

Summary

Several promising accessions of forage grasses and legumes were evaluated for their quality in a

tropical humid forest ecosystem. The trial was conducted in an Entisol at the Technological Institute at San Carlos, Costa Rica (10° 20' N, 84° 34' W; 172 m.a.s.l.). Evaluations were carried out during the wettest and driest seasons of June 1988 to October 1989, when plants were 3, 6, 9, and 12 weeks old. Results indicated that *Panicum maximum* CIAT 622, 673, and 6299 had acceptable levels of IVDMD, even though they tended to diminish with cutting age. In contrast, *B. decumbens* CIAT 606, *B. brizantha* CIAT 6780, and *B. dictyoneura* CIAT 6133 had medium values of CP that were constant throughout the experiment. Although the IVDMD and CP in legumes were more constant over time than in grasses, in both the largest reductions occurred between the third and sixth weeks. CP contents were also high, even in later cuttings.