

THE EFFECTS OF FOUR FEED LEVEL DURING LATE PREGNANCY ON
THE REPRODUCTIVE PERFORMANCE OF PIGS.

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A study was made on the response of sows and gilts at four levels, 1.8, 2.0, 2.5 and 3.0 Kg. per day of a proprietary meal. CP. 14.5%, ME.(Kcal/Kg), 3005, Ca. 0.82%, P. 0.45%.

The study included the last three weeks of gestation during spring and summer in a farm located in a cold zone, Dos Rios, State of Mexico. The animals used in the trial were the result of a three rotational cross using the Duroc, Hampshire and Yorkshire breeds. After pregnancy confirmation, using an ultrasonic device, the females received 1.8 Kg per day of a gestation feed made in the farm. CP. 14.0%, ME.(Kcal/Kg) 2913, Ca. 0.91%; P. 0.52%. From 90 days post-coitum to farrowing the animals were randomly assigned to the following treatments: A) 1.8, B) 2.0, C) 2.5 and D) 3.0 Kg per day.

The females received the specified amount of daily feed at two different times, 8:00 A.M. and 1:00 P.M. During all the pregnancy the animals were confined in stalls and twenty five animals per treatment were used. At farrowing the piglets were weighted and counted the litters were equalized as evenly as possible by number and weight.

During lactation the females were fed ad libitum and the piglets did not receive any kind of complementary feed. The results obtained are shown in tables I, II, and III.

A completely randomized factorial design, 2X2, was used for the analysis of data. There was not a significant difference in the number of piglets born and weaned. A significant difference was found for individual piglet weight at birth (P 0.01) and at weaning (P 0.05). The best results were obtained using 2 Kg. of feed per day, the last three weeks of gestation.

When the performance of gilts and sows was analysed separately, there was found in gilts a tendency (P 0.12) to increased the litter weight at weaning as a result of the increased survival of the piglets in the animals which received 2.5 Kg. per day as compared to those receiving 2.0 Kg. in late pregnancy.

In sows there was found a statistically significant difference (P 0.05) in the litter weight at weaning, the best performance was obtained at the 2.0 Kg. per day level.

In addition there was found a trend (P 0.15) to have better piglet survival when the amount of daily feed was increase from 1.8 Kg to 2.0 Kg. or more, but there was not a parallel increase in the litter weight at weaning.

Conclusions: In the conditions of the trial it is sufficient to give 2.0 Kg. of feed per day to the females to obtain a satisfactory reproductive performance. It should be possible to obtain additional benefits in gilts by increasing the daily allowance from 2.0 to 2.5 Kg. per day.

TABLE I
EFFECTS OF 4 FEED LEVELS IN LATE PREGNANCY
ON THE REPRODUCTIVE PERFORMANCE OF THE
FEMALE PIG.

	*****DAILY FEED ALLOWANCE (Kg)			
	1.8	2.0	2.5	3.0
Metabolizable energy allowance (Kcal/Day)	5409	6010	7512	9015
Number of animals.	24	25	24	24
Average number of piglets at birth.	8.17	8.24	8.50	8.46
Average birth weight (Kg.)	1.43	1.60	1.47	1.49
Average number of piglets after cross-fostering.	9.08	8.96	9.08	9.20
Average number of piglets at weaning.	6.96	7.04	7.50	7.50
Average piglet weight at weaning (Kg.)	4.15	4.60	4.26	4.26
Piglets survival (%) Weaning to mating interval (Days).	76.98	78.79	83.12	81.35
	5.22	5.45	4.95	5.27

TABLE II
EFFECTS OF 4 FEED LEVELS IN LATE PREGNANCY
ON THE REPRODUCTIVE PERFORMANCE OF GILTS.

	*****DAILY FEED ALLOWANCE (Kg)			
	1.8	2.0	2.5	3.0
Piglets survival(%)	86.24	82.41	88.64	83.74
Average litter weight at weaning (Kg.).	33.48	31.16	36.41	32.79
Weaning to mating interval (days).	5.00	5.11	4.66	5.44

TABLE III
EFFECTS OF 4 FEED LEVELS IN LATE PREGNANCY
ON THE REPRODUCTIVE PERFORMANCE OF SOWS.

	*****DAILY FEED ALLOWANCE (Kg)			
	1.8	2.0	2.5	3.0
Piglets survival(%)	69.57	76.38	78.97	79.64
Average litter weight at weaning (Kg).	23.23	32.41	29.59	31.24
Weaning to mating interval (days)	5.38	5.69	5.15	5.15

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