^b	170 ^{bc}	61 ^b	25 ^b