

SELECTION OF SUPERIOR INTERSPECIFIC HYBRIDS OF *Brachiaria* FOR THE DEVELOPMENT NEW IMPROVED CULTIVARS

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This paper reports partial results of the evaluation of 96 hybrids of *Brachiaria spp.* (*B. ruziziensis* x *B. brizantha* x *B. decumbens*) for agronomic traits in order to identify superior genotypes. These hybrids were pre-selected in the breeding program at Embrapa Beef Cattle, Campo Grande/MS, Brazil, based on agronomic performance and spittlebugs resistance. The hybrids were vegetatively propagated transplanted to a field trial in Campo Grande, in a randomized complete block design, with four replications and five plants per plot. The commercial cultivars *Brachiaria spp.* cv. Mulato II, *B. brizantha* cvs. Marandu and BRS Paiaguás were used as check. Field green weight (FGW) and regrowth ability (REG) were evaluated in three clippings; total dry matter (TDM) in two clippings and leaf dry matter (LDM), leaf dry matter percentage (L%) and Leaf: stem ratio (LSR) in only one clipping. The clippings were carried out during the rainy season of 2015. Data were analyzed using the restricted maximum likelihood/best linear unbiased prediction procedure. The accuracy estimates ranged from 0.76 (TDM) to 0.87 (L%), which are considered moderate to high values. Genetic variability was detected ($p < 0.01$) for all traits and hybrid x clipping interaction differences were detected ($p < 0.01$) for FGW and REG, indicating the performance of hybrids were not the same across harvests for these traits. Hybrids with superior performance than cv. Marandu were identified for all traits. Marandu was ranked in the 78th position for FGW, 79th for TDM, 92nd for REG and LDM, 88th for L % and 91th for LSR. Considering a selection intensity of 10 and 20% the selection response relative to cultivar Marandu was 57.4 and 52.1% for FGW, respectively; 49.5 and 41.8% for TDM; 33.0 and 30.4 for REG; 78.8 and 70.9 for LDM; 27.7 and 25.7 for L % and 147.5 and 127.0% for LSR. Moreover, comparing to the highest yielding check for all traits (Mulato II), 24, 17, 22, 19, 45 and 48 hybrids were superior for FGW, TDM, REG, LDM, L% and LSR, respectively. Superior apomictic hybrids will proceed to regional trials, which is the next phase of cultivar development.

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