

Kansas Agricultural Experiment Station Research Reports

Volume 0
Issue 10 *Swine Day (1968-2014)*

Article 109

1973

Muscling selection in swine and its effect on carcass traits

J D. Wheat

Donald H. Kropf

C H. Chang

See next page for additional authors

Follow this and additional works at: <https://newprairiepress.org/kaesrr>



Part of the [Other Animal Sciences Commons](#)

Recommended Citation

Wheat, J D.; Kropf, Donald H.; Chang, C H.; and Hines, Robert H. (1973) "Muscling selection in swine and its effect on carcass traits," *Kansas Agricultural Experiment Station Research Reports*: Vol. 0: Iss. 10. <https://doi.org/10.4148/2378-5977.5949>

This report is brought to you for free and open access by New Prairie Press. It has been accepted for inclusion in Kansas Agricultural Experiment Station Research Reports by an authorized administrator of New Prairie Press. Copyright 1973 the Author(s). Contents of this publication may be freely reproduced for educational purposes. All other rights reserved. Brand names appearing in this publication are for product identification purposes only. No endorsement is intended, nor is criticism implied of similar products not mentioned. K-State Research and Extension is an equal opportunity provider and employer.



Muscling selection in swine and its effect on carcass traits

Authors

J D. Wheat, Donald H. Kropf, C H. Chang, and Robert H. Hines

K**S****U**

Muscling Selection in Swine
and Its Effect on Carcass Traits

J. D. Wheat, D. H. Kropf, R. H. Hines
and C. H. Chang

Summary

Pigs farrowed in May, 1972, were the first born in the select and control lines. Performances of animals in the two lines were essentially the same. However, ham firmness and color differed significantly ($P < 0.01$) between lines, with those in the select line firmer and darker than those from the control line.

Procedures

Pigs in the base population of purebred Durocs were farrowed in 1971. Twenty boar pigs were randomly selected in July, 1971, when the remaining males were castrated. The select line was formed by using the most desirable 20 gilts and four boars based on an index that gave maximum loin eye area and minimum backfat thickness (estimated by the An/Scan, adjusted to 220 pounds) equal emphasis. The control line was formed by using four randomly chosen boars (from the group of 20 randomly selected as weanling pigs) to breed 20 randomly chosen gilts.

Gilts in the two lines farrowed in May, 1972. Ten boar pigs were randomly chosen at weaning from each line. The four with the most desirable indexes in the select line were mated to the 20 highest indexing gilts in the select line; 18 of the 20 gilts farrowed in May-June, 1973. Four of the 10 boars in the control line were randomly chosen and mated to 20 randomly selected gilts in the control line; 15 of the 20 gilts farrowed in May-June, 1973.

When possible, three barrows from each litter are slaughtered in the departmental meat laboratory. Slaughter weight is 220 pounds. Carcass data were collected from 51 barrows in 1971 and from 39 in 1972.