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Collecting Duckweed Samples For Microbial Community Profiling

PLOS One

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ATTACHMENTS

[S1_Protocol.pdf](#)

MATERIALS

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✂ Miracloth **Merck Millipore Catalog #475855**

✂ Nalgene™ Rapid-Flow™ Sterile Disposable Filter Units with CN Membrane, 1000mL
0.2µm pore **Thermo Fisher Catalog #127-0020**

✂ Sklar Sterile Disposable Scalpels **Contributed by users Catalog #06-3111**

OPEN ACCESS

DOI:

[dx.doi.org/10.17504/protocols.io.98zh9x6](https://doi.org/10.17504/protocols.io.98zh9x6)

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Processing Water Samples

- 1 Get 150 mL 0.2 micron filter unit. Lay sterilized miracloth on top of filter unit.
- 2 Collect 150-300 mL of water sample and pour through sterilized Miracloth into filter unit.
- 3 Filter water sample through 0.2 micron filter unit by turning vaccum on.
- 4 Cut 0.2 micron filter from unit using sterile scalpel.
- 5 Place into 5 mL centrifuge tube.
- 6 Flash freeze and store at -80C until processing.

Processing Rinse Solution And Duckweed Tissue Samples

- 7** Collect 1-3 grams of fresh weight Duckweed from environment sample. (See "Separating Duckweed From Other Solids" to obtain pure Duckweed tissue from environment.)
- 8** Place into 50 mL falcon tube.
- 9** Wash tissue 2x's with sterile water.
- 10** Rinse tissue 3-5x's with 30-40 mL rinse solution. Filter rinse solution through 0.2 micron filter each time.
- 11** Filter a total of 100-150 mL of rinse solution through 0.2 micron filter.
- 12** Cut filter using sterile scalpel, transfer to 5 mL centrifuge tube, flash freeze, and store for 16S rRNA amplicon sequencing.
- 13** Wash rinsed Duckweed tissue 2x's with sterile water.
- 14** Transfer tissue to 5 mL centrifuge tube.
- 15** Flash freeze and store for 16S rRNA amplicon sequencing.