

Figure 1 Dairy Cattle Reproduction Council (DCRC) Updated Dairy Heifer Synchronization Protocols – 2016

The Dairy Cattle Reproduction Council (DCRC) has updated synchronization protocols for dairy heifers and cows. Tear these pages out for reference on your dairy.

AI after detection of estrus

2xPGF



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 PGF. Non-responding heifers may be prepubertal.

Definitions and comments:

EDAI = estrous detection and AI after detection of estrus

PGF = prostaglandin F_{2a}

CIDR = Controlled internal drug release intravaginal insert containing progesterone

GnRH = gonadotropin-releasing hormone

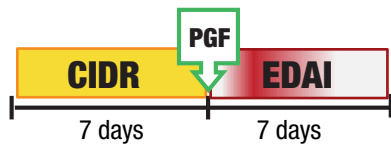
Intensity of red color within EDAI

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)



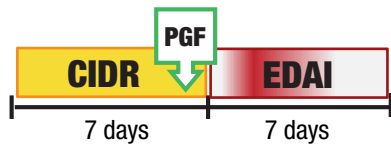
Comments: CIDR-PGF

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)

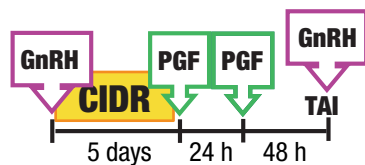


Programs for Timed AI (TAI)

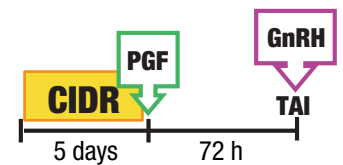
Comments: 5dCIDR Cosynch72

Option 1 yields greater conception rate to TAI than option 2.

5dCIDR_Cosynch72 (2 PGF) Option 1



5dCIDR_Cosynch72 (1 PGF) Option 2



Calendars



AI after detection of estrus

2xPGF

| S | M | T | W | R | F | S |
|------|------|------|------|------|------|------|
| | PGF | EDAI | EDAI | EDAI | EDAI | EDAI |
| EDAI | EDAI | EDAI | EDAI | EDAI | EDAI | EDAI |
| EDAI | PGF | EDAI | EDAI | EDAI | EDAI | EDAI |
| EDAI | EDAI | | | | | |

CIDR-PGF - Option 2

| S | M | T | W | R | F | S |
|------|------|------|------|------|------|------|
| | CIDR | CIDR | CIDR | CIDR | CIDR | CIDR |
| CIDR | CIDR | PGF | EDAI | EDAI | EDAI | EDAI |
| CIDR | EDAI | EDAI | EDAI | EDAI | EDAI | EDAI |
| EDAI | EDAI | | | | | |

CIDR-PGF - Option 1

| S | M | T | W | R | F | S |
|------|------|------|------|------|------|------|
| | | CIDR | CIDR | CIDR | CIDR | CIDR |
| CIDR | CIDR | PGF | EDAI | EDAI | EDAI | EDAI |
| EDAI | EDAI | EDAI | EDAI | EDAI | EDAI | EDAI |
| EDAI | EDAI | | | | | |

Timed AI (TAI)

5dCIDR_Cosynch72 Option 1

| S | M | T | W | R | F | S |
|------|------|------|------|------|------|------|
| | | | GnRH | CIDR | CIDR | CIDR |
| CIDR | PGF | PGF | | TAI | | |
| EDAI | EDAI | EDAI | EDAI | EDAI | EDAI | EDAI |
| EDAI | EDAI | | | | | |

5dCIDR_Cosynch72 Option 2

| S | M | T | W | R | F | S |
|------|------|------|------|------|------|------|
| | | | CIDR | CIDR | CIDR | CIDR |
| CIDR | PGF | | | TAI | | |
| EDAI | EDAI | EDAI | EDAI | EDAI | EDAI | EDAI |
| EDAI | EDAI | | | | | |

This protocol sheet was assembled by members of the Dairy Cattle Reproduction Council (DCRC). Programs are intended to promote sustainable food production by the dairy industry through sound reproductive management practices. The DCRC recommends working with a licensed veterinarian for proper use and administration of all reproductive hormones.