APPROVED

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SEDIMENTATION TECHNIQUE

The sedimentation technique is a qualitative method for detecting trematode eggs in faeces. The majority of trematode eggs are too large and heavy to float reliably in the flotation fluids normally used for nematode eggs. They do however sink rapidly to the bottom of a faecal/water suspension and this is the basis of the faecal sedimentation technique

Equipment List

- Two beakers or plastic containers
- Tea strainer or double layer of cheesecloth
- Measuring cylinder
- Fork, tongue blades or stirring rod
- Test tubes
- Test tube rack
- Methylene blue 1% solution or Malachite green 1% solution
- Microscope slides and coverslips
- Pipettes
- Balance or calibrated teaspoon
- Microscope

1. Weigh or measure approximately 3g of faeces into container 1.



2. Pour 40-50 ml of tap water into container 1.



3. Mix faeces and water thoroughly.



4. Filter the suspension through a tea strainer or double-layer of cheese cloth into container 2.

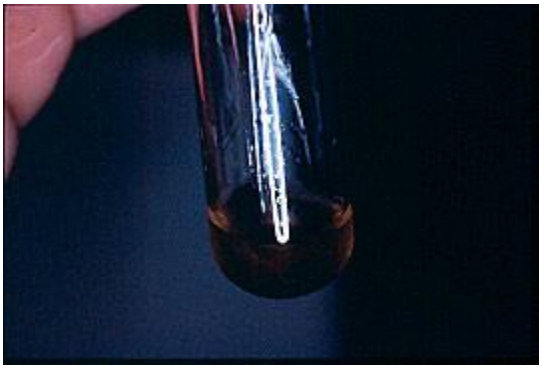


5. Pour the filtered material into a test tube.



Allow to sediment for 5 minutes.

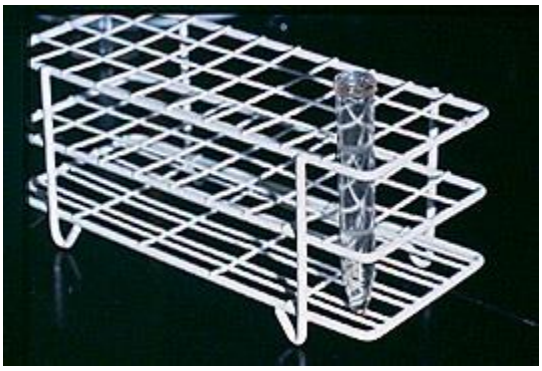
6. Remove the supernatant with a pipette very carefully.



7. Re-suspend the sediment in 5ml of water.



8. Allow to sediment for 5 minutes.



9. Discard the supernatant carefully.

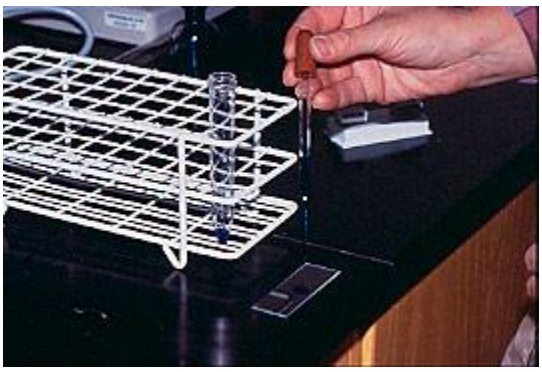
Stain the sediment by adding one drop of methylene blue or malachite green.

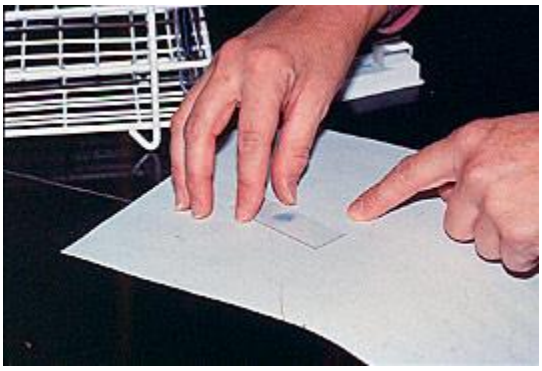
The dyes stain the faecal particles a deep blue or green leaving the trematode eggs unstained.



10. Transfer a small drop of the stained sediment to a microscope slide using a pipette.

Cover droplet with a coverslip.





Examine under a microscope at 10 x 10 magnification.

Identify eggs.

Repeat until all the sediment has been examined.

Alternatively, pour the whole amount into a Petri dish and examine methodically under a stereo-microscope.

Warning!!!

Nematode eggs may be present in the faecal sample but the recovery with this technique is very low. Nematode eggs should be examined using flotation techniques or the MacMaster technique.