Summary

The effect of eight sowing distances (25, 50, 71, 87, 100, 112, 122, and 132 cm between plants), on growth and DM production of *Panicum maximum*

fertilized with 16 kg P and 25 kg K/ha/year, was assessed on an Ultisol of Pucallpa, Peru (25°C mean temperature and 1770 mm annual rainfall). Twelve evaluations were made over 96 weeks. Production of dry matter/plant increased linearly with the sowing distance ($r^2 = 0.91^{**}$); however, DM yield/ha decreased logarithmically ($R^2 = 0.97^{**}$). The plant components differed from one year to another; for the first year, the leaf: stem ratio was high, and for the second, the number of stems/plant increased significantly. The highest DM yield/year (4.5 t/ha) was obtained with a sowing distance of 71-87 cm. Smaller distances did not favor plant survival. Dry matter production decreased with increasing sowing distances.