

SWINE FEEDING EXPERIMENT
Colorado Agricultural Experiment Station, Fort Collins, Colorado
Fed 100 days - Jan. 24 to May 3, 1943

Table I. Comparison of Grains

| Grain | No. Hogs | No. Lots | Ave. Daily Gain | Ave. Daily Feed | Total Feed Per 100 lbs. Gain | Feed Cost Per 100 lbs. Gain |
|-------------|-------------|-------------|--------------------|--------------------|---------------------------------|--------------------------------|
| Wheat | 11 | 2 | 1.14 lbs. | 5.38 lbs. | 474 lbs. | \$7.58 |
| Sample Corn | 11 | 2 | 1.06 | 5.15 | 489 | 7.71 |
| No. 1 Corn | 12 | 2 | 1.06 | 4.82 | 467 | 8.36 |
| No. 3 Corn | 12 | 2 | 1.07 | 5.04 | 484 | 8.66 |
| Milo | 10 | 2 | .95 | 5.00 | 550 | 9.64 |

Table II Comparison of Recommended and Low Levels of Feeding
Soybean Oil Meal

| | No. Hogs | No. Lots | Ave. Daily Gain | Ave. Daily Feed | Total Feed Per 100 lbs. Gain | Feed Cost Per 100 lbs. Gain |
|-------------------------------|-------------|-------------|--------------------|--------------------|---------------------------------|--------------------------------|
| .67 lbs. SOM per pig daily | 28 | 5 | 1.30 lbs. | 5.77 lbs. | 445 lbs. | \$7.75 |
| .20 lbs. SOM per pig daily | 28 | 5 | .82 | 4.38 | 541 | 9.03 |

Conclusions:

1. Wheat and sample grade (frosted) corn were found to be the most economical grains to feed. However, this experiment was not extensive enough to determine whether these differences are highly reliable or likely to reoccur in another similarly conducted experiment.
2. It does not pay from the standpoint of gains, efficiency of feed utilization, and feed costs to cut the soybean oil meal to one-third of the recommended amount.
3. Through the cooperation of Armour and Company at Denver, eleven backfats from these hogs were observed. Six were hard and slightly soft, five were soft, and none were oily. These proportions do not differ greatly from other experiments in which tannage was used as the protein supplement.

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(Table based on one average pig)

Table III

| Lot No. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|-------------------|-------------------------|-------------------------|-------------------------|-------------------|--------------------------|--------------------|-------------------|-------------------------|--------------------|---------------------------|
| Rations* | No. 3 Corn .671b.SOM | No. 3 Corn .201b.SOM | No. 1 Corn .201b.SOM | Milo .671b.SOM | Sample corn .671b.SOM | Wheat .201b.SOM | Milo .201b.SOM | No. 1 Corn .671b.SOM | Wheat .671b.SOM | Sample Corn .201b. SOM |
| No. Hogs | 6 | 6 | 6 | 5 | 6 | 6 | 5 | 6 | 5 | 5 |
| Av. Initial Wt. | 77.0 | 79.1 | 72.4 | 78.9 | 79.8 | 79.8 | 83.3 | 83.1 | 82.9 | 82.4 |
| Av. Final Wt. | 205.3 | 163.9 | 147.2 | 205.3 | 202.8 | 175.3 | 147.2 | 221.1 | 216.4 | 172.4 |
| Av. Daily Gain | 1.28 | .85 | .75 | 1.26 | 1.23 | .96 | .64 | 1.38 | 1.34 | .90 |
| Av. Daily Ration | | | | | | | | | | |
| No. 1 Corn | | | 3.50 | | | | | 5.10 | | |
| No. 3 Corn | 4.71 | 4.25 | | | | | | | | |
| Sample Corn | | | | | 4.80 | | | | | 4.39 |
| Wheat | | | | | | 4.47 | | | 5.24 | |
| Milo | | | | 5.27 | | | 3.68 | | | |
| S.O.Meal | .67 | .20 | .20 | .67 | .67 | .20 | .20 | .64 | .66 | .20 |
| Gr. Alf. | .08 | .10 | .10 | .05 | .07 | .09 | .08 | .06 | .05 | .10 |
| Mineral | .04 | .03 | .03 | .02 | .03 | .03 | .03 | .03 | .03 | .04 |
| Total | 5.50 | 4.58 | 3.83 | 6.01 | 5.57 | 4.79 | 3.99 | 5.83 | 5.98 | 4.73 |
| Feed Per Cwt. | | | | | | | | | | |
| Gain: | | | | | | | | | | |
| No. 1 Corn | | | 467.6 | | | | | 369.6 | | |
| No. 3 Corn | 367.3 | 501.1 | | | | | | | | |
| Sample Corn | | | | | 390.5 | | | | | 487.9 |
| Wheat | | | | | | 468.3 | | | 392.4 | |
| Milo | | | | 416.9 | | | 576.1 | | | |
| S.O.Meal | 51.9 | 23.6 | 26.8 | 52.2 | 54.2 | 20.9 | 31.4 | 46.4 | 49.1 | 22.2 |
| Gr. Alf. | 6.0 | 12.3 | 13.8 | 3.8 | 5.4 | 9.1 | 12.8 | 4.6 | 3.8 | 11.5 |
| Mineral | 2.8 | 3.6 | 3.7 | 1.7 | 2.5 | 3.0 | 4.4 | 2.1 | 2.0 | 3.9 |
| Total | 428.0 | 540.6 | 511.9 | 474.6 | 452.6 | 501.3 | 624.7 | 422.7 | 447.3 | 525.5 |
| Feed Cost Per | | | | | | | | | | |
| Cwt. Gain | 7.83 | 9.49 | 9.01 | 8.51 | 7.36 | 7.82 | 10.78 | 7.71 | 7.35 | 8.05 |
| Est. Market Value | | | | | | | | | | |
| Per Cwt. | 14.00 | 13.95 | 13.50 | 14.10 | 14.20 | 13.85 | 13.60 | 14.05 | 14.15 | 13.65 |
| Feed Costs Used: | | | | | | | | | | |
| Wheat | | | \$1.53 per 100 lbs. | Milo | \$1.70 per 100 lbs. | | | | | |
| No. 1 Corn | | | 1.74 " " " | SOM | 2.60 " " " | | | | | |
| No. 3 Corn | | | 1.74 " " " | Alfalfa | .70 " " " | | | | | |
| Sample Corn | | | 1.50 " " " | Mineral** | 1.89 " " " | | | | | |
| | | | | | | | | | | |

*Soybean oil meal hand-fed -- other feeds self-fed.
**(2 parts steamed bone meal, 2 parts gr. limestone, 1 part salt)