

# Summary

A field experiment was conducted in an allic Cambisol (Inceptisol) to compare the efficiency of different management systems on the introduction of *Andropogon gayanus* cv. Planaltina and *Brachiaria brizantha* cv. Marandú into native pastures; evaluate the impact of introduced grasses on forage yield and quality; and determine the response of native forages to the soil management systems tested. Treatments consisted of four soil preparation methods for planting: (a) in pits, (b) in pits with soil scarification, (c) in furrows, and (d) oversown on scarified soil. Two additional

treatments were used: (e) scarified native pasture receiving lime and fertilization, and (f) native pasture (check). Lime and fertilizers were also applied to the introduced grasses. The native pasture responded to the management practices by increasing dry matter production. The best sowing method tested for introducing grasses was the oversowing *A. gayanus* on partially disturbed soil (treatment d). Both dry matter production and the percentage of introduced grasses in the pasture composition increased. Results suggest that breaking the soil crust during soil preparation, mainly by scarification, is important, possibly increasing water infiltration and enhancing nutrient absorption by forages.