Beef-Synch: Using Artificial Insemination in Commercial Beef Breeding Herds

Important to establish:

1 what are the farmer's breeding goals?

2 what is the farm trying to achieve?

3 how does improved access to top genetics (via AI) help?

Beef +Lamb New Zealand Progeny Test demonstrated

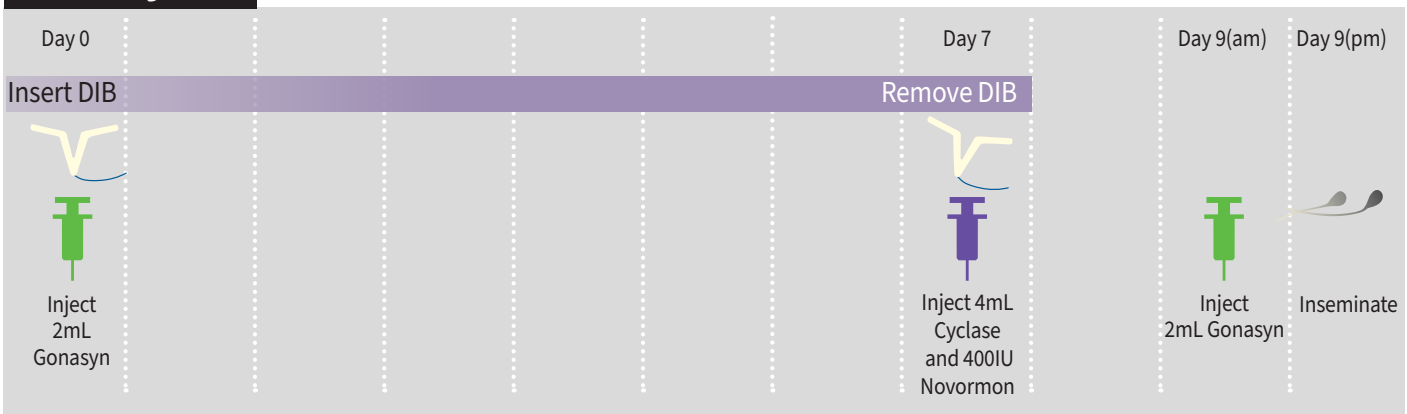
- **Better genetics** - using Artificial Insemination (AI) in beef breeding cows gives farmers access to the same genetics that stud breeders are using
  - Speeds up genetic gain in the breeding herd
  - Gets these superior genetics on farm 3 years sooner than if bulls were used
- **Better growth rates** - EBV's (estimated breeding values) for growth rates have been proven
- **Better carcass characteristics** - sire choice influences Beef EQ (eating quality) grading outcomes

Synchronising beef cows

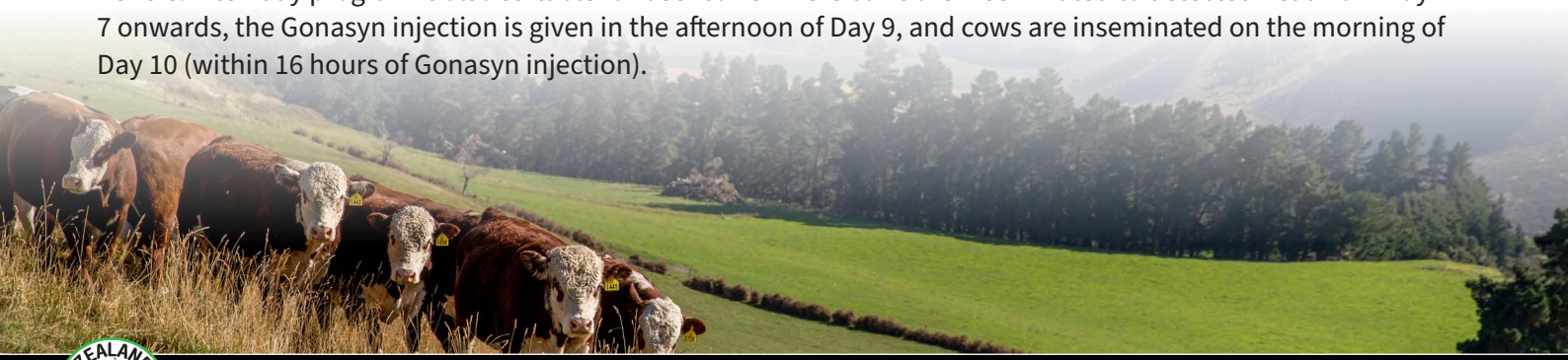
In order to use AI, synchrony of cows and heifers is required. Beef-Synch is the most commonly used beef cow synchrony to enable fixed-time AI on one occasion. Bulls are still required for cows that don't get pregnant to AI.

