INFLUENCE OF CATEGORY ON GESTATIONAL LOSS DURING FIXED-TIME ARTIFICIAL INSEMINATION (FTAI) PROTOCOL

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Gestational loss, both embryonic and fetal, have normally unknown causes, and cause great economic impact on livestock production. Several factors are associated with these losses: incidence of reproductive diseases, semen quality, body condition of cows and fertility. The aim with the present work was to evaluate the influence of the category (heifer, primiparous, secundiparous and multiparous) on gestational loss of cows submitted to FTAI protocol. The study was conducted on Seriema Ranch, in Miranda-MS, Brazil, from September 2016 to February 2017. Semen from 23 Nellore sires and 3 Angus sires were aleatory used. The semen was thawed by an electronic defroster. A total of 2079 females with an average body condition score of 2.6 (scale from 1 to 5) were inseminated, including heifers, primiparous, secundiparous and multiparous. Pregnancy diagnosis was performed by ultrasound 30 and 120 days after the IA. Data was analyzed with GLIMMIX procedure in SAS University. Body condition score in the day of pregnancy diagnosis was included in the statistical model as a covariable. Category had a significant effect on gestational loss (P=0.03). Heifers presented the highest gestational loss, with average of 5.91% ± 3.38. Primiparous had a 4.84% ± 2.71 loss, not differing from secundiparous, with a 4.86% ± 2.91 loss. Multiparous gestational loss averaged 3.00% ± 1.68 and differed from other categories. We conclude that heifers present higher gestational loss compared to other categories, while multiparous have lower gestational loss.

Keywords: abortion, embryonic loss, fetal loss, fertility