Dairy Heifer Synchronization Protocols - 2016

AI after detection of estrus

2xPGF

PGF — EDAI — PGF — EDAI

14 days **7 days**

Comments: 2XPGF
Approximately 70% of heifers should be in estrus during 14 days after the first PGF. Remaining heifers should be in estrus after the second PGF. Non-responding heifers may be prepubertal.

Definitions and comments:
EDAI = estrous detection and AI after detection of estrus.
PGF = prostaglandin $F_{2\alpha}$.
CIDR = Controlled internal drug release intravaginal insert containing progesterone.
GnRH = gonadotropin-releasing hormone.
Intensity of red color within EDAI denotes periods to expect most heifers in estrus. Most heifers come into estrus 2 to 5 days after PGF.

CIDR-PGF Option 1 (PGF at CIDR removal)

CIDR — PGF — EDAI

7 days **7 days**

Comments: CIDR-PGF
Approximately 70% of heifers should be in estrus during 7 days after CIDR removal. Non-responding heifers may be prepubertal. Option 2 improves the synchrony of estrus. CIDR-based programs may induce fertile estrus in some heifers that are prepubertal at start of treatment.

CIDR-PGF Option 2 (PGF at 1 day before CIDR removal)

CIDR — PGF — EDAI

7 days **7 days**

Programs for Timed AI (TAI)

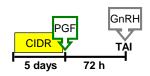**Comments: 5dCIDR_Cosynch72**
Option 1 yields greater conception rate to TAI than option 2.
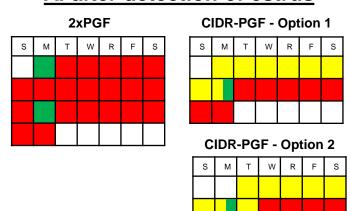
5dCIDR_Cosynch72 (2 PGF) Option 1

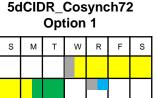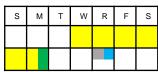GnRH — CIDR — PGF PGF — GnRH TAI

5 days **24 h** **48 h**

5dCIDR_Cosynch72 (1 PGF) Option 2

CIDR — PGF — GnRH TAI

5 days **72 h**

Calendars

| PGF | CIDR | EDAI | GnRH | TAI |

AI after detection of estrus

2xPGF

CIDR-PGF - Option 1

CIDR-PGF - Option 2

Timed AI (TAI)

5dCIDR_Cosynch72 Option 1

5dCIDR_Cosynch72 Option 2