

ESTRUS DETECTION EFFICIENCY IN EMBRYO RECIPIENTS SYNCHRONIZED WITH CLOPROSTENOL

Fernandes, C.A.C.^{1,2}; Figueiredo, A.C.S.¹; Oliveira, E.R.²; Vasconcelos, T.D.²; Alves, B.F.L.²; Gioso, M.M.¹; Viana, J.H.M.³; Oba, E.⁴

¹Unifenas, Rod. MG 179, Km 0, 37130-000 Alfenas MG; ²Biotran Ass. e Consult. em Reprod. Animal Ltda. R. Tatuin, 93, Res. Teixeira, 37130-000 Alfenas MG; ³Embrapa Gado de Leite, 36038-330 Juiz de Fora, MG; ⁴FMVZ-U nesp, 18618-000 Botucatu, SP; cacf@biotran.com.br

The efficiency of estrus detection is extremely important in any bovine production system. In Embryo Transfer (ET) programs its importance is even higher since management of donors and recipients is always counts on estrous behaviour detection. The accuracy of estrus detection in embryo recipients is directly related to the economic efficiency of the ET activity, because estrus detection efficiency determinates the amount of animals necessary for the program, and recipient maintenance is the main cost of an ET program. Several studies were published indicating low estrus detection rates, mainly when the animals were synchronized. The aim of this study was to evaluate the efficiency of estrus detection in recipients synchronized with Cloprostenol (Ciosin[®]), using reduction of plasma progesterone (P4) as criteria to evaluate luteolysis. Bovine females (n=240) were synchronized, being between 6 to 17 .days of the estrous cycle when received the luteolytic drug. To evaluate the efficiency of luteolysis and the possibility of estrus manifestation samples of blood were collected immediately before cloprostenol injection and 24-30 hours later. The animals were kept in pens of *Brachiária* grass, together with a bull teaser (one for 30 females). The visual estrus observation was performed twice a day, for 30 min. The immobility reflex was considered as the heat signal. From the 240 animals that received the luteolytic, 229 presented luteolysis, resulting in 95.4% efficiency. From these 229 animals that had luteolysis, 199 were detected in estrus up to 96 hours after the application, and the efficiency of estrus detection was 86.9%. Only one animal identified as in estrus did not presented reduction in P4 levels (false positive). These results showed that when the synchronization process is efficient and the detection it is made correctly, a high efficiency can be obtained in this process.