

## SOYBEAN YIELD AFTER BRACHIARIA SPECIES AND DESICCATION TIMES

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The cultivation of brachiaria in corn and soybean fields is a reality in the Tropical region of Brazil. The objective of this study was to evaluate the soybean yield after desiccation periods of brachiaria species cultivated for 18 months in soybean soil. The work was carried at Embrapa, in Dourados, MS, Brazil, in a glass ceiling and galvanized iron fence walls green house. The plots were 0.3m diameter wide and 0.4m height, with 19 kg of dry soil. The experimental design was randomized blocks with three replications. In the plots, the soils (red distroferic latosol and red distrofic latosol) were allocated. In the subplots, the treatments/species of Brachiaria (*Brachiaria ruziziensis*, *B. brizantha* cv. Paiaguás and cv. Xaraés, and a test without brachiaria). In the subsubplots the desiccation times (1, 15 and 30 days before soybean sowing). The desiccation was done with glyphosate at 1.08 liters of the acid per ha<sup>-1</sup>, in 200 L of water per ha<sup>-1</sup>. The soybean seeds, cv. BRS 1003 IPRO, were inoculated with *Bradirhizobium japonicum* and sowing on 10/10/2016 with two plants per pot. Soil moisture was kept at 80% of field capacity. In the soybean maturation, agronomic characteristics and grain yield components were evaluated. Data were submitted to analysis of variance and the means were compared by the Tukey test at 5% probability. It was verified higher soybean height after Paiaguás (79 cm) and smaller after Xaraés (67 cm). The grain yield was higher in red distroferic latosol (12.51 g plant<sup>-1</sup>) than in red distrofic latosol (8.77 g plant<sup>-1</sup>). A higher number of pods per plant (89 and 73), stem dry mass (27 and 22 g plant<sup>-1</sup>) and grain yield (14.1 and 10.2 g plant<sup>-1</sup>) were observed when sowing, respectively, 1 and 15 days after the brachiaria/treatments desiccation, and no difference between the treatments when sowing 15 and 30 days after desiccation. For Xaraés and *ruziziensis*, grain yield didn't dependent on desiccation times, while for Paiaguás the highest yield was verified at one day after desiccation.

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