



A094 FTAI, FTET and AI

TAI synchronization protocols using intravaginal device Vallée® containing 0.6 or 1.2 g of progesterone present satisfactory results on ovarian follicle and pregnancy responses in bovine females

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The present study evaluated the ovarian follicular dynamics and conception rate following synchronization of ovulation using intravaginal devices containing 1.2 (DMax; Dispoce Max®; Vallée S.A.) or 0.6g (DMonouso; Dispoce Monouso®; Vallée S.A.) of progesterone (P4). The number of use of each devices (1X=used for 8 days or 2X=used for 16 days) was tested. Four experiments were conducted to evaluate the efficacy of the protocol [Exp. 1 = Follicular dynamics and Exp. 2 (A, B and C) = Pregnancy rate]. In Exp. 1, 81 Holstein females (40 cows and 41 heifers) were divided into one of six treatments: New P4C (DIB®; MSD Animal Health; n=13); New DMax (n=14); DMax 1X (n=13); DMax 2X (n=13); New DMonouso (n=14) and DMonouso 1X (n=14). The synchronization protocol used consisted in the administration of 2mg of EB (P4C=Gonadiol®, MSD Animal Health or Vallée Groups=Estradiol Benzoate Vallée®) plus insertion of the device according to the treatment in the beginning of the protocol (D0). At D8, the devices were removed and was administered sodium cloprostenol (P4C=530µg Sincrocio®, Ourofino Animal Health and Vallée Groups=500µg, Sincrosin®, Vallée®), 1mg of estradiol cypionate (P4C=ECP®, Pfizer Animal Health and Vallée Groups=Estradiol cypionate Vallée®) plus 300IU of eCG (Folligon®, MSD Animal Health). Ultrasonographic examinations were performed (Chison 8200Vet, 7.5MHz) from removal up to 96 hours to determine the moment of ovulation. All animals received TAI 48 hours after the devices removal. In Exp. 2, 1599 Nelore postpartum cows were treated with the same protocol mentioned above, however, divided in experiments 2A (New P4C vs. New DMax vs. New DMonouso), 2B (P4C 1X vs. DMax 1X vs. DMonouso 1X vs. DMax Novo) and 2C (P4C 2X vs. DMax 1X vs. DMax 2X vs. New DMax). The pregnancy diagnosis was performed 30 days after TAI. Data were analyzed using the PROC Glimmix of SAS. In Exp. 1, no differences were found between treatments for the moment (P=0.38) and ovulation rate (P=0.99) (New P4C=69.2±14.0h and 100% vs. New DMax=60.9±12.9h and 100% vs. DMax 1X=68.3±12.4h and 76.9% vs. DMax 2X=64.8±12.9h 85.7% vs. New DMonouso =70.0±10.0h and 85.7% vs. DMonouso 1X=62.0±16.8h and 85.7%). In Exp. 2, no differences were verified on the pregnancy rates in either experiments: 2A [New P4C (62.3%; 91/146), New DMax (61.5%; 91/148) and New DMonouso (66.0%; 95/144); P=0.35]; 2B [P4C 1X (54.0%; 81/150); DMax 1X (48.0%; 71/148); DMonouso 1X (54.9%; 79/144) and New DMax (56.4%; 84/149); P=0.16] and 2C [P4C 2X (51.0%; 74/145); DMax 1X (48.6%; 70/144); DMax 2X (51.8%; 72/139) e New DMax (52.8%; 75/142); P=0.81]. In conclusion, it is possible to use Dispoce Max® (New, 1X or 2X) or Dispoce Monouso® (New or 1X) devices for the synchronization of ovulation and TAI in bovine females with satisfactory results.

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