FECAL EGG COUNT DETERMINATION

February 19, 2010

The research lab of Dr. Ray M. Kaplan offers laboratory services to veterinary practices as well as farmers and producers (institutions and researchers should contact the lab for the research service and price list) to aid in the management of livestock parasites. This document serves as a list of available services as well as the price and a brief description of each service provided by the Kaplan Lab. The instruction sheet and sample submission form is attached. Services can be arranged by contacting the lab at (706) 542-0742.

1. Fecal Egg Counts:

a. 2 or 4 gram modified McMaster method - $12.00 per sample

b. High sensitivity McMaster (8 epg sensitivity) - $15.00 per sample

c. Wisconsin or Stoll method - $20.00 per sample

2. Coproculture and Larval Identification (fecal culture for -$100.00 per culture speciation of parasites present) -$75.00 each when multiple samples submitted.

3. DrenchRite Larval Development Assay* -$450.00 per assay

a. Processing fee for un-testable sample -$50.00

4. PCV & TS (hematocrit and total protein) -$15.00 per sample

5. Blood smear examination (M. haemolamae) -$20.00 per slide

6. Fecal Sedimentation (test for liver fluke) -$20.00 per sample

7. Lectin Staining (quantifying relative percent of -$40.00 per sample H. contortus in a given sample)

*** Performance of this test requires pre-arrangement with lab prior to collection and submission of sample.**

Ray M. Kaplan, DVM, PhD, DipEVPC

Professor of Parasitology

PLEASE READ THE COLLECTION/ SUBMISSION PROTOCOL BEFORE

COLLECTION TO ENSURE PROPER SAMPLE SUBMISSION.

PLEASE CONTACT THE LABORATORY TO ENSURE LAB PERSONNEL

ARE AWARE SAMPLES ARE BEING SUBMITTED. (706) 542-0742

Sue Howell or Bob Storey, Dept. of Infectious Disease, College of Veterinary Medicine

501 D.W. Brooks Dr., University of Georgia, Athens, GA 30602

DIRECTIONS FOR FECAL SAMPLE SUBMISSION FOR FECAL EGG COUNT (FEC), COPROCULTURES AND LECTIN STAINING:

It is best to collect samples directly from the rectum, however, feces can be collected off the ground if the animals are first put into a shed with a clean floor (free of bedding, grass and dirt). Feces are easily collected from the rectum of mature animals using a latex glove with a little OB lubricant or KY jelly. The size of the sample that is needed to perform the test depends upon the tests requested per animal (several pellets (FEC) to a golf ball or lemon size clump for coproculture or lectin stain). We can always dispose of extra feces – better to include too much than too little.

On the day of collection, it is critical that feces be kept cool to prevent hatching of eggs, but care must be taken not to get the samples too cold because this will inhibit hatching. At the time of collection, feces should be placed in a cooler containing ice packs to keep the sample cool and can be placed in the refrigerator overnight. However, if requesting the

coproculture, feces should not be kept refrigerated more than 48 hours as prolonged chilling will inhibit hatching of eggs making it impossible to perform the coproculture. We have also found that samples in direct contact with ice packs for 24 hours often do not hatch well. Therefore, if kept cool with ice packs, place something like newspaper, cardboard, etc, over the ice pack to prevent the samples from touching the ice packs. Because of the problem with cold-inhibition, fecal collections should be shipped the same or the next day. If feces are to be shipped to the lab, it is important that air be excluded from the feces as much as possible to prevent the development of nematode eggs prior to their isolation and testing (see below).

SAMPLE PREPARATION (for shipping):
We currently recommend two different methods for packaging samples for fecal egg counts, coprocultures and lectin staining (see below). Samples can be sent by priority mail, so long as they arrive in our lab within 3 days of collection. Samples should not be exposed to extreme temperatures (i.e. do not freeze or leave in the sun). Refrigeration is not needed and is not desirable after samples are processed to exclude air. If the samples will be hand-delivered to the lab within 48 hours, then they can be kept cool and do not need "air-exclusion processing".

1. Utilize the "Reynolds Handi-Vac" system which utilizes a small handheld vacuum pump and special zip lock type bags for vacuum sealing. The Reynolds Handi-Vac kit is available at most grocery stores and at Walmart for around $10.00. The sample is placed in the Reynolds Handi-Vac bag and sealed. The Handi-Vac pump is used to evacuate all of the air out of the bag, providing an anaerobic environment that will delay the hatching of the nematode eggs until they arrive at our lab. Place a piece of tape over the vacuum seal to keep the bag air tight. Label the bag with the species (sheep, goat, llama, etc), farm name, and date of collection.

2. Samples may also be placed in individual baggies. Compress the pellets together and exclude the air as much as possible before sealing the ziplock on the baggie. Label the bag with the species (sheep, goat, llama, etc), farm name, and date of collection. Ship by overnight or priority express*.

*** If using the US Postal Service for the overnight delivery, be sure to check ahead of time to make sure they deliver to Athens, GA. With FedEx or UPS there should not be any problems.**

INFORMATION TO BE INCLUDED WITH SAMPLE: (Submission form attached).

1. Owner name and contact information (including email and fax if available)
2. Name and contact information of veterinarian
3. Species and breed of animals
4. Number of animals feces were collected from, and manner of collection (from rectum or ground)
5. Date of last deworming and drug used

A check must be submitted with the sample. Samples received without payment may be discarded unless prior arrangements have been made. (This policy was required because we have had instances where payment was never received for the services provided despite repeated attempts to collect).

FOR MORE INFORMATION CONTACT:

Ms. Sue Howell or Mr. Bob Storey (in lab of Ray M. Kaplan, DVM, PhD)
Department of Infectious Diseases
College of Veterinary Medicine
University of Georgia
Athens, GA 30602
voice: (706) 542-0742
fax: (706) 542-0059

e-mail: jscb@uga.edu or bstorey@uga.edu

Please include Sue Howell or Bob Storey on the address when shipping the sample.

Kaplan Lab Clinical Submission Form

Client Name:

Farm Name (if applicable):

Client Address:

City, State, Zip:

Home Phone Number:

Cell / Other Number:

Fax Number (if applicable):

E-mail Address:

Name of Veterinarian / Clinic:

Address:
City, State, Zip:

Phone Number:

Cell / Other Number:

Fax Number (if applicable):

E-mail Address:

TESTS REQUESTED:

NUMBER of SAMPLES:

DATE of COLLECTION:

Animal Species / Breed Submitted:
Last Deworming Date and Dewormer Used:

Manner Samples were Collected (from Ground or Rectum):