

Short Communication

PRODUCTION AND REPRODUCTION TRAITS IN DESI PIGS OF KERALA UNDER FARM CONDITIONS

There are three basic genetic groups of pigs in our country ie., desi pigs, exotic pigs and a non-standardized cross-bred of these two (Joseph Mathew, 1997). The exotic pigs are now considered to be comparatively superior to others and seem to have adapted to our agroclimatic conditions. But a clear deterioration in various production and reproduction traits have occurred in exotic pigs which is attributable to the cost of adaptation paid by them on introduction to tropical environment (Clive Philips and David Piggins, 1992). The amelioration of this can be achieved only through costly breeding, feeding and managerial strategies along with environmental enrichments and reduction of stress (Pfeiffer and Lengerkan, 1991). In this context an investigation on the production and reproduction potentialities of desi pigs, which form a considerable proportion of swine population in rural sectors of Kerala will be very

much worthwhile. This may also help to make appropriate decisions on the changes in the genetic make up of present genetic groups of pigs available in Kerala.

Materials and Methods

Samples of desi pigs procured from various parts of Kerala were reared under managerial conditions prevailing in Centre for Pig Production and Research, All India Coordinated Research on Pigs, Mannuthy. The various production and reproduction traits were assessed for two generations under farm conditions for the period 1993-1997.

Results and Discussion

The various production, reproduction and carcass traits observed in desi pigs are furnished in Table 1, 2 and 3 respectively.

The fortnightly body weights, average daily gain and feed conversion efficiency in desi pigs

Table 1 Production traits of Desi pigs**I. Fortnightly body weights (kg)**

Fortnight	Body weights (Mean + SE)	
	Male	Female
At birth	0.73 + 0.17	0.72 + 0.13
1 st	1.71 + 0.44	1.59 + 0.50
2 nd	2.67 + 0.74	2.54 + 0.67
3 rd	3.78 + 0.94	3.63 + 0.89
4 th	5.50 + 1.67	5.22 + 1.31
5 th	5.97 + 1.63	5.82 + 1.28
6 th	6.45 + 1.99	6.72 + 1.25
7 th	7.30 + 2.11	7.85 + 1.31
8 th	8.34 + 2.20	9.19 + 1.88
9 th	10.21 + 2.42	10.64 + 2.36
10 th	11.98 + 2.85	12.62 + 3.53
11 th	13.76 + 2.79	14.12 + 3.28
12 th	16.00 + 4.17	16.21 + 3.64
13 th	17.75 + 4.63	18.52 + 5.89
14 th	20.92 + 5.38	21.17 + 4.62
15 th	24.50 + 5.68	24.44 + 5.51
16 th	29.18 + 6.19	27.57 + 5.36
II Average daily gain (gm)	127.009	119.866
III. Feed conversion efficiency	-	1:7.754

Table 2 Reproduction traits and mortality rate in desi pigs

Trait		Mean + SD
1) Litter size at birth	Male	2.60 + 1.91
	Female	2.60 + 1.92
2) Litter weight at birth (kg)	Male	2.48 + 1.35
	Female	2.49 + 1.21
3) Litter size at weaning	Male	2.20 + 1.63
	Female	2.37 + 1.65
4) Litter weight at weaning (kg)	Male	15.56 + 7.09
	Female	16.03 + 9.82
5) Mortality rate (%)	Male	17.00
	Female	14.80
	Total	15.80

Table 3 Carcass traits in desi pigs

Trait	Value (Mean + S.D.)
Live weight at slaughter (kg)	34.94 + 11.18
Carcass weight (kg)	23.74 + 11.79
Carcass length (cm)	61.41 + 8.45
Dressing % (without head)	67.95
Back fat thickness (cm)	1.73 + 0.79
Weight of head (kg)	3.41 + 1.18
Weight of gut (kg)	4.79 + 1.31
Loin eye area (cm ²)	16.11 + 3.44
Meat bone ratio	4.911
Weight of feet (g)	892.53 + 292.85
Weight of internal organs (g)	
Liver	794.82 + 264.83
Kidney	143.10 + 55.77
Heart	143.89 + 67.80
Lungs	499.04 + 271.69
Spleen	106.14 + 51.20
Diaphragm	62.11 + 64.77

seem to be lower than that reported in exotic pigs supporting the related observations of Saseendran and Rajagopalan (1982). The data base obtained in this study may be utilised for effective utilisation of traits in appropriate genetic improvement of local pigs of Kerala.

Summary

A study was conducted to ascertain the production, reproduction and carcass characteristics of desi pigs of Kerala under farm

conditions. The results obtained provides a valuable database on the various traits of our indigenous pigs for appropriate use in their genetic improvement and conservation of germ plasm.

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