A150 Folliculogenesis, Oogenesis and Superovulation

Parameters blood and viability oocyte Girolando's breed supplemented with linseed (*Linum usitatissimum L.)* - preliminary results

C.J. Tavares Cardoso[1], W.A. Leite da Silva[1], H. Kischel[1], E.D.S. Arruda[1], M.G.C.R. Ferreira[1], A.C.B. de Lima[1], M.V.M. Oliveira[1], M.B. Souza[2], E. Nogueira[3], F.A. Melo Sterza[1]

[1]UEMS, Aquidauana; [2]UEL, Londrina; [3]EMBRAPA Pantanal, Corumbá.

Keywords: cryopreservation, embryos , poli unsaturated fat acids.

The aim of this study was to evaluate the effect of supplementation with linseed on plasma concentrations of glucose, albumin and cholesterol, as well as the quality of oocytes obtained by ovum pick-up (OPU). Therefore, a total of 12 cows Girolando's breed, were randomly divided into 2 groups: control group (CTRL, n = 6) and linseed group (LINH, n = 6), differing only by the supply of 0,800kg/animal/day of linseed in the diet of LINH group. The supplementation period was 126 days, because in cattle the development of preantral follicles to the pre-ovulatory follicles takes three months (Webb, R. et al., Journal of Animal Science v. 82, p.63- 74, 2004). Thus, all oocytes were completely under the effect of feeding. Seven OPUs sessions were performed with 20 days intervals between each session. Blood samples were collected from the females at each of the OPU sessions, centrifuged and the metabolites were quantified in serum by automated colorimetric enzymatic method by spectrophotometry. Only oocytes classified as grade I and II were considered viable. The analyzes of blood metabolites and viability rates were performed using SAS PROC GLIMMIX the version 9.3. There was no effect ($P > 0.05$) linseed supplementation on plasma concentrations of glucose, albumin, cholesterol and oocyte viability rate (60.4% vs 64.4% control group and linseed, respectively). So as the time of supplementation did not interfere in any of the variables evaluated. Therefore, the supplementation with 0.800 kg of linseed in the diet of Girolando cows was not sufficient to alter the serum concentrations of glucose, albumin and cholesterol as well as the quality of the oocytes during the supplementation period, possibly due to the high initial body score condition of the animals.