

Summary

The agronomic performance of seven accessions of *Arachis pintoii* was evaluated between January 1994 and November 1996, on a humic gley Inceptisol. The trial was conducted at the Brasilia Faculty of Agriculture (1500 mm rainfall; 1000 m.a.s.l.; 15° 35' S and 47° 42' W), Planaltina, DF, Brazil. Soil was prepared mechanically for planting, but no fertilizers were applied, nor herbicides for weed control. The treatments consisted of seven accessions of *A. pintoii* that were

preselected at the Cerrados Agricultural Research Center (CPAC) of EMBRAPA. These accessions belonged to a collection of 80 accessions, obtained during expeditions conducted under the coordination of the National Center of Genetic Resources and Biotechnology (CENARGEN), also of EMBRAPA. The germplasm was planted in January 1994 and evaluated until November 1996. Vegetative material was used as planting material for both the legume and the grass *Paspalum maritimum* BRA-000078. After 60 days of rooting, the *A. pintoii* plantlets were transplanted at distances of 0.7 m between rows and 0.5 m between plants in 20-m² plots. The grass was planted between the rows of legume. A completely randomized design was used, with three replications per treatment. The associations of the grass with *A. pintoii* accessions BRA-013251, BRA-015121, BRA-031135, and BRA-031143 were relatively stable over time. The accessions *A. pintoii* BRA-030368 and BRA-031542 diminished in the association: after 2 years of cuttings and consecutive grazings, they represented barely 5% of the botanical composition. At the end of the second year, *A. pintoii* BRA-031828 was the only accession to comprise 60% of the associated pasture, showing good vigor and excellent plant health. *Paspalum maritimum* BRA-000078 showed high branching ability and stem growth, reaching an average length of 703 ± 308 cm per plant and a daily growth rate of 6.8 ± 3.0 cm, between 0 and 104 days after planting. These results highlight the potential of this grass for use in degraded areas; for example, to control erosion on slopes and combat weeds.