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 niemfuensis*) and Tanner grass (*Brachiaria radicans*) 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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