Breeding Management Use #4

Confirming Pregnancies

Pregnancy testing is a practice cattle producers struggle to implement consistently. According to USDA, only 18% of operations palpate for pregnancies and 2.2% ultrasound for pregnancies.[6] The ESTROTECT™ Breeding Indicator offers a simple and accurate method of pregnancy detection by attaching the patch following the breeding season. If the patches show no signs of estrus activity following breeding via AI or exposure to a bull, the cows or heifers can be assumed pregnant.

A joint study by South Dakota State University and the University of Missouri compared the ESTROTECT™ Breeding Indicator with three different blood-based pregnancy tests and showed the patches perform as good or better in determining pregnancy.[7]

Determining Pregnancy Success	Blood Test 1	Blood Test 2	Blood Test 3	ESTROTECT™ Breeding Indicator
Ability to correctly identify pregnant animals (P=0.14)	98%	97%	95%	99%
Ability to correctly identify non-pregnant animals (P=0.09)	67%	82%	87%	82%
Overall Test Accuracy (P=0.25)	86%	89%	92%	92%

"Comparison of Four Methods to Determine Pregnancy Success in Beef Cattle" South Dakota State University. 2013.

Conclusion

The precision design and function of the ESTROTECT™ Breeding Bullseye™ cannot be found anywhere else on the market. As a complete breeding management tool, the ESTROTECT™ Breeding Indicator with Breeding Bullseye™ technology helps confirm pregnancies, determine cycling and pinpoint timing for breeding. Through university-led research, a simple and proven high vs low estrus intensity identification system was developed for the ESTROTECT™ Breeding Indicator. Help achieve more pregnancies and less pregnancy loss, resulting in more calves on the ground, to provide more potential profit!

[1] Colazo, et al. 2018. Evaluation of a modified GnRH-based timed-AI protocol associated with estrus detection in beef heifers inseminated with sex-selected or conventional semen. Livestock Research Section, Alberta Agriculture and Forestry, Edmonton.
[2] Clemmons, Reese, Dantas, Franco, Smith, Adeyosoye, Pohler & Myer. 2017. Vaginal and Uterine Bacterial Communities in Postpartum Lactating Cows.
[3] O'Connor. Heat Detection and Timing of Service. Extension Circular 402. Pennsylvania State University.
[4] Davis, Rorie, Powell, Lester & Lindsey. Serial use of Estrotect™ estrous detection patches as a reproductive management tool. University of Arkansas.
[5] Pohler et al., 2016; Speckhart et al., 2018; Oliveria et al., 2018; Periera et al., upub
[6] NAHMS. 2009. Part II: Reference of Beef Cow-Calf Management Practices in the United States, 2007-08. Natl. Anim. Health Monit. Serv., Fort Collins, CO.
[7] Perry, Smith & Pohler. Comparison of four methods to determine pregnancy success in beef cattle. South Dakota State University and University of Missouri.

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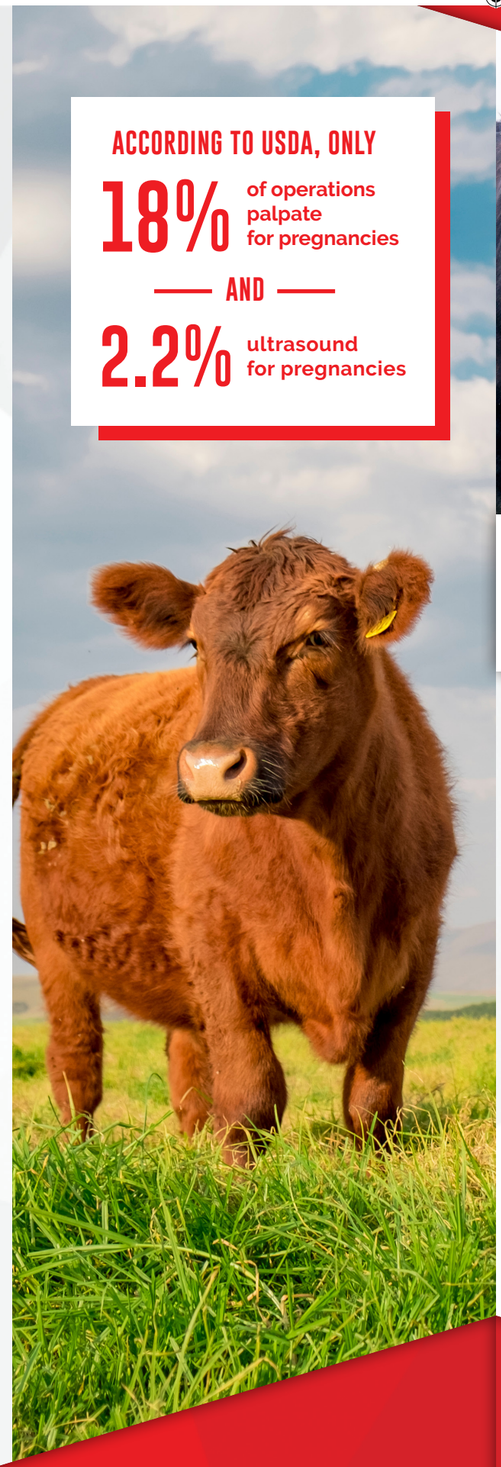


ESTROTECT™ BREEDING INDICATOR

www.ESTROTECT.com

ESTROTECT™ BREEDING INDICATOR

The Estrotect™ Advantage

A Breeding Management Tool

What is a top challenge for beef and dairy producers today? Getting cows bred.

