

Summary

The effect of applying macro- and micronutrients on the dry matter production of "Taboquinha" grass (*Panicum laxum*) was evaluated in greenhouse trials using 3 kg of plinthite soils gathered from the municipality of Muaná on the Island of Marajó, Brazil. Soil characteristics were pH = 4.5, $Al^{+3} = 2$ meq/100 g, $Ca^{+2} = 0.3$ meq/100 g, $Mg^{+2} = 0.2$ meq/100 g, $K^{+} = 12$ ppm, $P = 2$ ppm, and 2.2% organic matter. A completely randomized block design was used with three replicates. Treatments were as follows: T1, control; T2, complete (C) = application of N (177 kg/ha), P (200), K (100), Ca (72), Mg (30), S (40), B (1), Cu (3), and Zn (7), but no lime; T3, C plus lime; T4, C without N; T5, C without P; T6, C without K; T7, C without Ca; T8, C without Mg; T9, C without S; T10, C without B; T11, C without Cu; and T12, C without Zn. Dolomitic lime was applied to raise base saturation to

50%. Four cuttings were made, the first at 55 days and the others at 45-day intervals. Dry matter production of *P. laxum* increased significantly with N, P, and K application; however, there was no response to application of Ca, Mg, B, Cu, Zn, and dolomitic lime. The absence of P drastically reduced the amount of N and Ca in the forage. *Panicum laxum* apparently absorbs sufficient quantities of Fe and Mn present in the soil, which could be detrimental to grazing animals.