

The effect of Kalanduru (*Kyllinga mallanosperma*) on the performance of milking buffalo cows

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Main objective of the present study was to find out the effect of feeding of Kaladuru on performance of milking buffalo cows. Nine lactating buffalo cows were selected and divided into three groups according to the body weight ($394 \pm 64\text{kg}$). Animals within a block were allocated to three treatments namely; Kalanduru, Hybrid Napier grass variety CO-3 (*Pennisetum purpureum* x *Pennisetum americanum*) and whole vegetation cover (grass + legume + sedges + other shrubs). All animals were stall-fed *Ad libitum*. Each animal was fed with 3 kg of rice (*Oryza sativa*) bran and 50 g of mineral mixture along with the grass. Feed offered and refusals were measured every day for each animal for a period of 20 days. Live weight and milk production of animals were measured during the experimental period. Data were statistically analysed and means were separated using LSD.

Dry matter and ash content of Kaladuru (20.7% of DM and 12.7% Ash) was higher compared to CO-3 (17.4% DM and 12.1% Ash) or whole vegetation (18.5% DM and 14.8% Ash), but the crude protein content of Kaladuru (13%) was lower than that of whole vegetation (13.6%). No significant differences were observed between treatments for forage dry matter intake as well as for total dry

matter intake. However, intake of whole vegetation (70 g/kg^{0.75}/d) was somewhat higher compared to Kaladuru (65 g/kg^{0.75}/d) or CO-3 (65 g/kg^{0.75}/d). Dry matter intake of Kalanduru was similar to that of CO-3 indicating that Kalanduru can be used as palatable forage to feed cows. Feeding of CO-3 increased (P<0.05) the milk production (3750ml/d) of cows compared to other two feeds and, the lowest milk yield was recorded with Kalanduru (2500ml/d) (3000ml/d for whole vegetation). According to the results, Kalanduru is a palatable forage, which can be used for feeding of milking buffalo cows in southern part of Sri Lanka under waterlogged condition.

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