

Summary

Between November and December, 1985, at the end of the rainy season, on a well-drained isohyperthermic savanna of the National Research Center ICA-CIAT Carimagua in Colombia (4°37' N, 71°19' W, 175 m.a.s.l., 2000 mm of rainfall), the quality and acceptability of native grasses to grazing animals was determined under different stocking rates with no burning. Before carrying out the study in the area, *Stylosanthes capitata* cv. Capica had been introduced in strips of variable width between 5 and 20 m. Upon beginning the observations, the legume had disappeared and the pastures had been managed under continuous grazing during a year with stocking rates of 0.33, 0.66, 1.00, and 1.33 animals/ha.

Frequency of presence (FP) and frequency of consumption (FC) were determined through visual observation of defoliation or lack thereof of the native species. These measurements were made in 100 quadrants of 0.50 m². With the data on FC and FP, a preference index (PI) was calculated ($PI = FC/FP \times 100$). In addition, a selection index (SI) was determined by dividing the presence of a given specie in the extrusa

sample over the total sum of species identified. The availability of the species on the savanna was measured on three sites of 2 m x 2 m, chosen at random in each stocking rate treatment. The most frequent species were identified from these sites, and subsamples were taken for quality analysis. Statistical analyses included linear regression and analysis of variance for a random block design.

On the savanna, 89 species were identified, and *Andropogon bicornis*, *Trachypogon vestitus*, *Paspalum pectinatum*, and *Andropogon selloanus* dominated. The stocking rate affected availability ($P < 0.02$), but not the preference of native species. A significant effect ($P < 0.05$) of replication on availability of species was found and this was associated with differences in soil texture. Animal selectivity was related to availability of native species, for example: *A. bicornis*, *T. vestitus*, *A. leucostahyus*, *A. selloanus*, and *Schizachyrium hirtiflorum* constituted 59% of the forage offered and 63% of the diet selected. A relatively high rate of prostrate species (21%) was found in the diet, in spite of only representing 3% of the biomass on offer. This was related to their higher quality, as measured by IVDMD (43%) and CP (8.1%). Erect species of high and low availability had lower quality (IVDMD 29%, CP 6.2%) than prostrate grasses. On summary the order of preference of native grasses was: 1) prostrate species; 2) erect species of high availability; and 3) erect species of low availability.