THE MACRO-MINERAL PROFILE OF FOUR TROPICAS GRASSES
AT DIFFERENT STAGES OF REGROWTH

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ABSTRACT

Pangola grass (Digitaria decumbens), Lucuntu grass (Ischaemum timorense), Star grass (Cynodon nlemfuensis) and Tanner grass (Brachiaria rhabdiana) were planted on Piarco fine sand soil at Central Experiment Station, Centeno, Trinidad, using a split plot design with grasses as main plots, and regrowth cutting intervals: 4, 5, 6, 7 and 8 weeks as sub-plots, in order to study their effects on the macro-mineral profile of the grasses. There were four replicates per treatment.

When grasses were compared, it was found that there were significant (P < .001) differences in overall means of nitrogen (N), calcium (Ca), phosphorus (P), sodium (Na) and magnesium (Mg) content, but not of potassium (K) content. Star grass had the highest levels (g/kg dry matter) of N (12.8), P (3.4) and Mg (2.4); while Ca (7.3) and K (10.4) content were highest in Lucuntu grass. The lowest content of N (8.1) and Ca (2.8) were found in Tanner grass, of K (7.3) and Mg (1.6) in Pangola grass, and of P (1.8) and Na (0.4) in Lucuntu grass.

For all minerals studied except calcium, there were significant (P<.001) differences at different stages of regrowth, with the highest levels at 4 weeks of age decreasing gradually to reach the lowest levels at 8 weeks.

The results are discussed in consideration of meeting the macro-mineral requirements of ruminants for optimum health and production.°

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