Abstract

Objective. To examine the relationship between body condition score (BCS), the occurrence of estrous, estradiol plasma concentrations, diameter of largest ovarian follicle (LF) and pregnancy rate in suckled Bos indicus cows submitted to a fixed-time artificial insemination (FTAI) protocol. Material and methods. Thirty eight Brahman cows received an intravaginal device of progesterone + estradiol benzoate on Day 0, device withdrawal + dinoprost + equine chorionic gonadotropin on Day 9, and FTAI on Day 12. Pregnancy was diagnosed 90 days after FTAI. Results. There was no effect of BCS on the occurrence of estrous, estradiol plasma concentrations or diameter of the LF (p>0.05). The diameter of LF did not influence (p>0.05) estradiol plasma concentrations. The diameter of the LF and estradiol plasma concentrations did not influence the occurrence of estrous (p>0.05). Pregnancy rate per FTAI was not affected (p>0.05) by BCS, the occurrence of estrous or plasma concentrations of estradiol. There was a tendency (p=0.10) of a direct relationship between diameter of the LF and pregnancy rate FTAI. Conclusions. BCS, plasma concentrations of estradiol and occurrence of estrous did not influence pregnancy rate per FTAI in Brahman cows submitted to progesterone-based protocol. However, the diameter of LF had a tendency to positive impact on pregnancy rate per FTAI.

Keywords

Beef cattle, body condition, oestradiol, ovarian follicles (Source: Agrovoc).