

Summary

The objective of this trial was to evaluate the effect on production and quality of *Panicum maximum* of deferring the utilization period. This trial was conducted at the Governador Valadares experiment station (166 m.a.s.l., 1165 mm rainfall) of the Empresa de Pesquisa Agropecuária de Minas Gerais (EPAMIG). The trial was carried out at a site with flat topography (sandy loam soil, pH 6.5, 99 ppm K, and 4 ppm P), and at a site with 15%-25% slope (loam, pH 5.6, 89 ppm K, and 1 ppm P). Cutting dates to begin deferral were 9 and 30 January, 20 February, and 12 March. Fourteen cuts were

made, spaced every 12 days. Each topography used a factorial design in 8 x 4 m plots.

The results showed that topography did not affect either DM quality or production. DM production was adjusted to the model $Y = A (1 - C (\exp. - K * \text{days}))$, and was ascending until day 35 after cutting. The highest DM production (4.3 t/ha) was obtained when deferral of cutting was begun on 9 January and was not significantly different ($P > 0.05$) from yields obtained when cutting was done on 30 January (3.37 t/ha) and on 20 February (2.94 t/ha), but it was higher than the yield obtained when cutting was done on 12 March (2.35 t/ha).

The reduction in CP content with time was higher ($P < 0.05$) when cutting was done on 9 and 30 January. The proportion of plant components (stem and leaf) varied because of effects of topography and cutting date.

This study shows the importance of deferring the use of *P. maximum* in Minas Gerais, as an economical practice to maintain forage availability in drought periods and to ensure pasture persistence.