

Observations

The pigs receiving the RQ-20 gained a little more slowly than the pigs that did not receive RQ-20. However, they were slightly more efficient in use of feed, consuming 16 pounds less corn per 100 pounds gain, but 7 pounds more protein supplement.

For practical purposes the RQ-20 was of no benefit to the pigs receiving it in this experiment.

PROJECT 110, Test 3

C. E. Aubel

A second experiment was conducted with fall pigs in the dry lot. Two lots of pigs were used. One lot received the RQ-20 in the protein mixture at the rate of 3 pounds to 600 pounds of supplement. The mixture was self-fed with the shelled corn and was composed of 4 parts tankage, 4 parts soybean meal, 1 part alfalfa meal, and 1 part linseed meal in the dry lot.

Table 59 gives the results of this experiment.

Table 59

Value of RQ-20 in the Ration of Fattening Pigs in the Dry Lot.

December 6, 1955, to March 12, 1956—97 days.

| Basal ration fed: Shelled corn, mixed protein supplement in dry lot | Basal + RQ-20 | |
|--|---------------|---------------|
| | Basal | Basal + RQ-20 |
| Lot number | 1 | 2 |
| Number pigs in lot | 9 | 10 |
| Av. initial wt. per pig, lbs. | 50.70 | 52.10 |
| Av. final wt. per pig, lbs. | 221.11 | 217.30 |
| Av. total gain per pig, lbs. | 169.11 | 165.20 |
| Av. daily gain per pig, lbs. | 1.74 | 1.70 |
| Av. daily ration per pig, lbs.: | | |
| Shelled corn | 5.16 | 5.46 |
| Protein supplement | .82 | .81 |
| Lbs. feed per 100 lbs. gain per pig: | | |
| Shelled corn | 329.04 | 320.82 |
| Protein supplement | 52.36 | 47.82 |

Observations

The pigs receiving the RQ-20 gained a little less per day than those not receiving it. They produced their gains a little more efficiently than those not receiving the RQ-20. The differences were small, about 3.5 percent.

The Maximum Value of Alfalfa Meal in Protein Supplements for Pigs on Pasture.

PROJECT 110, Test 4

C. E. Aubel

Since pastures for swine are often poor, inadequate, or unavailable in Kansas, there is a growing appreciation of the value of alfalfa hay or meal in the rations of all swine brood sows (and pigs being fed for market). This experiment was designed to secure information on the maximum use of alfalfa meal in protein supplemental mixtures as a substitute for pasture, tested with pigs on summer pasture and in dry lot.

In the test two lots of pigs were fed shelled corn and a mixed protein supplement, with varying quantities of alfalfa meal on sudangrass pas-

ture, and one lot was fed in the dry lot, with a large quantity of alfalfa meal in the protein supplement to ascertain whether alfalfa meal thus fed could replace the green pasture. All feeds were self-fed.

Lot 1 on pasture received 4 parts tankage, 4 parts soybean meal, 1 part cottonseed meal, and 1 part alfalfa meal.

Lot 2 on pasture received 4 parts tankage, 4 parts soybean meal, and 2 parts alfalfa meal.

Lot 3 in the dry lot received 4 parts tankage, 4 parts soybean meal, and 3 parts alfalfa meal.

Table 60 gives the results of this experiment.

Table 60

The Maximum Value of Alfalfa Meal in Protein Supplements for Pigs on Pasture.

June 11, 1955, to September 20, 1955—101 days.

| Ration fed | Shelled corn, sudangrass pasture, mixed protein supplement | | Shelled corn, mixed protein supplement in dry lot |
|--------------------------------------|--|--|--|
| | 4 parts tankage 4 parts S.B.M. 1 part alf. meal 1 part C.S.M. | 4 parts tankage 4 parts S.B.M. 2 parts alf. meal | 4 parts tankage 4 parts S.B.M. 3 parts alf. meal |
| Lot number | 1 | 2 | 3 |
| Number pigs in lot | 9 | 9 | 10 |
| Av. initial wt. per pig, lbs. | 57.40 | 57.80 | 58.80 |
| Av. final wt. per pig, lbs. | 191.44 | 197.88 | 192.20 |
| Av. total gain per pig, lbs. | 134.04 | 140.08 | 133.40 |
| Av. daily gain per pig, lbs. | 1.32 | 1.38 | 1.33 |
| Av. daily ration per pig, lbs.: | | | |
| Shelled corn | 4.20 | 4.12 | 4.30 |
| Protein supplement | .67 | .69 | .77 |
| Lbs. feed per 100 lbs. gain per pig: | | | |
| Shelled corn | 308.19 | 289.12 | 325.71 |
| Protein supplement | 50.81 | 55.52 | 58.62 |

Observations

1. Gains made by the pigs in all three lots were about the same, with a little advantage in the lot receiving 2 parts of alfalfa meal on pasture. Daily corn consumption varied little. The dry-lot pigs consumed about .1 pound per day more protein supplement than the pasture-grazing pigs.

The feed consumption per 100 pounds gain was greatest by the dry-lot-fed pigs, as expected. On pasture the requirements were within experimental expectation; a slight advantage was found in Lot 2 that received the most alfalfa meal.

2. These results confirm last year's and indicate a little preference for more alfalfa meal in the ration.

Varying Quantities of Alfalfa Meal in the Rations of Spring Pigs and in the Dry Lot.

PROJECT 110, Test 5

C. E. Aubel

This experiment was conducted the summer of 1955 with spring pigs to obtain information on maximum use of alfalfa meal in protein supplemental mixtures for pigs in the dry lot.

Four lots of pigs were self-fed shelled corn and a mixed protein supplement. Lot 1 pigs were placed on sudangrass pasture and self-fed protein supplement made up of 4 parts tankage, 4 parts soybean meal, 1 part cottonseed meal, and 1 part alfalfa meal.

Lot 2 received the same protein supplement as Lot 1 for 38 days or until they weighed 100 pounds. They were then removed from the