Note: non-pregnant cows will return to heat over a condensed period, so it is essential to have sufficient bulls running with the cow herd 18 – 24 days after AI. To calculate bull numbers required, assume 50% pregnancy rate to the Beef-Synch AI.

Beef-Synch

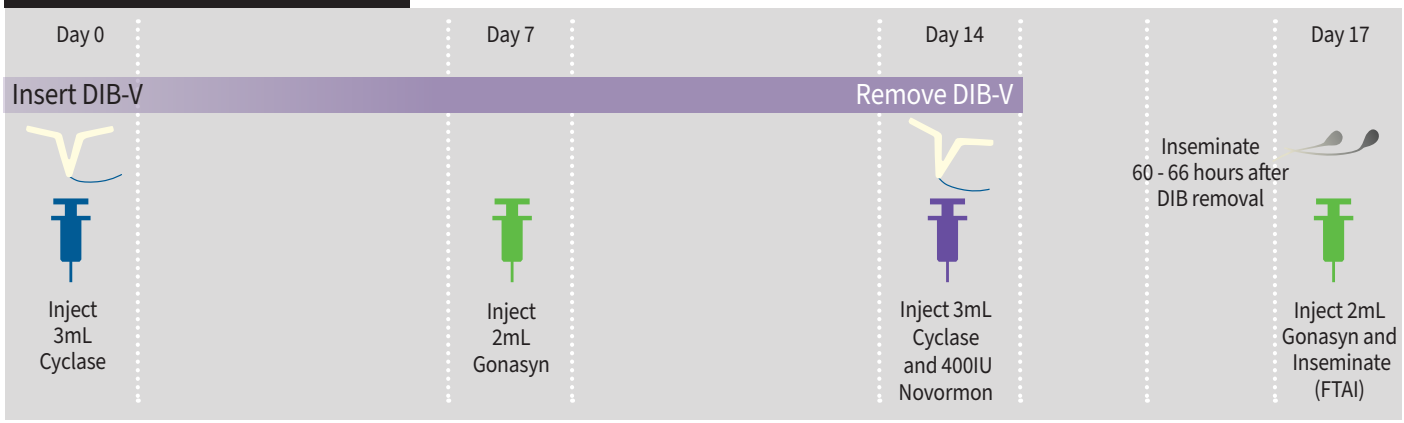


An alternative program where AI occurs at the same time as final Gonasyn injection is also acceptable for beef heifers. A ten day program is also suitable for beef cows where cows are inseminated to detected heat from Day 7 onwards, the Gonasyn injection is given in the afternoon of Day 9, and cows are inseminated on the morning of Day 10 (within 16 hours of Gonasyn injection).



Beef Synch

7&7 Synch for beef



Compared to the synchrony program currently used in NZ beef cows, the 7&7 program requires one additional dose of prostaglandin (PG), and one additional yarding of the cows. Treatment of post-partum beef cows with the 7&7 synchrony program including Novormon significantly improved pregnancy rates compared to the widely used 7-day Co-Synch program*.

What is essential for optimal AI outcomes?

- Minimum body condition score (BCS) of cows at mating ≥6 (reference)
- Timing of program interventions and AI is crucial
- Organised, well-run program, whilst minimising stress on heifers and cows

Farmers involved in the *Beef + Lamb NZ* Progeny Test reported

- They were able to align farm goals by choosing desired genetic traits
- AI was simple to do and worthwhile to bring top genetics into the farming system
- AI was easy to implement – requires careful planning and a well-run program
- Cows need to be set up for success of the program – BCS is especially important
- Decisions made about bulls today influence the herd for the next 8 – 10 years (so also influence farm profitability for this period). Decisions about genetics are BIG decisions
- Genetics is one thing that farmers have 100% control over

Hear from the farmers involved in the B+LNZ Progeny Test

Read the case studies

For more information

Beef Cow Body Condition Scoring

*Reference TB R19 – Pregnancy rates following synchrony programs in beef cows

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