

Pigs Make Excellent Gains At The Williston Station

J. H. LONGWELL, *Chief in Animal Industry,*
and W. H. HUBER, *Superintendent, Williston Sub-Station*

A COMPARISON of a mixture of equal parts by weight of corn and barley with wheat, as feeds for pigs, was made at the Williston station during the summer of 1943. The grain was grown on the station farm and was all good quality. Protein supplement was fed to both lots of pigs.

Twenty weanling pigs were purchased locally for use in the trial. These pigs were mixed breeding, and weighed an average of 27 pounds. They were treated with phenothiazine powder mixed in ground feed, in an amount sufficient to provide each pig with 5 grams of phenothiazine. Considerable numbers of roundworms were passed by the pigs the next day.

The pigs were identified with ear notches and weighed individually. Three day weights were taken at

the beginning and end of the trial, the average of the three weights being used as the initial and final weights. Individual weights were also taken every 14 days during the trial. The pigs were divided as equally as possible into two lots of 10 pigs each. Lot 1 received the wheat and lot 2 was fed the corn and barley mixture. Both groups were fed in dry lot.

The results are summarized in Table 1.

**Table 1—Summary of gains and of feed consumption
June 12th to October 5th, 1943**

	Lot 1	Lot 2
Pigs per lot.....	10	10
Average final weight.....	203.0 lbs.	206.2 lbs.
Average initial weight.....	26.9 lbs.	26.8 lbs.
Average gain.....	176.1 lbs.	179.4 lbs.
Average daily gain.....	1.48 lbs.	1.50 lbs.
Feed consumed per 100 pounds gain		
Corn.....		144.2 lbs.
Barley.....		144.2 lbs.
Wheat.....	280.6 lbs.	
Protein supplement.....	52.5 lbs.	54.0 lbs.
Total.....	333.1 lbs.	342.4 lbs.
Total feed eaten		
Corn.....		2587.12 lbs.
Barley.....		2587.13 lbs.
Wheat.....	4941.50 lbs.	
Protein supplement.....	924.50 lbs.	968.75 lbs.
Total.....	5866.00 lbs.	6143.00 lbs.

The protein supplement was a commercial mixture and contained 44 percent protein. The grains were ground and the protein supplement mixed with them.

Gains made by the two lots were nearly the same, and the amounts of

feed required to produce 100 pounds of gain were also about equal. A statement of costs and returns is included in Table 2. Costs and returns will of course vary with market prices of feed and hogs.

TABLE 2—Financial Summary, not including labor costs.

	Lot 1.	Lot 2.
Cost of pigs.....	\$ 100.00	\$ 100.00
Cost of grain	87.46	103.59
Cost of protein supplement	41.60	43.59
Miscellaneous costs, Vaccination, etc.	20.15	20.15
Total costs	249.21	267.33
Returns from sale of pigs.....	273.04	272.56
Net above cost	23.83	5.23

The pigs cost \$10.00 a head. Prices charged for feed are: Corn \$1.06 a bushel, barley \$.96 a bushel, wheat \$1.06 a bushel (CCC price) protein supplement \$90.00 a ton.

SUMMARY

A mixture of shelled corn and barley, equal parts by weight was equivalent to wheat as feed for growing fattening pigs, when supplemented with protein.

Gains were nearly equal in the two lots; 1.48 pounds daily and 1.50 pounds daily in the wheat lot and corn-barley lot, respectively.

Amounts of feed required to produce 100 pounds gain were almost the same in the two lots and were quite low; 333 pounds and 342 pounds in Lot 1 and Lot 2, respectively.

This trial demonstrates the fact that average pigs will make rapid and economical gains when properly managed and fed a well balanced feed. It also demonstrates the fact that wheat is an excellent feed for hogs, at least equal to the usual feed grains, corn and barley.

Will Building Paper on The Floor of A Granary Impart An Odor to The Grain

THOMAS E. LONG
Assistant Agricultural Engineer

DURING the harvest season, there has been occasion for some farmers to place some type of building paper on the floor of the permanent or temporary storage for the small grain crop. There have been some reports that this grain was declared unfit for human consumption because of odors after it had been in storage for some time.

TESTS MADE

Between November 25, 1942 and October 13, 1943 one lot of wheat was stored on six different kinds of surfaces. Boxes as shown in the sketch were made and building paper placed on the floor and filled

with wheat of 12.5 percent moisture content. Each trial with building paper was repeated three times. One sample was taken from the floor and one sample 6 inches above the floor from each compartment.