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**PERTAINING TO MANIOC LEAF MEAL AND IPIL IPIL
LEAF MEAL AS A SUBSTITUTE FOR COCONUT MEAL
IN LAYER'S STARTER AND GROWER RATION**

BY

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ABSTRACT

Manioc leaf meal, prepared from leaflets and petioles, contained (dry matter basis) 23 percent crude protein, 7.8 percent ether extract, 21.7 percent crude fibre, 7 percent ash and 39.6 percent nitrogen free extract.

Ipil Ipil leaf meal, prepared from leaflets and petioles, contained (dry matter basis) 25 percent crude protein, 4.8 percent ether extract, 14.9 percent crude fibre, 9.6 percent ash and 49.1 percent nitrogen free extract.

These leafmeals were found to be a cheaper and rich source of protein.

Meals prepared from manioc leaves and Ipil Ipil leaves were incorporated in starter and grower rations to an amount of 0 percent, 5 percent and 10 percent by weight separately as a substitute for coconut poonac. The starter ration was fed to three weeks old starter chicks for a period of five weeks, followed by grower ration from the eight weeks. The weight of individual chicks and group feed consumption were measured at weekly intervals, from the eight week onwards.

The completely randomized design was used to analyse the treatment effects. The treatment effects were statistically analysed by the analysis of variance and regression analysis.

The results showed that there were significant ($P=0.05$) difference between control (without manioc or Ipil Ipil leaf

meal) and 10 percent manioc leaf meal and control and 5 percent Ipil Ipil leaf meal treatment with respect to weight gain. When the proportion of manioc leaf meal was increased, the consumption was found to be decreased. Therefore, the feed conversion efficiency decreased with the increasing of manioc leaf meal in starter and grower ration.

When the proportion of Ipil Ipil leaf meal was increased, the mean weekly feed consumption increased, which resulted in increase in the feed conversion efficiency.

A high significant correlation ($r=0.6357$, $P<0.05$) was found between weekly consumption and weekly body weight gain.

Therefore, it may be concluded that 10 percent level of manioc leaf meal and 5 percent level of Ipil Ipil leaf meal form an economically valid substitute for coconut poonac in starter and grower ration without any deleterious effect to the chicks.

Comparing 10 percent manioc leaf meal and 5 percent Ipil Ipil leaf meal, there was no significant difference ($P=0.05$) between them with regard to weight gain and feed conversion efficiency. From the economical analysis it is possible to recommend 10 percent manioc leaf meal, due to its low unit price.

This aspect suggest that further study is needed to arrive at the maximum level of manioc leaf meal as a substitute for coconut poonac.

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