

FEEDING TRITICALE TO FATTENING SWINE

Triticale is a hybrid grain developed from a cross between wheat and rye. Compared to barley it has about 4.5 percent less fiber and 3.5 percent more protein. Triticale should be suitable as a feed grain for swine. However, it is susceptible to ergot, and often contains amounts in excess of the feeding tolerance level. In addition to the problem of ergot, triticale rations appear to be somewhat unpalatable to swine.

Yields of triticale have not been as good as yields of either barley or oats at Dickinson, Williston, Minot or Fargo.

In this trial triticale was fed at two levels, and was compared to a 16 percent protein barley – oats – soybean oilmeal ration.

Table 1 shows the composition and costs for the three rations used. Table 2 summarizes data recorded on weights and gains, and, table 3 summarizes feed used and cost per hundredweight of gain.

Table 1. Ration Composition and Feed Cost.

Ration ingredient	16% Protein barley-oats ration		50% Triticale ration		75% Triticale ration	
	Pounds per ton	Cost per ton	Pounds per ton	Cost per ton	Pounds per ton	Cost per ton
Oats	564	\$ 9.64	564	\$ 9.64	426	\$ 7.28
Barley	1138	20.14	288	5.10	-	-
Soybean oilmeal	238	12.74	238	12.74	238	12.74
Triticale	-	-	850	15.04	1276	22.58
Di-calcium phosphate	24	1.44	24	1.44	24	1.44
Limestone	24	.60	24	.60	24	.60
Trace mineral salt	10	.26	10	.26	10	.26
Fortafeed	680 gms.	.34	680 gms.	.34	680 gms.	.34
Vitamin A	60 gms.	.06	60 gms.	.06	60 gms.	.06
Vitamin D	28 gms.	.14	28 gms.	.14	28 gms.	.14
Zinc sulfate	360 gms.	1.88	360 gms.	1.88	360 gms.	1.88
Grinding	-	2.00	-	2.00	-	2.00
Total		\$49.24		\$49.24		\$49.32

Table 2. Data on Weights and Gains in the Triticale Evaluation Study.

Data on:	16% Protein barley-oats ration	50% Triticale ration	75% Triticale ration
Number of pigs per lot	11	11	11
Initial weight – lbs.			
Total per lot	520	524	525
Average per pig	47.3	47.6	47.7
Final weight – lbs.			
Total per lot	2393	2274	2406
Average per pig	217.5	206.7	218.7
Gain per lot – lbs.	1873	1750	1881
Average daily gain per pig – lbs.	1.38	1.31	1.41

Table 3. Feed Used and Cost per Hundredweight of Gain in the Triticale Evaluation Study.

Data on:	16% Protein barley-oats ration	50% Triticale ration	75% Triticale ration
Total pounds of feed used per lot	7300	6910	6730
Pounds of feed per hundredweight gain	389.7	394.9	357.8
Cost per hundredweight of gain	\$9.59	\$9.71	\$8.84

Summary

Data from the first year's trial show little difference in daily gain between lots. Pigs fed the 50 percent triticale ration made the slowest daily gain, 1.31 pounds, while those fed the 75 percent triticale ration made the fastest gains in the trial, 1.41 pounds per day. The 75 percent triticale ration was the most efficient ration, showing about 9 percent savings in feed when compared to the 16 percent protein barley-oats ration. Because of their efficiency the pigs fed the 75 percent triticale ration made the cheapest gains.

This preliminary trial indicates that good, clean ergot free triticale can replace up to 75 percent of the barley and oats in a swine growing finishing ration, and may be expected to improve the efficiency of the ration because of its lower fiber and higher protein content.