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Demonstrating Advancements in Biotechnology to Ranchers in Southern Utah: Pregnancy Diagnosis

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Determining pregnancy in a cattle herd is one of the most vital aspects of a productive herd. Usually pregnancy diagnosis occurs in the fall when other culling decisions are made. However, in many cases identifying pregnant heifers and cows within 28 days of breeding allows for timely culling and marketing (Green et al., 2005). Today, many different methods to identify pregnancy exist for cows and heifers. Finding the method that works for each individual operation can be a challenge for ranchers. One method commercially available is the pregnancy associated glycoproteins (PAG) test.

The PAG pregnancy test is relatively accurate and inexpensive. The materials needed to perform the PAG blood pregnancy test are blood collection tubes (Figure 2) and sterile needles. For this test, a blood sample is obtained by sticking the needle at a 90 degree angle to the tail into the middle coccygeal vein underneath the tail, a procedure commonly known as tail pricking (Figure 1). Blood is then collected in a tube (Figures 3 & 4). The blood samples were taken 25-28 days post breeding and sent to the Utah Veterinary Diagnostics Lab for testing. The results are 99.9% accurate (Table 1) (Lucy and Poock, 2012).

Table 1. Pregnancy Results.

Ranch	# of Cows	% Pregnant	% Open
Number 1	235	69%	31%
Number 2	10	70%	30%

Figure 1. Insertint the sterile needle into the middle coccygeal vein which is located under the tail.

Figure 2. Blood collection tubes with corresponding identifying number.

Figure 3. Drawing blood.

Figure 4. Vacuum suction fills the collection tube.

No endorsement of products mentioned is intended nor is criticism implied of products not mentioned.

References

Lucy, M., and Poock, S. (2012). Pregnancy Determination by Palpation and Beyond. Applied Reproductive Strategies in Beef Cattle, Proceedings. Sioux Falls, South Dakota.

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