V Encontro Científico de Produção Animal Sustentável
31 de outubro de 2014
Instituto de Zootecnia, Nova Odessa, SP

EFFECT OF NUMBER OF ASPIRATIONS AND MONTHS OF THE YEAR ON THE TOTAL AND VIABLE OOCYTES IN NELLORE DONORS

EFEITO DO NÚMERO DE ASPIRAÇÕES E MESES DO ANO SOBRE A QUANTIDADE DE OÓCITOS TOTAIS E VIÁVEIS EM DOADORAS NELORE

ERIKA ALINE RIBEIRO DIAS[1]*, FABIO MORATO MONTEIRO[1], SUZANE PERES CAMPALHOLI[2], MONICA ACCORSI[3], BERNARDO MARCOSE BAYEUX[3], JOSLAINE NOELY DOS SANTOS GONÇALVES CYRILLO[1], EMILIANA DE OLIVEIRA SANTANA BATISTA[4], ALEXANDRE HENRILY SOUZA[5], PIETRO SAMPAIO BARUSELLI[4]

[1]Instituto de Zootecnia (IZ), Centro APTA Bovinos de Corte, Sertãozinho, SP, Brazil.
[2]Universidade Estadual Paulista "Júlio de Mesquita Filho" (UNESP), Faculdade de Ciências Agrárias e Veterinárias, Jaboticabal, SP, Brazil.
[3]Sexing Technologies, Sertãozinho, SP, Brazil.
[4]Universidade de São Paulo (USP), Faculdade de Medicina Veterinária e Zootecnia, São Paulo, SP, Brazil.
[5]University of California (UC), California, EUA.
*email: erikaaline.rd@gmail.com

Several factors can influence the recovery of the amount of oocytes for *in vitro* embryo production (IVEP), including the age of the donor, the time and the frequency at which the animal is collected and climate station year. Another factor is the individual variation of each animal in the number of oocytes and embryos. Thus, the aim of this work was to evaluate the effect of the number of aspirations and the influence of the months of the year in the amount of total and viable oocytes in Nellore cows. The date was collected from January 2011 to December 2012. Non-lactating, cycling Nellore cows (n = 42) of high genetic value were used as oocyte donors. The procedures were carried out in a farm in southeast Brazil (21°8'16"S/48°58'2"W), located in humid tropical climate. All the donors were maintained on pasture consisting of guinea grass (*Panicum maximum* and *Urochloa brizantha*), getting protein mineral supplement energy and water *ad libitum* daily. The analyzes were performed by proc GLIMMIX of SAS 9.3 (SAS Inst., Inc., Cary, NC). The amount of total oocytes (P=0.16) and viable (P=0.11) did not influenced by the number of aspirations. However, the months of the year have an effect on the amount of total and viable (P<0.0001) oocytes. Probably the production of oocytes did not suffer influences the number of aspirations performed mainly because the intervals between each OPU (Ovum Pick-Up), about 21 days. The increase in the amount of total and viable oocytes that occurred in the fall was probably due to better nutritional conditions in the summer. The decreased production in winter was the likely lack of food during previous season. The decreased availability of food especially in winter (dry season) leads animals to lose weight and body condition scores, probably impair reproductive endocrine function. Therefore, in conclusion, the number of follicular aspirations did not influence the number of total and viable oocytes. However the months of the year influenced the amount of the total and viable oocytes from the Nellore donors with the same nutritional management.

Keywords: *Bos indicus*, Donor, OPU.

Acknowledgements: Sexing Technologies.