

Public Abstract

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Title:COMPARISON OF CIDR-BASED PROTOCOLS TO SYNCHRONIZE ESTRUS AND FACILITATE AI IN POSTPARTUM BEEF COWS

Artificial insemination (AI) and estrous synchronization are reproductive technologies that enable beef producers to efficiently improve herd genetics. To date, however, beef producers have been reluctant to adopt these technologies. Development of effective estrous synchronization protocols is necessary for the expanded use of AI.

The 7-d Select Synch and CO-Synch + CIDR protocols provide an effective means to synchronize estrus in postpartum beef cows. Recently a 5-d Select Synch and CO-Synch + CIDR protocol was developed to synchronize estrus.

Experiment 1 was designed compare the 7-d and 5-d Select Synch + CIDR protocols on the basis of timing and synchrony of estrus following treatments. There were no differences between treatments for estrous response, interval to estrus, synchrony of estrus, or synchronized conception or pregnancy rates resulting from AI. Experiment 2 was designed to compare pregnancy rates resulting from fixed-time AI (FTAI) following administration of the 7-d and 5-d CO-Synch + CIDR protocols with insemination performed 66 and 72 h, respectively. Pregnancy rates resulting from FTAI were 67% for both treatments. The results from these experiments indicate that the 7-d and 5-d Select Synch and CO-Synch + CIDR protocols performed comparably on the basis of synchronizing estrus and facilitating pregnancy resulting from FTAI.

The 5-d protocol provides an alternative to the 7-d protocol for use in facilitating FTAI, however beef producers must seriously consider the increased labor and treatment costs when choosing a protocol.