RECYCLING OF SWINE WASTES FOR FEEDING GILTS

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At present, one of the most important research topics scientists are involved with is the search for alternative sources of food for animal production. Some of the reasons for using excreta as part of diets for --- swine are:

1. Economical.
2. As as alternative protein source.
3. Reduction of pollution.
4. Possible Inmunological effect.

1. Economical advantages.
A hog weighing 100 kg. excretes 1 kg. of feces Dry - Basis (Muheling, 1969). Piglets excreta contains -- considerable amounts of indigested feed due to feed waistage and poor digestibility.

2. The use of piglet excreta as a source of feed reduces soybean meal intake. Therefore more soybeans are available for human consumption.

3. The large amounts of excreta contribute to pollution of cities or towns located not far away from hog farms lacking good waist management and reprocessing.

4. Feeding sows with manure will produce a certain amount of antibodies which will be transferred to the offspring through colostrum, therefore piglets will - have a greater resistance to disease.

Throughout history, manure has been used as a fertilizer, as an alternative source of feed or as fuel for heating. Many processing and recycling techniques have been tested:
a). mixing fresh manure with feed.
b). manure silage.
c). dehydration or fermentation.

Animals consuming processed excreta have not developed any disease (Bucholtz, et al., 1971; Harmon, - 1974). Weight gain was not significantly affected -- when pigs were fed with fresh manure (Diggs et al., 1965).

Materials and Methods.

Data were collected from 36 crossbred sows in a -- study involving 4 treatments consisting of:
1. Control diet, 2 kg/sow/day.
2. 75% control diet + 25% fresh piglet excreta (dry - basis - D. B.)
3. 50% control diet + 50% fresh piglet excreta (D. B.).
4. 50% control diet + 50% fresh piglet manure + 160 g. of sugar cane molasses per sow per day (8% intake in D. B.)

Results.

From the results obtained in this trial, we can assume that it is possible to feed sows up to 50% fresh -- piglet manure without affecting number of pigs born - per litter, birthweight, weight at weaning, number of pigs weaned and weight gain of the pregnant sows. -- The economy obtained in feed was $ 20.10 U.S.cy per sow per year.

Data was subjected to statistical analysis as out lined by steel and torrie, 1960.

Conclusions.

1. It is possible to substitute 50% of the sows diet for fresh piglet's manure in D. M. B. without affecting offspring's per formance.
2. The objectives of this study were not to improve - performance but to use alternative sources available to the hog producer more effeciently without affecting existing performance.
3. A practical method of recycling fresh manure is - proposed for comercial hog producers.

Selected references:

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