

Summary

A joint project among the Ministerio de Agricultura y Ganadería of Costa Rica, the Centro Agronómico Tropical de Investigación y Enseñanza, and the Centro Internacional de Agricultura Tropical began in 1987 to evaluate tropical pastures in Costa Rica. A parallel effort in seed multiplication of 2 grass accessions and 14 legumes is being carried out at three places in different ecosystems (Atenas, Guápiles, and San Isidro del General).

In 32 months of activities, a total of 633 kg of grass seed and 705 kg of legume seed have been produced; this seed has aided in the expansion of pastures evaluations in Costa Rica and in other areas of Central America. In addition, this pioneer experience has increased knowledge on seed production aspects, such as flowering and seed maturity periods, flowering density, seedbed management, and yields of pure seed. *Andropogon gayanus* flowered in December and yielded between 50 and 150 kg/ha of pure seed; *Brachiaria* species flowered intensely and the seed matured for harvest in July, except for *B. brizantha*, whose seed matured in August; the highest yields of pure seed were those of *B. dictyoneura* CIAT 6133 (282 kg/ha) and *B. humidicola* CIAT 679 (160 kg/ha). At Guápiles, pure-seed yields were 600-1900 kg/ha for *Arachis pintoi*, and 100-400 kg/ha for *Desmodium ovalifolium*. At Atenas, 200-600 kg/ha for *Centrosema brasilianum* and 50 kg/ha for *Stylosanthes guianensis* at San Isidro del General.

With this foundation, the project intends to expand its seed activities involving more multipliers and progressively refining the management of each material for more profitable production.