TVMDL Texas A&M Veterinary Medical Diagnostic Laboratory

Test for Trich

The Texas A&M Veterinary Medical Diagnostic Laboratory (TVMDL) offers timely and accurate diagnostic tests for Tritrichomonas foetus, the parasite that causes bovine trichomoniasis, or "trich." Trich causes abortions and infertility, and unless properly identified with diagnostic testing, can cost the state's cattle producers millions.

TVMDL employs the most current technology available utilizing real-time polymerase chain reaction (PCR) testing. In order to provide the best service to clients, here are some important guidelines to keep in mind for shipping, incubating and pooling samples for these tests.

Shipping and incubating samples
As with all diagnostic tests, strict attention to detail in collecting and handling samples helps to ensure an accurate diagnosis:

- Clients who ship samples to TVMDL should make sure they use collection pouches that have not expired.
- Because the PCR test is based on molecular biology, strict attention to avoid cross contamination between samples should begin at collection. All samples should be collected in as clean a manner as possible. Avoid allowing blood and fecal matter into the collection pouch.
- Protecting the sample from extreme weather or exposure to sunlight while at chute side is important. You can minimize temperature extremes in shipment by adding a cold pack in hot weather. Protect your sample from direct contact with the cold pack.

For step-by-step instructions on how to collect a trichomoniasis sample and then package for shipment, visit tvmdl.tamu.edu/references/video.

TVMDL recognizes the need to provide producers and practitioners with turn-around times that are as short as possible, and our laboratories strive to meet this standard every day. Our ability to quickly and accurately produce results is linked to receiving a sample quickly and then starting the testing process. When testing for Tritrichomonas foetus by PCR, for example, samples are required to be incubated at 37^{o}C (98.6^{o}F) for 48 hours prior to testing.

Samples should arrive at TVMDL as soon as possible after collection, but less than 96 hours post collection, where they will be incubated for 48 hours before testing. Any incubation by the submitting veterinarian should be recorded on the Trichomonas test record.

POOLING SAMPLES TO REDUCE COSTS
Samples must be collected and shipped individually to the laboratory; TVMDL will pool samples at the lab for $1 per pouch if pooled testing is requested. For official TAHC testing, up to 5 samples may be pooled, and pooling must be completed at the TVMDL. Five samples will be tested for the price of one with pooling. (Pricing example: 5 samples submitted and pooling requested would be charged $25 testing fee + $5 pooling for a total of $30 plus accession fee.)

If a pooled sample results in a positive test, TVMDL will identify the positive animal(s) by testing the individual samples in the pool at the regular price of $25 per test. Without the individual tests, all bulls in a positive pool are required by the State to go to slaughter.

HISTORY OF TRICHOMONIASIS IN TEXAS

In 2008, the Texas beef cattle industry responded to the economic threat posed by bovine trichomoniasis. The industry asked the Texas Animal Health Commission (TAHC) to consider launching a trichomoniasis control program. In response, TAHC organized the trichomoniasis working group, which includes representatives from livestock commodity groups, the Texas A&M AgriLife Extension Service, the Texas A&M University College of Veterinary Medicine and Biomedical Sciences, the Texas Veterinary Medical Association and TVMDL.

Although, the program emphasizes PCR testing as the preferred methodology, culture of the organism is another option. Selected by the State and TAHC as the primary testing facilities, TVMDL's full-service laboratories offer both testing options.