

Ten-year summary of K.S.I.A. swine testing station data
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Swine testing stations "performance prove" breeding lines for genetic progress in the swine industry. The phenotype of a boar is a combination of his genetic ability and environment (nutrition, health, and etc.). Thus by using central test stations where all pigs are housed in similar pens and fed the same rations, the effect of environment is reduced so the genetic ability is more accurately appraised.

The Kansas Swine Testing Station first tested hogs for Kansas Breeders the fall of 1958. Since then about 100 breeders have participated in the test station,

Table 19. Ten-year summary of carcass traits of tested barrows.

Year	Loin eye, sq. in.	Back fat, in.	Carc. length	% lean cuts
1958	3.79	1.69	28.0	48.5
1959	3.67	1.60	29.3	46.9
1960	3.78	1.54	29.1	48.1
1961	3.80	1.43	28.7	50.5
1962	4.38	1.25	29.2	53.4
1963	4.32	1.30	29.3	54.5
1964	4.13	1.32	29.6	53.2
1965	4.50	1.35	30.0	53.9
1966	4.37	1.30	29.3	54.3
1967	4.43	1.23	28.6	56.2
Av. first 5 yr.	3.88	1.50	28.8	49.5
Av. last 5 yr.	4.35	1.30	29.1	54.4

Table 20. Ten-year summary of performance & carcass traits
of tested boars.

Year ^A	Age at 200 lbs., days	Av. daily gain, lbs.	Back-fat probe, in.	Feed con- version, lbs.
1958	152	1.96	1.09	3.11
1959	153	1.81	1.11	2.93
1960	150	1.78	1.08	2.76
1961	151	1.82	1.02	2.77
1964	148	1.87	1.01	2.82
1965	140	1.89	.95	2.70
1966	152	1.83	1.00	2.92
1967	147	1.78	.96	2.92
Av. first 4 yr.	151	1.84	1.08	2.89
Av. last 4 yr.	147	1.84	.98	2.84

A-Only slaughter pigs were tested in 1962-1963

Table 21. Fall and spring litters compared by indicated performance
and carcass traits. (9 Seasons)

Boars	Spring litters	Fall litters
Age at 200 lbs., days	146	151
Av. daily gain, lbs.	1.82	1.85
Backfat probe, in.	1.05	1.02
Feed/gain ratio, lbs.	2.80	2.99
<u>Barrows</u>		
Carcass length, in.	29.5	28.8
Backfat, in.	1.38	1.43
Loin eye, sq. in.	4.01	4.15
% Lean cuts, carc. wt.	51.3	51.1
Av. daily gain, lbs.	1.72	1.74

Summary

Although yearly variations occur as expected with some new station co-operators each year, improvements have been excellent in carcass-related traits (Table 18). Loin eye area has increased approximately .7 sq. inch, backfat has been reduced .3 to .4 inch, and lean cut percentage increased 5 to 6%. Carcass length has improved least, about .1 inch.

Backfat probe of the boars has been reduced approximately .1 to .2 inch, but age at 200 lbs. and feed conversion have improved only slightly.

Seasonal variations appear insignificant except for the feed conversion ratio. Spring farrowed pigs have required almost 20 pounds less feed than fall farrowed pigs per 100 pounds gain.

Marked improvements are being made with the highly heritable carcass traits. Performance traits with only medium heritability improved only slightly the past 10 years.