Studies on Early Weaning of Pigs

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INTRODUCTION

Up to the present the weaning of pigs has been commonly done at the Lajas Substation at an age of 56 days. Carroll and Krider (*1*)[2] contend that, with the diets now available, it is entirely feasible to wean pigs at from 7 to 21 days of age. Cunha (*2*) stated that the trend in the United States was toward weaning pigs at 6 weeks of age, and some are considering weaning as early as 3, instead of the customary 8 weeks.

The experiment reported here was conducted to obtain information of this nature with pigs raised under normal conditions at the Lajas Substation. The object of the experiment was to determine the usefulness of weaning pigs at an age earlier than the customary 56-day period.

PROCEDURE

Eighteen sows were selected and divided at random into three groups of six sows per group. The pigs from one group were weaned at 21 days of age. Those from a second group were weaned at 42, and from a third at 56 days. One sow from the 42-day group was discarded at the beginning since she did not farrow in time.

The pigs to be weaned at 21 days were crib-fed a 20-percent crude-protein growing ration starting 1 week before weaning time. All other pigs were crib-fed starting at 21 days with the ration mentioned previously. Feed consumption was recorded in each case.

All the pigs were weighed at birth and at 21, 42, and 56 days. The pigs weaned before 56 days of age were kept in the same pen in which they were born.

RESULTS AND DISCUSSION

The results in table 1 show that weaning before the customary age did not result in an increase in the number of pigs raised per litter to 56 days of age. This suggests that losses of pigs that remain with their dams after 21 days of age do not necessarily result from trampling or overlapping of the sows.

Table 2 shows that pigs weaned at 56 days were heavier than those weaned at either 21 or 42 days. This difference was highly significant as

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[2] Italic numbers in parentheses refer to Literature Cited, p. 65.

indicated by an appropiate "*t*-test" (*3*). The small difference in weight between the pigs weaned at 21 and at 42 days was not statistically significant.

Table 2 also shows that, as the age of weaning increased, the pigs consumed less when crib-fed. The reason for this lower feed consumption is that, even though the flow of milk of the sows begins to decrease from 21 days on, sufficient is produced to supplement the growing ration.

The results obtained in this experiment do not show any advantage of weaning pigs at an age earlier than the customary 56 days. The better all-around performance of the pigs weaned at 56 days is sufficient to

TABLE 1.—*Comparison of total number of pigs under each treatment*

Weaning age (days)	Litters	Pigs at 21 days	Pigs at 42 days	Pigs at 56 days
	Number	*Number*	*Number*	*Number*
21	6	48	48	46
42	5	44	44	44
56	6	47	47	47

TABLE 2.—*Comparison of average weights and feed consumption of pigs under each treatment*

Weaning age (days)	Litters	21-day weight	42-day weight	56-day weight	Feed consumption per litter
	Number	*Pounds*	*Pounds*	*Pounds*	*Pounds*
21	6	11.30	18.36	31.32	295
42	5	11.19	20.94	31.80	230
56	6	11.20	22.80	36.55[1]**	157[1]**

[1] ** Highly significant at 1-percent level.

counterbalance any saving of feed by the sow. Weaning earlier than at 56 days of age does not save much time between farrowings. This saving of time becomes noticeable after a sow has farrowed five or six times. Many sows do not remain in the herd so long. Furthermore, our general recommendation is not to keep the sow for more than three to four farrowings.

SUMMARY

Seventeen litters of pigs were divided into three groups and each group was weaned at a different age. Weaning ages were 21, 42, and 56 days. The pigs weaned at 21 days were started on a ration suited for small pigs; it consisted of about 20-percent crude protein 1 week before the weaning date. All the others were started on the same ration at 21 days.

The feed consumption of each group was recorded. All of the pigs were weighed at 21, 42, and 56 days. The evaluation of each weaning method was based on these two characteristics.

The results obtained indicated that there was a highly significant difference in favor of the pigs weaned at the customary 56-day age. They consumed less concentrate feed and weighed more at weaning time, favored, no doubt, by the additional milk obtained from their dams. If weaning is to occur at all before 56 days, it apparently should occur at 21, rather than at 42 days. Since differences are not significant between these two groups, weaning at 21 days will save some time and extra labor.

RESUMEN

Diecisiete lechigadas de cerdos se dividieron en tres grupos y cada grupo se destetó a edades distintas. Las edades al tiempo del destete fueron: 21, 42, y 56 días. A los cerditos destetados a los 21 días de edad se les comenzó a proveer una ración de crecimiento una semana antes de destetarlos. Todos los demás cerditos empezaron a consumir esta ración a los 21 días de edad. El consumo de alimento de cada grupo se anotó y todos los cerditos se pesaron a los, 21, 42, y 56 días de edad. La evaluación de cada época de destete se hizo basada en estas dos características.

Los resultados obtenidos indicaron una diferencia altamente significativa a favor de los cerditos destetados a los 56 días. Ellos consumieron menos alimento concentrado y pesaron más al tiempo del destete, favorecidos, indiscutiblemente, por la leche adicional que obtuvieron de sus madres. Las diferencias entre el destete a los 21 días y a los 42 días no fueron significativas, por lo que parece que, si se va a destetar antes de los 56 días, ésto debe hacerse a los 21 días.

LITERATURE CITED

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3. Steel, R. G. D., and Torrie, J. H., Principles and Procedures of Statistics, McGraw Hill Book Co., New York, N.Y., 1960.