The Value of Antibiotics, Aureomycin B, Supplement (Aurofac 2A) and Vitamin B, Premix (Fortafeed 2-49-C) in the Protein Supplement for Fattening Spring Pigs in the Dry Lot in Summer (Project 110, Test 3).

C. E. Aubel

In 1955-56 experiments were designed with swine to secure information on the maximum use of alfalfa meal in protein supplemental mixtures as a substitute for pasture in the dry lot, since pastures for swine in Kansas are often poor, inadequate, or unavailable.

The pigs in these tests received with their grain mixed protein supplements which contained varying quantities of alfalfa meal.

The mixed protein supplement that gave best results for the two years tested was one of 4 parts tankage, 4 parts soybean meal, and 3 parts alfalfa meal.

From time to time there come on the market new substances, chemical and otherwise, that added to a ration increase gains and feed efficiency.

To the efficient protein supplement of the two years preceding, antibiotics and a vitamin B12 premix were added to see if the 4 parts tankage, 4 parts soybean meal, and 3 parts alfalfa meal protein mixture would then produce more efficient gains.

In this test four lots of pigs were self-fed shell ed corn and a mixed protein supplement. Each lot contained 10 pigs.

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

Lot 2 was fed in dry lot and received a mixed protein supplement of 4 parts tankage, 4 parts soybean meal, and 3 parts alfalfa meal.

Lot 3 was fed in dry lot and received the same protein supplement as lot 2 except that 15 pounds of Fortafeed 2-49-C, a vitamin B12 premix, was added per ton to the protein mixture.

Lot 4 was fed in dry lot, received the same protein supplement as lot 3, with 15 pounds of Aureomycin B2 (Aurofac 2A) added per ton of protein mixture.

Table 1 gives the results of this experiment.

Observations

In this experiment pigs in lots 1, 2, and 3 made almost exactly the same daily gains: 1.47, 1.48, and 1.49 pounds each, respectively. Lot 4 (receiving both vitamin B12 premix and Aureomycin B2) gained 1.38 pounds each daily.

Somewhat less total feed was consumed by dry lot fed pigs that got increased alfalfa meal than by pigs allowed pasture (See Table 3).

The results of this experiment confirm that increased alfalfa meal in the protein supplement increases efficiency in dry lot feeding, and the addition of an antibiotic and vitamin B12 increases efficiency still further.

The Effect of Antibiotics, Aureomycin B1, Supplement (Aurofac 2A) and Vitamin B, Premix (Fortafeed 2-49-C) in the Protein Supplement for Fattening Swine in Dry Lot in Summer and Compared with Sudangrass Pasture Feeding.

June 13, 1956, to September 19, 1956—98 days.

<table>
<thead>
<tr>
<th>Lot number</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number pigs in lot</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Avg. final wt. per pig, lbs.</td>
<td>56.20</td>
<td>57.20</td>
<td>57.20</td>
<td>57.20</td>
</tr>
<tr>
<td>Av. total gain per pig, lbs.</td>
<td>120.7</td>
<td>192.0</td>
<td>193.2</td>
<td>212.5</td>
</tr>
<tr>
<td>Av. daily gain per pig, lbs.</td>
<td>1.47</td>
<td>1.48</td>
<td>1.49</td>
<td>1.58</td>
</tr>
<tr>
<td>Lbs. feed per 100 lbs. gain per pig:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shelled corn</td>
<td>285.37</td>
<td>283.33</td>
<td>277.27</td>
<td>292.07</td>
</tr>
<tr>
<td>Protein supplement</td>
<td>45.06</td>
<td>44.53</td>
<td>44.81</td>
<td>38.24</td>
</tr>
</tbody>
</table>

The Value of Furoxolidone n-180 and Terramycin Antibiotic in the Rations of Fattening Pigs in the Dry Lot (Project 110, Test 4).

C. E. Aubel

One of the most critical problems of the swine industry is disease. Antibiotics have been demonstrated to be effective in keeping some diseases at a low level. The nitrofurans have shown good results for certain specific diseases in poultry. Their effect in swine feeding is little known, for few experiments have been carried on feeding them to swine.

This experiment was initiated to study the effect of furoxolidone n-180 in rations for growing and fattening swine.

In this test four lots of fall pigs were self-fed free choice a basal ration of shelled corn and a mixed protein supplement in dry lot in winter. The mixed protein supplement was made up of 4 parts tankage, 4 parts soybean meal, 1 part linseed meal, and 1 part alfalfa meal.

Lot 1 pigs received no nitrofurans. They were self-fed the basal ration, a mixed protein supplement, and shelled corn.

Lot 2 pigs received shelled corn and a mixed protein supplement to which had been added n-180 at the rate of 4½ pounds per ton. This supplied it to the pig at the rate of about 50 gms. per ton of total feed.

Lot 3 pigs received shelled corn and a mixed protein supplement to which had been added n-180 at the rate of 2½ pounds per ton. This supplied it to pigs at the rate of about 25 gms. each per total feed.

Lot 4 pigs received shelled corn and a mixed protein to which had been added Hi-Con TM-10 at the rate of 1½ pounds to a ton.

Adequate herbage was made to Hess & Clark, Inc., Ashland, Ohio, for supplying the furoxolidone n-180 for this experiment, and to Chas. Pfizer and Co., Terre Haute, Ind., for the Terramycin-B1 supplement, Hi-Con TM-16.