Soil Hyphal Extractions

Solutions:
Sodium hexametaphosphate (39.5 g in 1L DI H₂O)
PVLG
Acid fuchsin stain (14:1:1, lactic acid:glycerol:DI H₂O with 0.01 acid fuchsin stain)

Specialized Equipment:
Fritted glass (ordered from VWR, Catalog Number 26316-690)
Filters (ordered from fisher, Catalog Number GNWP 025 00 Millipore
No.:GNWP02500)

Procedure:
1. Weigh ~10 g soil into a weigh boat and record mass on the data sheet. Try to avoid having roots in the sample.
2. Combine soil with 450 ml DI H₂O and 50 ml sodium hexametaphosphate solution in a 500 ml beaker.
3. Stir vigorously on a stir plate for 5 minutes.
4. Transfer 200 ml of the slurry to a 200 ml beaker and stir for 2 minutes.
5. Pipette 5 ml of the solution from the center of the vortex and vacuum through fritted glass with a 0.2 um filter.
6. Add enough drops of acid fuchsin stain solution to cover the filter.
7. Repeat steps 5-6 with another filter.
8. Place both filters on a glass slide and let filters dry for at least 1 hour.
9. After filters have dried, mount both filters on a glass slide with PVLG.
   a. Be sure to label glass slide with the sample information, date, and your initials.
10. Place slide in the drying oven at 60 °C overnight to harden the PVLG.