

Summary

The paper describes the origin and geographical distribution of the *Centrosema acutifolium* Benth. germplasm collection. This species was until recently referred to as "*Centrosema* sp." in CIAT and RIEPT reports. In addition, it describes the preliminary evaluation of 24 accessions from the Colombian Orinoco region and central west Brazil and of nine accessions from the Orinoco region in Colombia and Venezuela.

Centrosema acutifolium is a species closely related to *C. pubescens*; taxonomically, the most important differences are that *C. acutifolium* has shorter calyx teeth and its bracteoles are smaller and less concave than those of *C. pubescens*. The presently available germplasm collection comprises 35 accessions collected between 1975 and 1986 in Goiás, Mato Grosso, and Minas Gerais, Brazil (6, 14, and 1 accessions, respectively) and in the Orinoco region of Vichada, Colombia, and Territorio Federal Amazonas, Venezuela (5 and 9 accessions, respectively). Thus, the natural distribution of the species is very disjunct, with a small distribution area restricted to the Orinoco region between latitudes 4° N and 6° N, and an extended area in central west Brazil. A series of morphological differences between the *C. acutifolium* types from the Orinoco and Brazil regions include: the length to width ratio of leaflets; the length of floral peduncles, bracteoles and pods; pod smoothness and seed color.

One of the most promising *C. acutifolium* accessions from the Orinoco region is CIAT 5277 which was collected in 1979 near Santa Rita, Vichada, Colombia, on an acid, low-fertility Oxisol (pH = 4.3, 5.0 ppm P, and 86% Al saturation) in a high rainfall environment (2130 mm/year) with three to four dry months during the year.

The preliminary evaluation trials, conducted on an Ultisol at the CIAT experimental station in Santander de Quilichao, Cauca, Colombia, assessed the intraspecific variation in plant earliness, seed and dry matter (DM) production potential, and nutritive value. Results showed considerable variation in all parameters with the exception of leaf percentage in DM. Dry matter yields were influ-

enced by *Pseudomonas* bacterial blight which affected the accessions from central west Brazil more than the germplasm from the Orinoco region. Other differences between the two *C. acutifolium* types were plant earliness (Orinoco germplasm later flowering than Brazilian germplasm), crude protein (CP) content and in vitro dry matter digestibility of leaves (higher in accessions from the Orinoco region).

On the basis of preliminary evaluation results, morphological differences, and the disjunct distribution, it is suggested that the *C. acutifolium* material from the Orinoco region and that from central west Brazil be considered as different taxa. The respective botanical variety names '*orinocense*' and '*matogrossense*' are proposed.