Reproductive Management Strategies for Dairy Heifers

Artificial insemination after detection of estrus

A. Two PGF followed by heat detection

Definitions and comments:
PGF = Prostaglandin F2α. *Intensity of color in EDAI indicates estrus intensity. Most heifers are in estrus 2-7 days after PGF. Approximately 70% of the heifers will be in estrus in the first 14 days after the first PGF. The remaining heifers should be in estrus after the second PGF. Non-responding heifers might be prepubertal. TAI can be used to provide a breeding opportunity of heifers not detected in estrus.

B. CIDR program with PGF at removal

Definitions and comments:
CIDR = Controlled internal drug release. Approximately 70% of heifers should be in estrus during 7 days after the CIDR removal. Non responding heifers may be prepubertal. CIDR-based programs may induce fertile entrees in some prepubertal heifers. *PGF can be given on day 6 instead of 7 (One day before CIDR removal) to increase synchrony of estrus in the program.

Programs for timed AI

GnRH = Gonadotropin-releasing hormone.
For the timed AI program presented below, the option A yields greater number of pregnancies per insemination than option B.

A. 5-d CIDR-Synch with GnRH and 2 PGF

B. 5-d CIDR-Synch without GnRH and 1 PGF

Note: This reproductive management sheet was assembled by the Dairy Cattle Reproductive Council (DCRC). Programs are intended to promote sustainable food production through sound dairy practices. The DCRC recommends working with a licensed veterinarian for the proper administration of all treatments.