

CRINOLONE (FGA) TREATMENT AFTER A.I. IN EWES DOES NOT AFFECT
EMBRYO SURVIVAL

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Peterson et al. (1984) increased lambing rate from 67% in untreated ewes to 95% in ewes which were supplemented with exogenous progesterone from days 8 to 14 after mating. The experiment reported here studied the effect on non-return rate of administration of Cronolone from day 8 to 14 after uterine A.I. A group of 120 Merino ewes had Chrono-gest (Intervet) intravaginal sponges inserted for 12 days and 400 i.u. of PMSG (Folligon, Intervet) administered at sponge removal. 6 Commencing 52 hours after sponge removal ewes were inseminated with 50 x 10 sperm in 0.05 ml of diluted frozen-thawed semen into each uterine horn. Half of the ewes had another Chrono-gest sponge inserted at day 8 after A.I. for six days. Ewes were joined with 4% of harnessed vasectomised rams for five weeks following insemination. There was no difference in non-return rate which was 50% for both groups. The results show that treatment with FGA in early pregnancy does not have the effect of reducing embryo mortality.

PETERSON, A.J., BARNES, D., SHANLEY, R. and WELCH, R.A.S. (1984).
Proc. N.Z. Endocr. Soc. 21: 13.

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RELATIONSHIPS BETWEEN SOW PERFORMANCE AND ULTRASONIC BACKFAT MEASUREMENT

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Ultrasonic measurement of **backfat** allows an accurate estimate of the proportion of fat in the sow and is a useful indicator of sow condition (Darneley, 1980). Although it is recognised that the body condition of sows is critical to breeding performance, there is little objective information on the relationship between the two. This paper reports the relationships between sow reproductive performance and ultrasonic **backfat** level. **Backfat** depths of 266 gilts and sows in a large commercial piggery were measured ultrasonically at the P position on two occasions; within one week prior to farrowing and again 4-5 weeks later at weaning. **Backfat** depth was not affected by parity; the average ($\pm$ SE) P_2 measurements at farrowing and weaning were 29.9 ($\pm$ 0.5) mm and 25.7 ($\pm$ 0.4) mm respectively, which are much higher than those reported for sows in U.K. (Darneley, 1980). Correlations between P_2 measurements and litter size were low and not significant. However, the proportion of litters with stillborn piglets was greater for sows with more than 29 mm **backfat** at farrowing than for those with less **backfat** (63/128 vs 48/138, $\chi^2 = 5.7$, $P < 0.05$). The results suggest that the body condition of sows has no short term effect on litter size, although stillbirth rate may be greater in sows which are fatter at farrowing.

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