

Directions for instant terrestrial micro-life, e.g. nematodes, rotifers, tardigrades, tree turbellarians, insects, insect eggs, tiny snails, algae, microfungi, and many other forms of life. Paul G. Davison, Feb. 4, 2010 (edited Aug. 31, 2015)

1. Select freshly collected moss with tweezers to obtain shoots free of adhering substratum high in obscuring particulate matter, i.e., as much as possible, remove bark, soil, etc. from the moss. Older portions of moss shoots with dead leaves are desired as this zone of decomposing moss leaves stems harbors much life. It also contains more particulate matter than the green portions. The trick is to balance the amount of moss added with the expected particulate matter once extracted. It is important to remove adhering pieces of substratum prior to extraction. Place moss in distilled water as shown.



2. Wait about 10 minutes as moss and creatures hydrate. You may leave sample for several hours before going to step 3.



3. Shake container with moss and water for about 10 seconds.



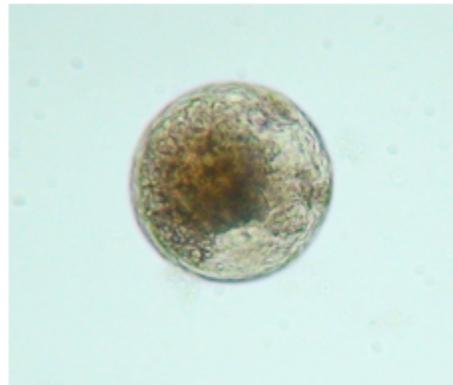
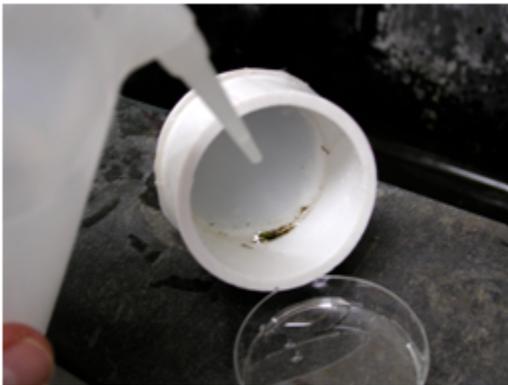
4. Place sieve with coarse mesh on top of the sieve with pre-wetted 35 micron mesh.



5. Pour moss with water into coarse mesh held atop the 35 micron mesh. Rinse moss with distilled water catching the rinse water on the 35 micron mesh.



6. Rinse 35 micron mesh into a small Petri dish and observe with dissecting microscope. Turbellarian cysts are roughly 150 – 200 microns in diameter. Many will excyst within 15-30 minutes of initial hydration. Additional cysts and eggs from the same moss sample can be obtained by repeating steps 3-6.



Tree turbellarian cyst
(cyst wall is thin and transparent)

Many arthropods will float on top of the water once extracted. Aphids, thrips, and springtails are commonly found on the water surface from extractions of mosses taken from tree trunks.

Observation with a compound microscope is needed to detect hyphomycete conidia that are ubiquitous. While larger shelled amoebae and protozoans are readily seen with a quality dissecting microscope, discovery of smaller forms is best made with a compound microscope.