

Summary

The principal morphological characteristics of *Centrosema brasilianum* (L.) Benth., a forage legume that adapts well to soil and climatic conditions in tropical America, are described as is the agronomic evaluation of seven selected ecotypes.

Centrosema brasilianum is a herbaceous perennial that has a trailing and twining growth habit. Leaves are trifoliolate and vary in size and shape according to the ecotype. Flowers are papilionaceous and may be blue, purple, violet, or less frequently white; they typically occur in clusters with each inflorescence comprising between two and five flowers although the inflorescence may at times have fifteen flowers. The fruit is a linear, dehiscent pulse containing up to 23 seeds. Among the plant characters which can be used to distinguish *C. brasilianum* from other *Centrosema* species, are the large bracteoles (up to 50% or more of a leaflet's size) and the hirsute-pilose floral peduncle.

The seven *C. brasilianum* ecotypes chosen for the agronomic evaluation trial included the accession CIAT 5234 (BRA-006025) that had originally been collected under a wide range of diverse ecological conditions in Arauca, Colombia; Sucre and Anzoátegui, Venezuela; and Amazonas and Bahía, Brazil. They had been selected in previous plant introduction nurseries on the basis of plant vigor and disease resistance. Evaluations were based upon dry matter (DM) production and nutritive value and were performed over a period of two years on an Ultisol (pH 4.0, 6.0% OM, 3.2 ppm P,

85.0% AI saturation) at the CIAT-Quilichao station in Santander, Cauca, Colombia. Results showed similar DM production indicating that the diverse origins of the ecotypes had no influence on their performance at Quilichao. The data also corroborate the high potential that CIAT 5234 is demonstrating in regional trials of the International Tropical Pastures Evaluation Network (RIEPT). Results dealing with nutritive value confirm that *C. brasilianum* is a species of high nutritive value especially in crude protein content.