

Effects of resynchronization with progesterone and prostaglandin F₂• on estrus response and pregnancy rate in beef cattle.

ABSTRACT

This experiment was designed to compare the estrus response and pregnancy rate of cows first synchronized using CIDR with cows that were resynchronized after failing to display estrus. Estrus response and pregnancy rate were also compared between cows resynchronized with either CIDR or prostaglandin F₂• (PGF₂•). Initially, 140 Brangus cows were synchronized with CIDR. About 30 days after Artificial Insemination (AI), cows were checked for pregnancy using ultrasound and those that remain open were divided into two groups and resynchronized with either CIDR or two injections of PGF₂• at 11 days interval. All cows were observed visually for estrus response for a period of 2 h at 12 h interval, starting immediately after CIDR removal or after the second injection of PGF₂•. Cows were in estrus when they mounted if at least 3 times during the period of observation. Following removal of CIDR and second injection of PGF₂•, cows were inseminated 60 and 70 h later, respectively. There were no significant differences ($p>0.05$) in estrus response and pregnancy rate between cows initial synchronization and resynchronization with CIDR protocol. Although, statistically not significant there was relatively higher percentage of estrus response (81.6 vs. 70%) and pregnancy rate (30.6 vs. 28.0%) in cows resynchronized with CIDR than cows resynchronized with PGF₂•.

Keyword: Beef cattle; CIDR; Estrus response; PGF₂α; Pregnancy rate; Resynchronization.