Effect of cutting interval and nitrogen fertilizer rate on dry matter yield and chemical compositions of purple guinea grass (Panicum maximum TD 58)

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Abstract

This experiment was conducted to study the effect of nitrogen fertilizer application (0, 16, 32 and 64 kg/rai) and cutting interval (4, 6, 8 weeks interval) on yield and quality of purple guinea grass (Panicum maximum TD 58). The results show that there was a significant difference in dry matter yield and protein yield of purple guinea grass. These were significantly increased with a 46 kg. nitrogen fertilizer application 6,765 and 488 kg/rai, respectively compared with the non-nitrogen fertilizer application (4,894 and 353 kg/rai respectively) infrequent cutting (8 weeks interval) significantly increased the dry matter yield compared with frequent cutting (every 4 weeks). However, frequent cutting increased the crude protein concentration, but reduced the level of ADF in purple guinea grass.

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