

Summary

The response of forages to mycorrhizal inoculation and to different P applications rates when grown in a dystrophic dark red Latosol, obtained from the Campos das Vertentes region of Minas Gerais, Brazil, was evaluated under greenhouse conditions in Lavras. A completely randomized statistical design was used, arranged in a 3 x 5 factorial scheme with four repetitions, for a total of 15 different treatments. These treatments consisted of mycorrhizal inoculation (natural soil, soil without mycorrhizas, and soil inoculated with *Glomus etunicatum*) and five P application rates (0, 50, 100, 200, and 300 mg/kg soil), applied to forage species *Brachiaria brizantha*, *Stylosanthes guianensis*, and *B. brizantha* + *S. guianensis*. Two cuttings of aerial parts of plants were performed. Plant development (DM production of aerial parts) and total crude protein (CP) content of aerial parts were analyzed. Results showed that increasing P rates significantly increased DM production and CP accumulation in aerial parts of plants. These results were evidenced by the presence of mycorrhizal fungi to a greater or lesser extent, depending on the forage species studied, mainly in the case of intermediate P application rates.