GIANT AFRICAN SNAILS AS CHICKEN FEED?

The giant African snail, Achatina fulica, which is a common pest in Papua New Guinea, is being tested for possible use as a chicken feed.

The work is going on at the Centre for Animal Research and Development, a joint Indonesian Ministry of Agriculture/Australian Development Assistance project, based at Bogor in West Java. Scientists there are interested in possible new sources of feed for animals, especially if they are rich in protein.

The giant African snail is also a common pest in Indonesia, particularly during the wet season. The researchers decided to use only the flesh of the snails because the shells contain large amounts of calcium which upsets the mineral balance of the diet. It was found that the flesh could be easily separated from the shell after boiling the snails.

Snail meal made from the meat had a high protein content (60.9%) and when dried it stored well and was not strong smelling. However, the researchers discovered that unboiled meat did not give normal growth in chickens. This was thought to be due to a chemical in the slime because simply washing fresh snails improved the growth. Even after washing, fresh meat was still not as good as boiled meat.

In feeding tests with broilers when snail meal was used to replace fish meal up to a total of 15% of the total feed, growth rates were not affected. When 20% or more snail meal was included there was a reduction in growth rate. It was found that in layers, up to 5% snail meal could be included in their diet without affecting producttion or egg colour.

The scientists conclude that when properly prepared, snail meal has a high nutritional value for growing chickens and is an acceptable substitute for fish meal in broiler diets. They are now looking for ways to simplify the processing and storage of snail flesh.

Hopefully this destructive pest can be used to make up for some of the damage it causes.

For a description of the giant African snail, and the damage it causes, see HARVEST Volome 7 (4): pp. 176-179.

FURTHER READING

Elmslie, L.J. (1982). The Potential for snail farming. Span 25(1): 35-37.

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