

VMP 991-015

Parasite Control in Sustainable/Organic Agriculture

Double Centrifugation

Use:

Utilized to diagnose intestinal Helminth ova and Protozoan cysts in feces in the cattle industry.

Procedure:

1. Weigh & record weight of 1-3 grams of feces in a clean labeled beaker
2. Label a 15 ml centrifuge tube near top of tube.
3. Measure 12-14 mls of water in tube and add to feces.
4. Homogenize feces in water.
5. Pour mixture through a strainer into a 2nd clean beaker.
6. Next pour the fluid into the labeled 15 ml centrifuge tube.
7. Carefully place tube in centrifuge
8. Balance centrifuge by adding water as needed to each tube.
9. Centrifuge at 1,200 - 1,300 rpm (approx. 280 X g) for 5 minutes.
10. Allow centrifuge to stop on its own.
11. Decant water from tubes & place in rack.
12. Add 10-12 mls of float solution to each tube.
13. Use an applicator stick to thoroughly re-suspend sediment.
14. Carefully place tube in centrifuge and balance centrifuge.
15. Fill tubes with flotation solution until a slight meniscus forms
16. Carefully place cover slips on the tubes.
17. Gently press down on the cover slips to seal the tubes.
18. Centrifuge at 1,200 - 1,300 rpm (approx. 280 X g) for 5 minutes.
19. Allow centrifuge to stop on its own.
20. Check for and correct large bubbles under cover slips
21. Allow to stand for 10 minutes.
22. Carefully **lift** the cover slip from the tube and immediately place it on a labeled microscope slide.
23. Focus on the slide with 4X, then examine the slide with 10X.
24. Scan and count strongyle-type ova; divide by recorded fecal weight to obtain eggs-per-gram.
25. Note any other ova, larvae or oocysts.