

Summary

From November 1987 through October 1989, 20 *Panicum maximum* accessions were evaluated on an Ultisol of the Ouro Preto d'Oeste Experimental Station, Rondônia, Brazil (tropical rain forest), for dry matter (DM) yield, leaf/stem ratio relationship, crude protein (CP) content, and in vitro DM digestibility (IVDMD). Evaluations were made every 6 weeks in two periods of maximum precipitation (1.621 mm) and every 12 weeks in two periods of minimum precipitation (142 mm). Differences ($P < 0.05$) were found in all ecotypes for the characteristics evaluated. According to the results, the most promising ecotypes for the area are CPAC-3012, 3003, 3024, 3072, 3063, 3060, 3016, 3028, and 3055.