FACTORS AFFECTING OVA TRANSFER IN LIMOUSIN, MAINE-ANJOU AND SIMMENTAL CATTLE

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Clinical records from CBR Ova Transplants, Inc. of superovulated Limousin (Lm, n=176), Maine-Anjou (MA, n=62) and Simmental (Sm, n=73) were studied to obtain preliminary information on factors influencing ova transfer success. Data were analysed by one way ANOVA with unequal subclasses. Duncan's multiple range tests were used for mean separation (means with different superscripts are different at approximately P<.05). An affect of season (winter, spring, summer, fall, respectively) was found on pregnancy rates in Lm (55%ab, 58%ab, 67%a, 43%b), recovery rates in MA (67%ab, 44%b, 64%ab, 70%a), and pregnancy rates in MA (36%ab, 54%ab, 75%a, 34%b).

An affect of day of collection (day 5, 6, 7, 8, 9, 10, respectively) was found on recovery rates in MA (69%ab, 38%b, 55%b, 52%b, 79%a, 42%b) and pregnancy rates in MA (45%ab, NA, 66%a, 45%ab, NA). An affect of body weight (<440 kg, 440-540 kg, 540-640 kg and >640 kg, respectively) was found on number of CL in Lm (10.8ab, 12.6a, 12.6a, 8.4b), number of ova recovered in Lm (5.7b, 8.2a, 9.0a, 4.2b), number of usable ova in Lm (3.1b, 5.3a, 5.1a, 2.8b), recovery rates in Lm (50%b, 64%a, 66%a, 49%b), pregnancy rates in Lm (29%b, 49%a, 54%a, 60%a), number of usable ova in MA (3.3ab, 2.6b, 3.4a, 5.0ab), pregnancy rates in MA (38%b, 38%b, 46%b, 71%a), number of CL in Sm (11.5a, 7.0b, 9.2ab, 11.8a), number of ova recovered in Sm (9.2a, 4.2b, 5.9ab, 8.1ab) and number of usable ova in Sm (6.2a, 3.3b, 4.1ab, 2.6b). An affect of product (FSH or PMSG, respectively) was found on number of usable ova in MA (70%, 45.1%) and pregnancy rates in Sm (48.1%, 65.7%). An affect of parity (cow or heifer, respectively) was found on recovery rates in Lm (65%, 36%) and recovery rates in MA (42%, 65%). No affect of number of inseminations (1, 2 or 3) or day of stimulation (10, 11 or 12) was found. It is emphasized that these clinical data are subject to uncontrolled confounding; therefore, reservation must be used in interpretation of results. However, the data should have useful observational value in the development of hypotheses for critical testing.