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CONSTRUINDO SABERES, FORMANDO PESSOAS E TRANSFORMANDO A PRODUÇÃO ANIMAL

(USE OF) SOURCES OF PHOSPHORUS IN DEGRADED PASTURES RENEWAL

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Bovine grass-fed livestock is responsible for almost 50% of the national bovine herd. The grass-fed cattle find their main source of food in the pasture, however, the degradation of the pasture has been a big problem to the Brazilian livestock. The absence of phosphorus may cause damages to the production line, resulting in pastures with disabled covers and favoring the occurrence of species. The present study evaluated the productivity of *Brachiaria hybrid* cv. Mavuno submitted to sources of phosphorus, associated or not, in the renewal of degraded pasture. The experiment was implemented on the pasture area in USP, Pirassununga, SP. The treatments were made up of traditional and natural soluble sources reactive, with supply of 100 kg P_2O_5 ha^{-1} and applied 90 days after liming at a dose of 2.2 t ha^{-1} as dolomitic limestone, these being Simple Super Phosphate (SSP), Triple Super Phosphate (TSP) and Reactive Natural Phosphate (RNF), composing the following treatments: 1. Control (no match); 2. SSP (00-19-00) with 526 kg ha^{-1}; 3. TSP (00-43-00) with 217 kg ha^{-1}; 4. RNF Bayovar with 333 kg ha^{-1}; 5. 25+75 RNF SSP with 83 kg ha^{-1} + 392 kg ha^{-1}; 6. 50+50 RNF SSP with 167 kg ha^{-1} + 263 kg ha^{-1}; 7. 75+25 RNF SSP with 250 kg ha^{-1} + 132 kg ha^{-1}; 8. 25+75 RNF TSP with 83 kg ha^{-1} + 163 kg ha^{-1}; 9. 50+50 RNF TSP with 167 kg ha^{-1} + 109 kg ha^{-1} and 10. 75+25 RNF TSP with 250 kg ha^{-1} + 54 kg ha^{-1}. The experimental design was randomized in complete blocks with 10 treatments and 4 repetitions. The samples of the whole plants for the evaluation of dry mass were dried in an oven with air movement at 65°C for 72 hours. After establishing the standardization to 20 cm height and the application of doses of nitrogen and potassium on cover. The results of dry forage mass (kg ha^{-1}) the first cut notes that the 3 Treatments (TSP) and 5 (25% + 75% RNF SSP) showed better results when compared with the control treatment. The solubility of Triple Super Phosphate is the main feature of the source that justifies such a result. The results also indicate that the association of a RNF (25%) with a SSP (75%) appears as an alternative to phosphorus application on pasture, under the conditions of this experiment.

Keywords: Mavuno, Reactive Natural Phosphate, Simple Super Phosphate, Triple Super Phosphate