

# Summary

During the 1996 and 1997 growing seasons, experiments were established in the savannas of the fertile alluvial lands, sandbanks, and esterines of the El Frío cattle ranch (7° 45' N, 68° 55' W), located in the Alto Apurè region of Venezuela, to evaluate the floristic composition of hyperseasonal lowlands under different cutting and fertilization regimes. A typical sandbank, downriver from the dike, that forms part of a 6000-ha module was chosen. The experimental area consisted of four lots, 5 x 10 m<sup>2</sup>, distributed in completely randomized blocks. In 1996, pastures were cut at 10 cm height, at three frequencies: 30, 60, and 90 days and check (no cutting, no grazing, no fertilization). The following parameters were evaluated: residual biomass, floristic composition, and humidity. The hyperseasonal savanna is mainly composed of the grasses *Paspalum chaffanjonii*, *Panicum laxum*, *Leersia hexandra*, and *Axonopus purpusii*. *Paspalum chaffanjonii* contributes most to aerial biomass. Both humidity and grazing affected floristic composition and the relative ability of grasses to withstand grazing. The excessive flooding and prolonged stay of cattle decreased the floristic diversity of the savanna.