Summary

In an Ultisol in the Chapare, Cochabamba region of Bolivia (5000 mm/yr average precipitation, and 24°C average temperature at 250 m.a.s.l.), dry matter (DM) production and spittlebug (*Zulia* sp., *Aneolamia astralis*, *Mahanarva* sp.) infestation were measured on 36 *Brachiaria* ecotypes over a period of two years beginning in June 1984.

The ecotypes were planted after forest-clearing and fertilizers were not applied. Results showed that the ecotypes B. humidicola CIAT 6705, 6013. 679, 675, 682, and 6707; B. decumbens CIAT 6392 and 6012; and B. nigropedata CIAT 6386, displayed superior DM production (average 3.37 t/ha) and the incidence of insect attack was low. B. decumbens CIAT 606, the most common ecotype in the region, produced less DM and was more susceptible to spittlebug attack than the majority of ecotypes evaluated. This was also found to be true for B. eminii CIAT 6134, and B. decumbens CIAT 6130, 6370, 6700, and 6132.