

## FOLLTROPIN – V<sup>®</sup> DOSE TRIAL ON SUPEROVULATION PROTOCOL IN EUROPEAN BEEF COWS

Fernandes, C.A.C.<sup>1,2</sup>; Figueiredo, A.C.S.<sup>1</sup>; Oliveira, E.R.<sup>2</sup>; Vasconcelos, T.D.<sup>2</sup>;  
Alves, B.F.L.<sup>2</sup>; Gioso, M.M.<sup>1</sup>; Viana, J.H.M.<sup>3</sup>

<sup>1</sup>Unifenas, Rod. MG 179, Km 0, 37130-000 Alfenas MG;. <sup>2</sup>Biotran Ass. e Consult. em Reprod. Animal Ltda. R. Tatuin, 93, Res. Teixeira, 37130-000 Alfenas MG; <sup>3</sup>Embrapa Gado de Leite, 36038-330 Juiz de Fora, M [cacf@biotran.com.br](mailto:cacf@biotran.com.br)

In the last years the Brazilian beef cattle presented notable growth. The current situation of the beef cattle in Brazil places our Country in prominence in this sector in the world-wide context. Besides possessing the biggest number of commercial bovines of the world, we recently reach the position of world-wide greater exporting of meat. The variability of superovulation results is the main limiting factor to the great contribution the embryo transfer (ET) technique on promoting genetics enhancement. It is an important factor that passed more than 40 years of the birth of the first deriving bovine of the ET technique; few significant changes had occurred specifically in the superovulation protocols. In the last 6 years, research on follicular dynamics brought some improvements on E.T. protocols which, nowadays, can be made as a fixed time procedure. However, relevant information are still missing such as the determination of superovulatory hormones sensibility in different bovine breeds as long as it is known that excess of hormone is one of the main factors for a poor protocol response in viable embryos. The aim of this work was to evaluate different doses of FSHp (Folltropin – V<sup>®</sup>) in European beef cows, under tropical conditions and to determinate which dose brings the best ratio between total structures and quantity of viable embryos. Twelve adult Simmental and Angus cows were (48 to 98 months old). Those cows are showed regular estrous cycle and are not in lactation and with body condition between 3 to 4 (scale 1-5) All of them were submitted to all groups and were superovulated on the following protocol - D0: Insertion the intravaginal progestagen device (DIB<sup>®</sup>); D1: Injection (i.m.) of 3 mg estradiol benzoate (Ric – BE<sup>®</sup>); D5 – 8: FSH (Folltropin<sup>®</sup>, 8 decreasing doses); D7 afternoon: 150µg (i.m.) of d-cloprostenol (Prolise<sup>®</sup>); D8 afternoon: implant removal ; D9 afternoon: 25 mg (i.m.) of LH (Lutropin-V<sup>®</sup>); D10: 2 AI (12/12h). All donors received 130 mg, 160 mg and 200 mg of Folltropin<sup>®</sup> diluted in 20 mL of 0,9% saline solution. Also were inseminated with the same semen lot. All embryos collects were manipulated by the same technician. Differences between the breeds had not been observed. The average number of embryos were  $692 \pm 392$ ,  $1008 \pm 406$ ,  $967 \pm 351$  and the average number of transferable embryos were  $542 \pm 228$ ,  $6,92 \pm 211$ ,  $508 \pm 287$  respectively to 130, 160 and 200 mg of Folltropin<sup>®</sup>. Differences between the doses of Folltropin related to the number and transferable structures had not been observed. In the present study 130 mg dose for being of lesser cost shall be used as first dosage for cows in the same category.

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