



A233 Embryology, Developmental Biology and Physiology of Reproduction

### Genetic paternal effects on ovary characteristics and ovarian structures of canchim (*Bos indicus* vs *Bos taurus*) heifers: preliminary data

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The aim of this study was to identify the influence of the paternal genotype on ovarian characteristics of Canchim heifers. Heifers (n=140) were evaluated by transrectal ultrasonography (US; Mindray, DP 2200VET, Shenzhen Mindray Bio-Medical Electronics Co., Shenzhen, China) twice with a 14 d interval to detect the presence of a CL. The presence of a CL was not detected in 45 heifers following evaluations, and 32 heifers were randomly selected (16.0 months; 211.0 ± 3.3 kg) daughters of 6 bulls (A, B, C, D, E and F). Heifers were allocated in a grazing intensive pasture system at an experimental station of the Brazilian Agricultural Research Corporation (EMBRAPA), located in São Carlos, state of São Paulo, Southeast of Brazil. US evaluations were performed every 14 days, from January to April 2015. The ovaries were classified according to their diameter (OC) as: I (< 1.5 cm); II (1.6 cm to 2.5 cm); III (2.6 to 3.5 cm); IV (3.6 to 4.5cm). The largest follicle (LF) and the second largest follicle (SLF) present on the ovaries were also recorded. Statistical analysis were performed using the GLIMMIX procedure of SAS® considering the effects of sire and repetition and the results were presented as least squares mean ± SE. Results were significant when P < 0.05. Heifers daughters of bulls A, C and F had greater CO (2.0 ± 0.07, 2.1 ± 0.08 and 2.1 ± 0.05, respectively) than heifers daughters of bulls B, D and E (1.8 ± 0.06, 1.8 ± 0.05 and 1.9 ± 0.06, respectively). Furthermore, heifers daughters of bulls A, C, E and F had greater MF (10.3 ± 0.39; 10.1 ± 0.44; 10.4 ± 0.34 and 10.4 ± 0.29mm, respectively) than the daughters of bulls B and D (0.34mm ± 8.9, 9.1 ± 0.27, respectively). In addition, the SMF of heifers daughters of sires A, C, E and F (5.9 ± 0.31, 6.2 ± 0.36, 6.2 ± 0.28 and 6.1 ± 0.24mm respectively) was also greater than heifers daughters of bulls B and D (5.3 ± 0.28 and 5.4 ± 0.22mm, respectively). This study corroborated data from the literature that showed genotype (sire) effects in reproductive tract characteristics of females and also in the development of ovarian structures.

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