

## FINISH YOUR BERLESE FUNNEL AT HOME

1. Place a folded paper towel wet with rubbing alcohol in the bottom of your bottle. The alcohol will preserve any organisms that fall on it. Reassemble your funnel.

2. Position the desk lamp closely over the funnel so that the light warms the surface of the soil. To escape the heat & light, the organisms will crawl out of the soil at the bottom & fall into the container below. The wattage has to be high enough to heat the soil, but not so high that it will light the funnel on fire.

3. Once your sample is dried up from the heat of your lamp, take your funnel apart to carefully remove the paper towel and have a look at your samples. Count the organisms and try to separate them into like groups such as worms, grubs (any wormlike organism with legs), snails or slugs, insects (3 pairs of legs) or spiders, mites and ticks (4 pairs of legs). How many different micro-invertebrates or micro-arthropods can you see in each of your sample? Do they look very different? If you do not see any micr invertebrates after 5 days, discard your s the procedure with another sample. Every



very different? If you do not see any microinvertebrates after 5 days, discard your soil sample & start the procedure with another sample. Every soil is different & some samples work better than others. AREFOOT UNIVERSITY

Did you know?

A single shovel full of rich garden soil contains more species of organisms than can be found above ground in the entire Amazon rain forest! Soil organisms, an important part of the underground living system, can be divided into six groups: bacteria, fungi, protozoa, nematodes, arthropods and earthworms.

The Berlese (pronounced "bur LAY zee") funnel is an ingenious trap, based on avoidance behavior, used to remove organisms from the soil. The funnel can be made from a simple desk lamp & plastic bottle. Because soil organisms prefer a cold, dark & moist environment, like the conditions in soil, they try to escape when exposed to the heat, light and dryness created when a lamp shines directly on the soil.