

Summary

A preliminary study of the adaptation of *Stylosanthes guianensis* cv. Graham, Endeavour, and Pucallpa was conducted on a typical Psammaquent soil (pH 5.7; 2.8 ppm P; 1% OM; and 1.8, 0.6, and 0.3 meq/100 g of Ca, Mg, and K, respectively), on an experimental field of the Faculty of Agrarian Sciences, Northeast University, in Corrientes, Argentina. The University is located at 27° 28' S and 58° 16' W. A randomized complete block design was used with four replications. Plots were 8 m². Plant height and length of prostrate or creeping vines or stems were measured the first year, in addition to the damage caused by insects and diseases and the tolerance to frosts. DM production was determined the second year.

Cultivars showed quick establishment and, in the later stages of development, good flowering and fructification. Damage by anthracnose (*Colletotrichum*

spp.) was mild (< 5%) in cv. Pucallpa and Graham, and moderate (between 5% and 10%) in cv. Endeavour. During winter, plants underwent severe defoliation, but showed good recovery and biomass production with increasing temperatures. After 200 days of growth, DM production of cultivars (6 t/ha, on average) was higher than that of the local variety (0.7 t/ha).

Results indicate that the legume *S. guianensis* cv. Pucallpa has a high production potential in the areas northeast of Corrientes, Argentina. Further agronomic evaluations and grazing trials will therefore be conducted.