

# Summary

**Between 1984 and 1988, an experiment was conducted in a typical, poorly drained clayey Paleudult, with 11% slope, at the INIAA-La Esperanza experimental station, Puerto Bermúdez, in the Peruvian Amazon region**

(10° 18' and 74° 54' W, 200 m.a.s.l., and 3300 mm of rainfall). The persistence, and green dry-matter (GDM) production of two contrasting grass-legume pastures were evaluated. These pastures were: *Brachiaria dictyoneura* CIAT 6133-*Desmodium ovalifolium* CIAT 350, and *Andropogon gayanus* CIAT 621 cv. San Martín-*Zornia latifolia* CIAT 728, managed under three stocking rates (2, 3, and 4 animals/ha) and two rest periods (21 and 42 days), with an equal occupation period of 4 days in each pasture.

Availability of GDM was affected by the rest period but not by stocking rate. The greatest forage availability was obtained with a rest period of 42 days (1.7 t/ha), while with 21 days of rest availability was 1.3 t/ha. The pastures showed rapid degradation in terms of the grass and legume components, regardless of grazing management. This was related to high soil compaction, measured as mechanical resistance and infiltration rate. This compaction in the first 10 cm was greater with the high stocking rate treatments. The low stocking rate (2 animals/ha) used in this experiment turned out to be high for the region's ecological conditions.

It is clear from the results of this grazing trial that the use of pastures in high-rainfall, clayey-soil regions should be based on low stocking rates and long rest periods.