



 **bionova**  
PRECISION BREEDING

Fixed Time Artificial  
Insemination Program  
(FTAI)



# Fixed Time Artificial Insemination Program



Fixed Time Artificial Insemination is a reproductive method that uses precise tools to increase the overall genetic merit of the cattle. It is a viable technology in every cattle farm as it decreases the infertility of the females by being able to induce and synchronize the estrus and the ovulation in postpartum period.

The main benefits of the program are the following:

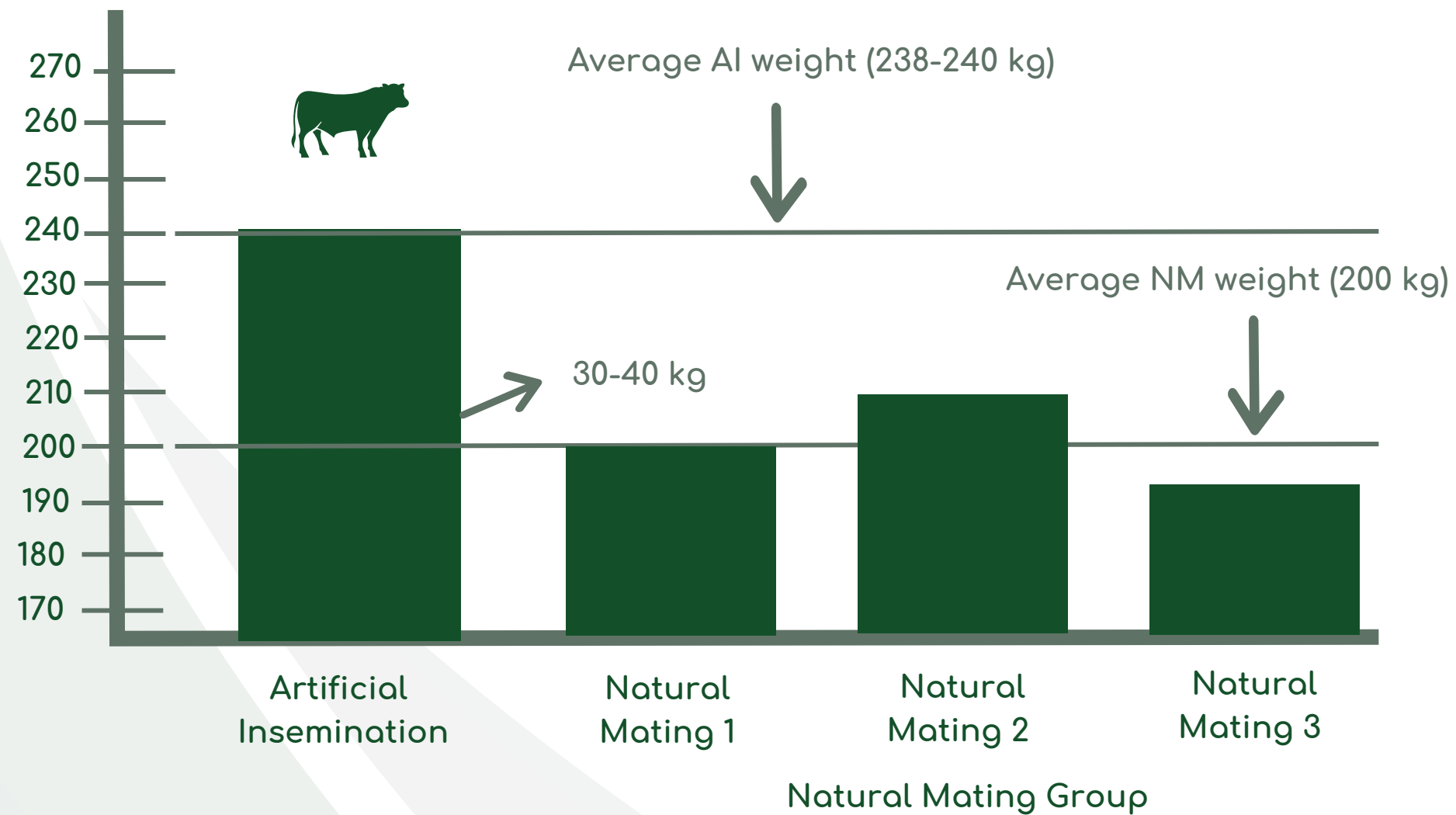
1. FTAI is a cost effective alternative that reduces the risk, time and labor rather than implementing a heat detection system.
2. It provides a greater chance for cows to be pregnant in a shorter period of time.
3. It generates long-term impacts as it improves the genetics of the succeeding herd production.
4. Improve the overall genetics of your herd.

Estrus-a regularly recurrent state of sexual receptivity during which the female of most mammals will accept the male and is capable of conceiving; "in heat"

Source: Merriam-Webster



# Fixed Time AI vs Natural Mating



The FTAI program increases the conception rate by improving the reproductive response of the cows. Cows express synchronized heats coinciding with the time of ovulation favoring a group insemination in a span of 3-4 hours. Females get pregnant earlier and faster than using heat detection system reducing number of open days. In addition, it increases the number of calves being born in a shorter period of time, getting heavier calves at weaning due to genetic influence.





