EFFECT OF PARITY ON MILK PRODUCTION AND REPRODUCTIVE PERFORMANCE IN HOLSTEIN COWS AFTER INDUCTION OF LACTATION IN A LARGE DAIRY OPERATION IN NORTHERN MEXICO

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Induced lactation of non pregnant cows may be a management alternative to reduce culling and increase profits. Annually many dairy cows are culled for reproductive failure. It is estimated that dairies would retain approximately half of these cows if they were lactating.

Data from two hundred forty five multiparous cows and heifer ( 123 cows and 122 heifers) were utilized in the experiment. Milk production and reproductive performance was compared for cows and heifers whose lactations were successfully induced by hormonal treatment because had fail to get pregnant after many services of A.I ( 54 cows and 57 heifers) or followed natural calving (69 cows and 65 heifers ) in the same period of time.

The study was conducted in a large commercial dairy farm in northern Mexico. The farm had free stall housing and cows were fed three time per day a total mixed ration, formulated to meet requirements for NEL, protein, minerals and vitamins of early lactaction dairy cow weighing 500 and 600 kg (NRC; 2001). Those animals successfully induced into lactaction were treated by following combination of hormonal treatment:

From days 1 to 7, cows were treated with oestradiol cypionate (2 mg per animal/day) and progesterone (50 mg per animal/day). From days 8 to 14, oestradiol cypionate (2 mg) alone was given. Nothing was administered on days 15,16 and 17. From days 18, 19 and 20, 0.5 mg of flumetasone was administered. All animals were treated with 500 mg bST on days 1, 6, 16, and 21, also received the same dose of bST every 14 days throughout lactation.

Milking began on day 21.

In conclusion cows and heifers with induced lactations produced less (P < 0.05) milk per adjusted 305-day lactation (9905 ± 1693 kg and 8624 ± 1390 kg) than natural calving (11857 ± 1903 and 10546 ± 1575 kg). Reproductive performance was similar between induced and natural calving animals for both category, but induced heifers have less opportunity to remain in the farm than non induced heifers, compared with induced and non induced cows.