Summary

Twenty-six Centrosema accessions from CIAT were evaluated for adaptation and dry matter (DM) production during establishment in the humid mountain region at Corozal, Puerto Rico, in 1987-1988. Most of the accessions were relatively slow growing during the first 8 weeks; however, at 12 weeks of growth the average soil coverage for all accessions was 35%. At 16 weeks of growth the average soil coverage ranged from 73% to 84% for C. brasilianum accessions, the hybrids Centrosema CIAT 5930, 5931, and 5933, and C. pubescens CIAT 442, 5126, and 5172. The C. macrocarpum accessions were significantly taller than the other accessions. Most of the accessions were considered disease tolerant, even though disease incidence was relatively high during the rainy season. Except for hybrid Centrosema CIAT 5930, they were able to recover at 32 weeks of

growth. Insect damage was also relatively high in most of the accessions during the first 16 weeks of growth, but they were able to recover at 32 weeks of growth, except for *C. macrocarpum* CIAT 5620 and 5735.

Weed incidence was relatively high in most accessions at 32 weeks of growth, except for *C. pubescens* CIAT 5172, the hybrid *Centrosema* CIAT 5935, and *C. schiedeanum* CIAT 5161, with less than 9%.

Flowering was very low for most of the accessions even in the short-day periods, except for *C. brasilianum* CIAT 5671, *C. pubescens* 5172, and *C. schiedeanum* CIAT 5161, which showed some flowering from November through March.

The most productive accessions were *C. schiedeanum* CIAT 5261, the hybrid *Centrosema* CIAT 5935, and *C. macrocarpum* CIAT 5735, 5620, and 5065, with DM ranging from 7.4 to 9.6 t/ha during establishment at 66 weeks of growth. These accessions were recommended for evaluation under grazing in association with grasses.