Ensiled Taro leaves as a protein source in pig diets in central Vietnam

Ensiled taro leaves can replace up to 30% of the dietary fish meal in diets for growing pigs without loss of performance

Abstract

Oxalate levels in 3 species of taro were higher in petioles (range of 1326 to 3567 mg/100 g DM) than in leaves (770 to 2531 mg/100g DM), and within each plant part, values were highest for Alocacia odera and lowest for Xanthosoma nigra, with intermediate values for Colocacia esculenta. Sun-drying, soaking, cooking and ensiling all reduced the concentration of oxalate but the effects were most pronounced (50% reduction) for cooking and ensiling.

DM and crude protein intakes of pigs fed a basal diet of maize, rice bran, cassava root meal and fish meal did not differ when ensiled taro leaves (ETL) replaced fish meal at up to 30% silage in the diet DM; however, intake of fiber increased linearly with replacement rate of ETL. Growth rate was reduced only slightly up to the 30% inclusion rate of ETL, at which point the growth rate was markedly reduced. The trends for feed conversion were similar to those for weight gain.

The results suggest that ETL can replace up to 30% of the dietary fish meal (20% ETL in the diet DM) in diets for growing pigs without loss of performance.

Keywords: Alocacia, boiling, Colocacia, cooking, conversion, growth rate, itching, soaking, Xanthosoma

Du Thanh Hang and T R Preston

Faculty of Animal Husbandry and Veterinary Medicine, Hue University of Agriculture and Forestry, Hue City, Vietnam

hangduthanh@yahoo.com.vn

* TOSOLY, AA48 Socorro, Colombia