

134/B

Evaluation of fish silage as a feed substitute for growing pigs

S S K Madage and Y Sultanbawa*

Food Technology Division, Industrial Technology Institute, Bauddhaloka Mawatha, Colombo 7

Swine production is one of the growing farming industries in Sri Lanka. One of the main problems faced by this industry is the lack of a low cost feed. Feed cost (50-60%) is one of the highest individual costs involved in pig farming. Fishmeal is an important but most expensive ingredient in commercial pig feeds. Fish silage is protein rich, value added product produced from fish by-products, which could be easily digested and absorbed by pigs. The fishery harbours alone in Sri Lanka collect about 1500 t of by-products annually which is available for value addition. Therefore, the objective of

this study was to evaluate the performance of pigs fed with fish silage by substituting commercial pig feed rations.

Substituting commercial pig grower ration with fish silage at 25% and 50 % and incorporating 25 % of fish silage into farm practice pig diets were carried out as two experiments. Feed intake of fish silage incorporated diet was higher in both experiments. Increasing level of fish silage increased protein and dry matter digestibility significantly ($P < 0.05$). In experiment 2 higher daily weight gain of 327 ± 16 g was achieved by silage fed pigs than the control diet (322 ± 8.48 g). Average carcass weight of silage fed pig was 78.4 ± 10.79 kg and pig fed with control diet was 75.2 ± 9.5 kg. There was no significant difference in carcass recovery ($P > 0.05$) between the silage fed pig 79.6 ± 1.7 and the pig fed with control diet 75.4 ± 4.5 . The Back fat thickness and feed conversion ratio did not show significant differences ($P > 0.05$). Therefore it was concluded that fish silage could be incorporated in pig ration up to 25%.

* yasmina@iti.lk

Tel: 011-2693807