

PRODUCTIVITY EFFICIENCY OF FEMALES YORKSHIRE AND LANDRACE
IN PURE AND RECIPROCAL CROSSES , FOR OFFSPRING AND REPRODUCTIVE TRAITS.
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The efficiency of Yorkshire and Landrace as female breeds is well know , Research on this breeds has been done in USA , Canada and England . However , there has been no research done in Mexico on the efficiency of this breeds on crossbreeding systems under experimental conditions.

The objective of this experiment was to determine the efficiency of production of female Yorkshire (Y) and Landrace (L) in pure and reciprocal crosses in a experimental farm (FMVZ UNAM) in the Mexico City valley.

The structure of the population used in this experiment is described in the next table:

Male Breed	n	Female Breed	n	Genetic Group	Offspring Number
Y	1	Y	16	Y x Y	107
Y	2	L	10	Y x L	71
L	2	Y	16	L x Y	156
L	1	L	17	L x L	151

Two complete cycles were followed and the performance recorded

The mean productive performance of Yorkshire and Landrace females for days to first service , number of services , days from weaning to efective service , farrowing interval and days open were respectively : 14.12 18.35 ; 1.00 , 1.23 ; 14.12 , 30.25 ; 152.36 170.67 ; 41.06 , 58.81.

The mean productive performance for YxY , YxL , LxY , and LxL crosses for litter size at birth , litter size at weaning , litter weight at birth , litter weight at weaning , were respectively : 9.77 , 8.30 , 10.13 , 9.26 ; 8.31 , 7.55 , 8.50 , 6.33 ; 13.55 , 12.29 , 8.50 , 13.02 ; 53.88 , 52.12 , 56.63 42.23 .

The mean offspring performance for YxY , YxL , LxY , LxL for birth weight , weaning weight , 70 day weight , 154 day weight , and 180 day weight were : 1.41 , 1.47 , 1.33 , 1.39 ; 6.67 , 6.69 , 6.14 , 6.39 ; 18.39 , 19.82 , 19.98 , 19.08 ; 76.59 , 81.38 , 75.62 , 72.82 ; 96.61 , 95.13 , 99.23 , 91.16 .

The heterosis for litter size at birth , litter size at weaning , litter weight at birth , litter weight at weaning , birth weight , weaning weight , 70 day weight , 154 day weight , 180 day weight were repectively : -3.15% , 9.70% , -3.39% , 13.15% 0.0 % , -1.68% , 6.19% , 5.07% , 3.50% .

Landrace females were better in reproductive parameters , crossbreds were better than the mean of the parents for litter size at weaning , litter weight at weaning , and grow after weaning .

Selected references : Dillard , E.U. and Robison O.W. .1968 . Crossbreeding Swine. North Carolina Agr. Exp. Sta. Bull. 432.; Fahmy , M.H. and Holtman W.B. . 1977 . Crossbreeding Swine in Canada . World Review of Anim. Prod. 13:9. ; Quintana F.G. Crossbreeding Systems in Swine . Ph.D. Thesis , Departament of Animal Science , North Carolina State University , Raleigh. ; Quintana , F.G. and Robison O.W. . 1980 , Efectividad del cruzamiento de razas en cerdos . Vet. Mex. 11:23. ; Sellier, P. 1976. The basis of Crossbreeding in pigs , A review Livestock Prod. Science 3:203.