

Summary

The effectiveness of partially acidulated phosphoric rock (PAPR) (26% of P_2O_5) and of simple superphosphate (SSP) (20% of P_2O_5) was studied in the establishment of *Brachiaria brizantha* cv. Marandú on degraded pasture. This study was made on an Oxisol (pH = 6.4, 5 meq/100 g of Ca + Mg, 0.23 meq/100 g of K, and 3 ppm of P) of Paragominas, Brazilian Amazon. The dosages of P_2O_5 applied were 50 and 100 kg/ha in a randomized block design with four replications.

Measurements were taken at 86 and 146 days after planting, finding that the grass responded ($P < 0.05$) to the application of both P sources. However, the response was greater when SSP was applied, possibly due to soil conditions which did not favor dilution of the PAPR. On the other hand, relative agronomic efficiency was reduced when increasing the dosage of P_2O_5 , being 58% when 50 kg/ha were applied and 54% when 100 kg/ha were applied.