

EVALUATION OF PIGLET MORTALITY IN 28 TWO-BREED CROSSES AMONG EIGHT BREEDS OF PIG

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ABSTRACT

Records of piglet mortality were taken on 775 first and 657 second litters farrowed at four locations and representing 28 combinations of two-breed crosses involving eight breeds. All the sows were mated to Poland China boars. Overall mortality was 18% of which 4.2% occurred at birth, 13.2% between birth and 21 days and 1.2% from 21 to 42 days. Landrace × Yorkshire dams had the lowest mortality rate (10.4%) followed by Duroc × Lacombe (12.3%) whereas the highest rate was found in the Hampshire × Lacombe sows (21.6%). Piglets with Tamworth and Yorkshire ancestry had the lowest mortality (16.2 and 16.7%) while those with Berkshire ancestry had the highest (20.0%). Mortality rate was slightly (2%) higher in first than in second parity litters, and highest in summer and similar in the three other seasons. Mortality rate was highest in very small and very large litters and among the lightest and the heaviest piglets. The results showed a linear relationship between mortality rate and homogeneity of piglet weights at birth within litter, mortality rising with the increase in intra-litter variation. The effect of sires on piglet mortality was significant in one, and non-significant in the three other locations.

INTRODUCTION

PIGLET mortality interests scientists and breeders in different countries because about 25% and sometimes even more of the piglets born are lost before they either contribute to the herds or become a source of revenue to the breeders. With the increasing costs of feed and management, pre-weaning losses could be a major factor determining the success or failure of pig enterprises.

Crossbreeding can reduce piglet mortality since studies (reviewed by Bäckström, 1973) have shown that crossbred piglets are more vigorous and stand a greater chance of survival compared with purebreds.

Holtmann, Fahmy, MacIntyre and Moxley (1975) reported on litter performance at birth and weaning of 28 crosses of sows all mated to Poland China boars at five stations. They noticed that the ranking of most of the crosses in litter size differed at weaning from that at birth indicating differences among the crosses in piglet mortality. The objective of the present study is

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