

Summary

A germplasm collection of the amphicarpic legume *Centrosema rotundifolium* was evaluated in single-row plots on acid, low-fertility Oxisols in the Research Stations Carimagua (five accessions) and La Libertad, Villavicencio (six accessions), Llanos Orientales, Colombia, in savanna climate environments characterized by 2100-2500 mm rainfall/year and 3-4 dry months.

Though not very productive at either site, the collection proved to be well adapted to the prevailing soil conditions. At both sites there was considerable variation among accessions in flowering time, seasonal dry-matter production, soil seed reserve, and nutritive-value components. The potential to produce underground seed seems to be substantially higher than that to produce aerial seed. Regarding the particularly important features dry-matter production and soil seed reserve, the outstanding accessions were in La Libertad CIAT 5260 and 25120, and in Carimagua CIAT 25120.

As amphicarpy is a most valuable, potential plant persistence mechanism, it is concluded that *C. rotundifolium* merits further evaluation which should include exposure to heavy grazing. It is suggested that such further experimentation should be conducted at a site with less rainfall and sandier soil than in Carimagua or La Libertad.