

B-22: Ensiling of Guathamala grass (*Tripsicum laxum* Nash.) with poultry droppings

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This study was conducted to investigate the potential and the optimum level of adding poultry droppings in ensiling Guathamala grass. Poultry droppings were added as 0, 10, 20, 30 and 40 % (dry matter basis) and ensiling was done in laboratory silos. During ensiling 2% molasses were added to all the treatments. Ensiling was done for 8 weeks. When the silage was set, samples were taken and the following analyses were performed; dry matter (DM), Organic matter (OM), Total ash (TA), Acid insoluble ash (AIA), Crude protein (CP), Ether extract (EE), Acid detergent fibre (ADF), Acid detergent lignin (ADL), Total volatile fatty acids (TVFA), Lactic acid (LA) and Water soluble carbohydrates (WSC). pH of the silages were measured *In vitro* DM and OM digestibilities were determined. Dry matter, TA, AIA, ADF, ADL, CP, Ammonia N and, DM and OM digestibilities were increased ($P < 0.05$) with the increasing proportions of poultry droppings in silage. Lactic acid, EE AND OM initially increased and then decreased ($P < 0.05$) as the proportion of poultry droppings increased. However, a decrease of CF and cellulose ($P < 0.05$) was observed at higher levels of poultry droppings in the silage. Physical characteristics of all the silages were satisfactory. This study suggests that poultry droppings could be incorporated upto 30 to 40% satisfactorily, when ensiling of Guathamala grass.