# GROWTH OF PIGS IN CROWDED CONDITIONS

By G.L. Malynicz, Senior Veterinary Officer, Tropical Pig Breeding and Research Centre, Goroka

*In this experiment, not much difference was found between the growth of pigs in large or small rooms.*

During 1972 a small experiment was conducted at the Department of Primary Industry piggery at Goroka to look at the effect of different sized room on growth rate and food eaten by young pigs.

The experiment was carried out in a local materials house which had bush timber walls and a kunai roof. The floor was made from dried elephant grass which was thrown in every day to make a deep litter.

There were three rooms in the house. These had the following areas: 2.50, 5.38 and 11.52 sq m. Six eleven-week-old pigs of about the same weight were put into each pen.

The pigs were all fed as much as they could eat of the same ration every day. The ration consisted of 1 kg of protein concentrate mixed with 10 kg of cooked sweet potato. The protein concentrate contained 55 % protein and all the vitamins and minerals that pigs need. To see how quickly the pigs were growing, they were weighed every week. The experiment lasted for ten weeks.

The table shows the results of the experiment. There was not much difference between the three pens in the growth rate. The pigs in the smallest room grew more quickly. However they required more food to put on a kilogram of weight, that is they had a higher food-conversion ratio. The pigs in the biggest room grew a little more slowly than the pigs in the other rooms, but their food-conversion ratio was good.

The experiment showed that there was not much effect of crowding on performance, so that in deep litter houses we can use small rooms.

**The Effect of Floor Space on Pig Performance**

| | *Floor space of rooms (square metres)* | | |
|---|---|---|---|
| | *2.50* | *5.38* | *11.52* |
| Weight at beginning (kg) | 20.5 | 19.8 | 20.0 |
| Weight after ten weeks (kg) | 68.2 | 65.3 | 58.5 |
| Daily weight gain (kg) | 0.68 | 0.65 | 0.55 |
| Food consumed per pig per day (kg) | 7.5 | 5.9 | 4.9 |
| Food conversion ratio[1] | 4.0 | 3.26 | 3.26 |

[1]Food conversion ratio is the amount of food eaten (expressed on a dry matter basis) divided by the weight gain.