

Ensiled taro leaves as replacement for fish meal

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Digestibility and nitrogen balance studies in pigs fed diets with ensiled taro (*Colocasia esculenta*) leaves as replacement for fish meal

Abstract

The four treatments applied to 4 growing pigs (15 kg live weight) in a 4*4 Latin square arrangement were four levels of ensiled leaves of taro (*Colocasia*

esculenta

) equivalent to 25, 50, 75 and 100% substitution of the protein from fish meal in a basal diet of sugar palm syrup. The pigs were housed in metabolism cages for consecutive periods of 12 days, with collection of faeces and urine during the last 5 days of each period.

There were positive curvilinear trends in DM and crude protein intake and in N retention in response to replacement of fish meal by ensiled taro leaves with the optimum proportion being at about 70-75% replacement. Coefficients of DM apparent digestibility were high on all diets but those for crude protein showed a negative curvilinear response with declining values beyond 25% substitution of the fish meal protein by that from taro leaf silage. The limiting factor to utilization of the taro leaf silage appears to be the lower apparent digestibility of the protein in the taro leaves.

Key words:

Colocasia esculenta, digestibility, N balance, sugar palm syrup, Taro leaf silage



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