

Summary

An evaluation was made in a reddish-yellow Podzol of the Centro de Pesquisa Agroflorestal de Rondônia, Ouro Preto d'Oeste, Brazil (10° 43' S and 62° 15' W), at 400 m.a.s.l. and 2000 mm of annual rainfall, between November 1986 and September 1988. DM production and chemical composition of three accessions of *Centrosema acutifolium*, seven of *C. brasilianum*, six of *C. macrocarpum*, and four of *C. pubescens* were evaluated in a random block design with 3 replications. At planting, 22 kg/ha of P were applied. Cuts were made at intervals of 8 and 12 weeks in periods of maximum (1465 mm) and minimum (238 mm) rainfall, respectively.

Most of the ecotypes evaluated are adapted and productive in the region, mainly *C. acutifolium* CIAT 5277 and 5112, *C. brasilianum* CIAT 5824 and 5178, and *C. macrocarpum* CIAT 5065 and 5713.