Summary

Forty-two new accessions of the forage grass *Brachiaria* spp. were evaluated at Paragominas (3° 05' S, 47° 21' O) in eastern Brazilian Amazonia together with four commercial accessions of this genus. There were marked intra and interspecific differences among accessions based on their degree of adaptation—an integrated measure of recovery to simulated herbivory, soil cover, potential for dry matter production and susceptibility to diseases and insects. A cluster analysis divided the 46 accessions into three distinct hierarchical groups with respectively, excellent, good and poor degree of agronomic adaptation. The accessions with best performance, which are recommended for further agronomic evaluation, were: *B. brizantha* BRA 003441, 003891, 004219 and 004308 and *B. decumbens* BRA 004391.