# Program Requirements

Minimum number of 15 heads qualified to the program.

1. **Body Condition Score (BCS) of 5-7 in the 0-9 scale.**
2. **Animal identification and basic records:** The female must be properly identified (e.g. ID number, ear tag, etc.) and should have basic records like the date of last calving, age, and last date of breeding.
3. **Basic facilities:** The farm must have functional and safe facilities like the working corral and chute to ease the handling of the females subjected to the program. We value the safety of the animals and technicians.
4. **Nutrition:** Females in grazing areas and confined setups must have enough availability and good quality forage that satisfies their nutritional requirements. Dry areas might need the use of supplementation like a proper supply of salt, minerals, and vitamins to ensure a good pregnancy rate.
5. **Farm Manager and Personnel:** A farm manager and staff are required to manage the daily operations like recording, feeding, and handling. Proper management is important to ensure good results from the program.





# How It Works?

## Day 0: Selection by Ultrasound and Induction of New Follicular Wave

All cows will undergo an evaluation by Ultrasound. This will help to Identify the cows able to be induced with a hormonal treatment designed according to the level of fertility. Qualified females will be subjected to induction of a new follicular wave.

## Day 8: Induction of Heat and Ovulation

Using a combination of hormones – heats and ovulation will be induced and synchronized in order to increase the chances of higher pregnancy rates without the need of heat detection.

## Day 10: Insemination Procedure

As soon as the cows express heat, they will be subjected to Artificial Insemination (AI) procedure at a determined time.

## > 28 Day: Pregnancy Diagnosis by Ultrasound

28 to 30 days after insemination, the females will be subjected to early pregnancy diagnosis by ultrasound.

## Resynchro Program & Bull Exposure

As part of the intensive breeding season, the Resynchro program is designed for females that did not conceive during the first FTAI. These animals will undergo a subsequent resynchronization and bull exposure in pursuit of achieving pregnancy.





# 12 Months Calving Interval. How Do We Do It?

Repeat the process next year

1. Selection of Cows and Heifers



2. Selection of Genetics



3. Preservice Exam by Ultrasound



4. Protocol of Synchronization



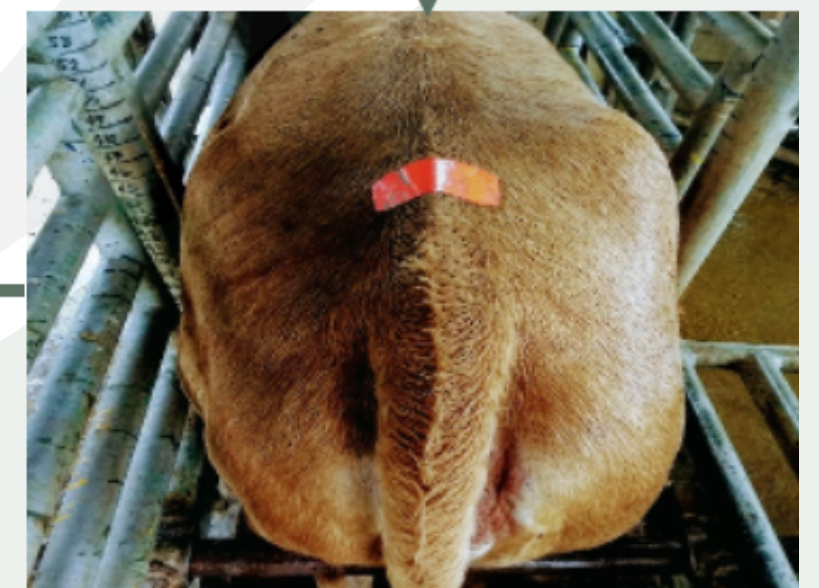
8. Calving



7. Pregnancy Diagnosis



6. Fixed Time AI



5. Induction of Heat and Ovulation





# Synchro + Bull Program

This integrated program is meant for farms currently practicing year-round breeding with bulls, aiming to establish and shorten the breeding season. The Synchro + Bull Program allows to address herd fertility concerns, while helping in setting controlled breeding, calving, and weaning seasons.

Through the use of reproductive ultrasound, we select healthy cows for bull exposure. Cows with reproductive abnormalities will be treated accordingly before the start of the breeding season. Making use of reproductive hormones, we induce the heat and ovulation for cows to be subjected to natural breeding for 45, 65 or 90 days only. The duration of the breeding season will depend on the level of fertility of the herd and the quality of the breeding bulls.





# Farms



Rancho Consuelo  
Canlubang, Laguna



Victa Ranch  
Mexico, Pampanga



M. Montesclaros Farms  
Valencia, Bukidnon





# Farms



JJ Rock Farm  
Talugtog, Nueva Ecija

Asturias Farms Inc.  
Asturias, Cebu

RDL Cattle Farm  
Milagros, Masbate





# CONTACT US



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