

Fecal Centrifugation & Pet Parasite Ova

What you should accomplish during Lab.

1. After an introduction, students, working in pairs, will prepare and examine a **Fecal Centrifugation**
2. Be able to Identify parasite ova / larvae commonly found in dog & cat feces.

Fecal Centrifugation Technique

1. Label centrifuge tube at top of tube
2. Measure 10-12 mls of float solution in tube and pour into clean beaker
3. Add a 1-2 grams of feces to the beaker
4. Mix thoroughly. Pour mixture through a strainer into a 2nd clean beaker.
5. Next pour the fluid into a 15 ml centrifuge tube.
6. Fill tube to within 0.5 centimeters of top
7. Carefully place tube in centrifuge and balance centrifuge.
8. Centrifuge at 1,200 - 1,300 rpm (approx. 280 X g) for 5 minutes.
9. Allow centrifuge to stop on its own.
10. Remove tube, place in rack
11. Fill tube with flotation solution until a slight meniscus forms
12. Carefully place cover slip on the tube
13. Allow to stand for 10 minutes.
14. Carefully **lift** the cover slip from the tube and immediately place it on a microscope slide.
15. Focus on the slide with 4X, then examine the slide with 10X. (Scan for larvae, oocysts, & ova)

Exercises

1. Fecal Centrifugation.

- a) Perform a fecal centrifugation on the provided dog feces.
 - i. Make a list of Parasite ova found.

Results

- 1. List the parasite ova / oocysts that you found.

To Study

1. Observe specimens of parasite diagnostic stages presented on the overhead monitors.
 - Utilize this lab and the Parasitology Website to learn these diagnostic stages as one will be responsible for identifying these on the Final Exam.

Canine

Oocysts: *Cystoisospora*

Larva: *Strongyloides*

Ova: *Trichuris*, *Eucoleus (Capillaria)*, Hookworm, *Toxocara*, *Paragonimus*, *Taenia*, *Dipylidium*, *Spirometra*

Feline

Oocysts: *Cystoisospora*

Larva: *Aelurostrongylus*

Ova: Hookworm, *Toxocara*, *Paragonimus*, *Taenia*, *Dipylidium*, *Spirometra*

The Links for the Parasitology Website Diagnostic Keys are:

https://parasitology.cvm.ncsu.edu/vet900/m_keys.html

https://parasitology.cvm.ncsu.edu/vet900/w_keys.html

<https://parasitology.cvm.ncsu.edu/vet900/quiz.html>

Even though there are other parasites on the keys: **YOU ARE ONLY RESPONSIBLE FOR THE DIAGNOSTIC STAGES LISTED ABOVE.**

On the exam you will be given the source of the specimen.

Example: "Dog Feces"