Extracting Nematodes from Soil with a Baermann Funnel

- A clamped rubber tube is placed below the funnel
- A piece of window screen (or similar material) is placed in the mouth of the funnel
- The funnel is placed into a rack or holder



• Place a tissue-paper wrapped soil sample onto the screen material.



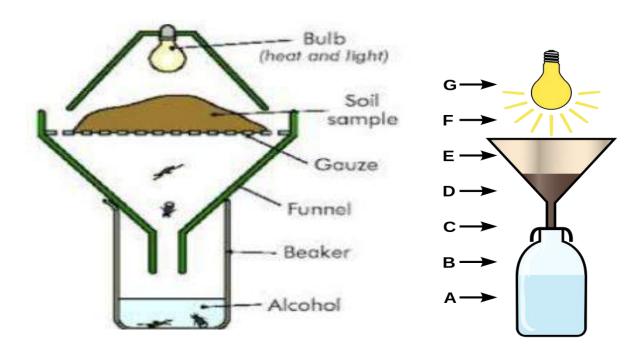
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- Add water to the funnel setup until the screen and soil sample are immersed.
- Wait overnight (or longer if desired).



- Gather the first couple of drops of water from the bottom of the tube by slowly releasing the clamp on the tubing.
- Examine under the microscope. Note that this technique will work only with actively mobile, living nematodes.

Extracting Microarthropods from Soil with Berlese funnel



Berlese funnel or Berlese trap, is an apparatus used to extract living organisms, particularly arthropods, from samples of soil. The Tullgren funnel works by creating a temperature gradient over the sample such that mobile organisms will move away from the higher temperatures and fall into a collecting vessel, where they perish and are preserved for examination. The illustration shows how it works: a funnel (E) contains the soil or litter (D), and a heat source (F) such as an electric lamp (G) heats the litter. **Animals** escaping the desiccation of the litter descend through a filter (C) into a preservative liquid (A) in a receptacle (B). This illustration is merely a schematic, since usually the soil sample will not be crumbled and poured into the funnel (this would inevitably lead to a high amount of soil particles in the preservation fluid requiring laborious work to sort out the soil organisms). In fact, the soil sample is placed on a mesh sieve that will allow the soil animals to pass but should retain most of the soil particles.