

# Effects of Pig Compost Application on Productivity of Peanut in Penghu Area

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## Abstract

This experiment was conducted in Penghu branch station in order to study the effect of applying pig compost at 0, 5, 10, 15, 20, 25 t/ha on peanut yield and soil fertility in a moderately alkaline soil. The results were summarized as follow :

Peanut yield was significantly increased with pig compost application in 1992 and 1993. Yield regression showed that pod yield was the highest for 13.9 t/ha of pig compost application in the first year, and 14.1 t/ha in the second year.

The rate of shelling was significantly increased with pig compost application, but was inhibited when application was exceeded 20 t/ha. The disease of rosette was increased significantly with application of pig compost over 20 t/ha. The disease of rosette was increased in the second year than the first year. It might be referred to continuous cropping.

The pH value and P<sub>2</sub>O<sub>5</sub> content of soil weren't affected by pig compost application, while the O.M. and K<sub>2</sub>O contents were increased significantly. Linear regression showed that O.M. content increased 0.16 to 0.19% and K<sub>2</sub>O content increased 17.6 to 21.7 kg for 10 t/ha of pig compost application each crop.

Key words: Pig Compost, Penghu Area, Peanut, Productivity.

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