

# Using a Synovex-H Treated Animal as a Heat Detection Aid

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Efficient and accurate detection of estrus are key factors in a successful AI program. Unfortunately, humans are “heat detection challenged” so doing an excellent job of detecting heat day in and day out is difficult to accomplish on many dairy farms.

Several heat detection aids are available. One we have not visited about recently is treating an animal with Synovex-H so it will become sexually active and will interact with animals in the herd who are in heat.

Heat detection is much easier when two or more animals are in heat. When the Synovex-H treated animal is in the herd there is always an animal with high estrogen available to interact with cows when they come into heat.

The Synovex-H treatment protocol given below is from an article written by Dr. Paul Fricke, Extension Specialist in Dairy Reproduction, University of Wisconsin-Madison.

## **Synovex-H Treatment Protocol**

*The following procedure constitutes extra-label use of Synovex-H. Please consult with a veterinarian before using Synovex-H as a method for androgenizing marker animals.*

Synovex-H is approved for use as a growth promotant to increase rate of weight gain and feed efficiency in feedlot heifers. Dairy and beef heifers for future reproductive replacements in the breeding herd should not be treated. Pellets should be implanted in the ear only; implantation at any other site may result in violation of Federal law. Each pellet contains 200 mg of testosterone propionate and 20 mg estradiol benzoate, both of which are endogenously produced steroid hormones. No slaughter withhold time is required for label use, however, milk from treated animals should not be sold for human consumption. Bulling, udder development, ventral edema, and elevated tailheads may occur in heifers treated with Synovex-H. Synovex-H is distributed by Fort Dodge Animal Health, Overland Park, KS 66210.

## **Selection of Marker Animals**

Lactating cows should not be treated with Synovex-H because milk from treated animals should not be sold for human consumption. Yearling freemartin heifers weighing 800 to 1000 pounds are commonly used as marker animals. Older, dry cows also have been used and are good marker animals because their pecking order within the herd is already established. However, older cows may be less desirable because they may not withstand the physical stress of constant walking and mounting activity compared with younger animals. Over-conditioned animals, animals with poor feet or legs, and those animals at the bottom of the herd pecking order should be avoided. (Editorial comment: Yearling steers have also been used.)

## **Treatment**

Generally, one implant per 100 pounds of body weight has been recommended as an effective dose, and implants are evenly divided between the two ears. Most animals respond

to treatment within several days to several weeks from the time of implantation. An intramuscular injection of 200 mg testosterone propionate at the time of implantation usually hastens the onset of the response but is not required for response. Treated animals are usually effective for about six months after implantation. Although animals can be retreated after their effectiveness begins to wane, most producers choose to treat a new animal. About 80% of treated freemartin heifers respond to treatment, and those animals that do not respond to treatment should probably be eliminated.