Missing one heat cycle or having a failed pregnancy can result in lost revenue between $42 and $126 per cow. Fortunately, there is a breeding management tool available to help producers improve pregnancy rates and their bottom line: **the ESTROTECT™ Breeding Indicator with Breeding Bullseye™ technology.**

The patent-pending Breeding Bullseye™ is precision-designed and calibrated to help pinpoint when cows and heifers are ready to breed:

1. The silver and black surface ink rubs off the adhesive patches as mounting activity occurs, revealing a color indicating the animal is in optimal estrus intensity.
2. The Breeding Bullseye™ takes it one step further with a calibrated large black circle in the middle of the indicator.
3. Upon the Breeding Bullseye™ or equivalent surface area rubbing off, it is time to initiate the breeding protocol to achieve the best odds of successful pregnancy.

In third-party research trials, when the Breeding Bullseye™ or equivalent surface area is activated, cows are proven to be up to three times more likely to result in confirmed pregnancies than if estrus is not detected before insemination.[1]

The ESTROTECT™ Breeding Indicator is the only university-tested and proven, rub-off breeding indicator on the market. The Breeding Indicator helps support reproductive improvement across beef and dairy production.

From estrus to confirmed pregnancy, ESTROTECT™ aids producers throughout the reproductive cycle beyond heat detection as a complete breeding management tool.

AS GOOD AS A BULL™

Breeding Management Use #1

Improving Pregnancy Rates

Pregnancy drives economics for dairy and beef producers. The longer cows stay open, the less profit they can generate in either milk production or weaning weight per calf.

USDA analysis indicates beef and dairy producers annually

LOSE $600 MILLION TO $1.2 BILLION

due to reproductive inefficiency.[2]

A key to efficiency lies in breeding cattle when they are in estrus.

When using artificial insemination (AI), knowing when cows and heifers are in optimal estrus is vital to achieving higher pregnancy rates per AI. By breeding when cattle are in high estrus intensity, detecting estrus with the ESTROTECT™ Breeding Indicator helps pinpoint when cattle are ready to breed. By breeding when cattle are in estrus, it results in more pregnancies per AI, less money spent on additional straws of semen and more time to focus on other areas of management.[3]

ESTROTECT™ BREEDING INDICATOR

Breeding Management Use #2

Determine Cycling

Use for Replacement Heifers

Cow and heifer estrus cycles happen like clockwork every 21 days. However, heifers might still be non-cycling females as they go through their puberty. You can determine whether replacement heifers are ready to breed by applying an ESTROTECT™ Breeding Indicator one month in advance of insemination to monitor which animals are cycling. A study by the University of Arkansas determined ESTROTECT™ Breeding Indicators were 86% accurate in identifying non-cycling heifers prior to breeding.[4] Knowing when heifers have cycled is an important step for breeding to ensure labor and semen are not wasted on animals that aren't ready to breed.

Use in Natural Service Herds

The ESTROTECT™ Breeding Indicator isn't just for AI herds. If you're using natural service, you can apply patches to determine when your herd is cycling and schedule bull turnout accordingly. Following breeding, you can apply ESTROTECT™ Breeding Indicators to determine pregnancy as well.

ESTROTECT™ BREEDING INDICATORS WERE 86% ACCURATE WHEN IDENTIFYING NON-CYCLING HEIFERS.

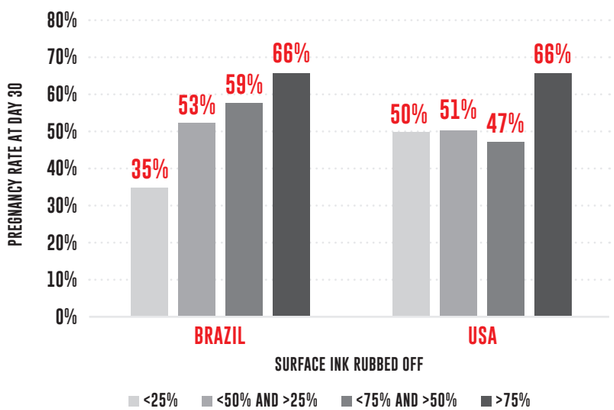
Breeding Management Use #3

Breed with Estrus Intensity

Low Fertility

High Fertility

Estrus and Pregnancy Rate



Adapted from Franco et al. (2018a) and Speckhart et al. (2018)

The ESTROTECT™ Breeding Indicator with Breeding Bullseye™ is more than a heat detector–

it's a tool to gauge estrus intensity. And the university research proves it.

University research shows higher estrus intensity correlates to increased fertility. Estrus intensity is expressed by mounting activity which ESTROTECT™ Breeding Indicators measure. When estrus (and therefore mounting activity) intensifies, it results in higher conception rates and lower pregnancy loss.

ESTROTECT™ Breeding Indicators use a unique Breeding Bullseye™ to indicate estrus intensity and identify which cows are your best candidates to breed. Applying an ESTROTECT™ Breeding Indicator to monitor estrus can help exponentially increase the odds of successfully getting cows and heifers pregnant. The Breeding Bullseye™ technology was born from university research to help better display estrus intensity.

In multiple studies from the U.S. and Brazil, pregnancy establishment increased and pregnancy loss decreased when cows were bred as the Breeding Bullseye™ was rubbed away.[5]

If the Breeding Bullseye™ or equivalent area – 50% or more – is rubbed off, more valuable genetics (like sexed semen and embryo transfer) can be used at higher success. If less than 50% of the surface ink rubs off, use lower-cost genetics or hold off breeding until higher estrus intensity is reached.

www.ESTROTECT.com

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