



DNA Extraction from Water Samples V.1

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protocol .

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This protocol was followed to extract DNA from potable and tailored water samples used to water various turf grasses in a greenhouse study. We closely followed the extraction protocol provided in the Qiagen DNeasy PowerWater Kit with a few modifications to account for low product yield.

Andrew Dominguez, Yanyan Zhang, Nicole Pietrasiak 2022. DNA Extraction from Water Samples.

protocols.io

<https://protocols.io/view/dna-extraction-from-water-samples-b4smqwc6>

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Sample Prep

- 1 If water samples are stored at -80°C allow time for samples to defrost depending on the volume. Large volumes can take a few hours to defrost.

DNA Extraction

2h

2h

- 2 [DNeasy PowerWater](#)

DNA extraction was completed using [Kit Qiagen Catalog #14900-50-NF](#) with the following modifications:

- In step 1, the specific filters used were [Whatman ME 24/21 STL Membrane Filters white \(Mixed cellulose ester\) black grid Millipore Sigma Catalog #10408712](#)
- In step 21, $30\ \mu\text{L}$ of Solution EB was added to increase DNA concentration
- Following step 21 the wait time was $00:05:00$ before moving on to step 22
- Following step 23, DNA extracts were stored at -80°C

2.1 A demonstration for folding a filter and inserting it into the Bead Tube can be found [here](#).

