## Summary

In a reddish-yellow Podzol of the experiment station of the Instituto Agronômico de Paraná (IAPAR), Paranavaí, Brazil (23° 05' S, 52° 26' W), between September 1989 and June 1991, a trial was conducted to evaluate adaptation, production of dry matter (DM) and seed, growth, and tolerance of pest and disease attack of 23 accessions of Centrosema pubescens and 6 of C. acutifolium. Treatments were laid out in a randomized block design with 3 replications and evaluations were made every 9 weeks in the rainy and dry season.

Results showed that *C. acutifolium* CIAT 15533, 15531, and 15530, and *C. pubescens* CIAT 438, 15160, and 5169 had the greatest potential for production and tolerance of pest and disease attack in Paranavaí, Brazil.