# Isolating Friendly Saltmarsh Mycorrhizal Fungal Spores of *Funneliformis geosporum*

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## Objective

To develop an efficient protocol for the isolation of saltmarsh mycorrhizal *Funneliformis geosporum* spores. This protocol allows for the symbiotic spores to be extracted from soil and serves as a purification technique for inoculation trials or spore counts.

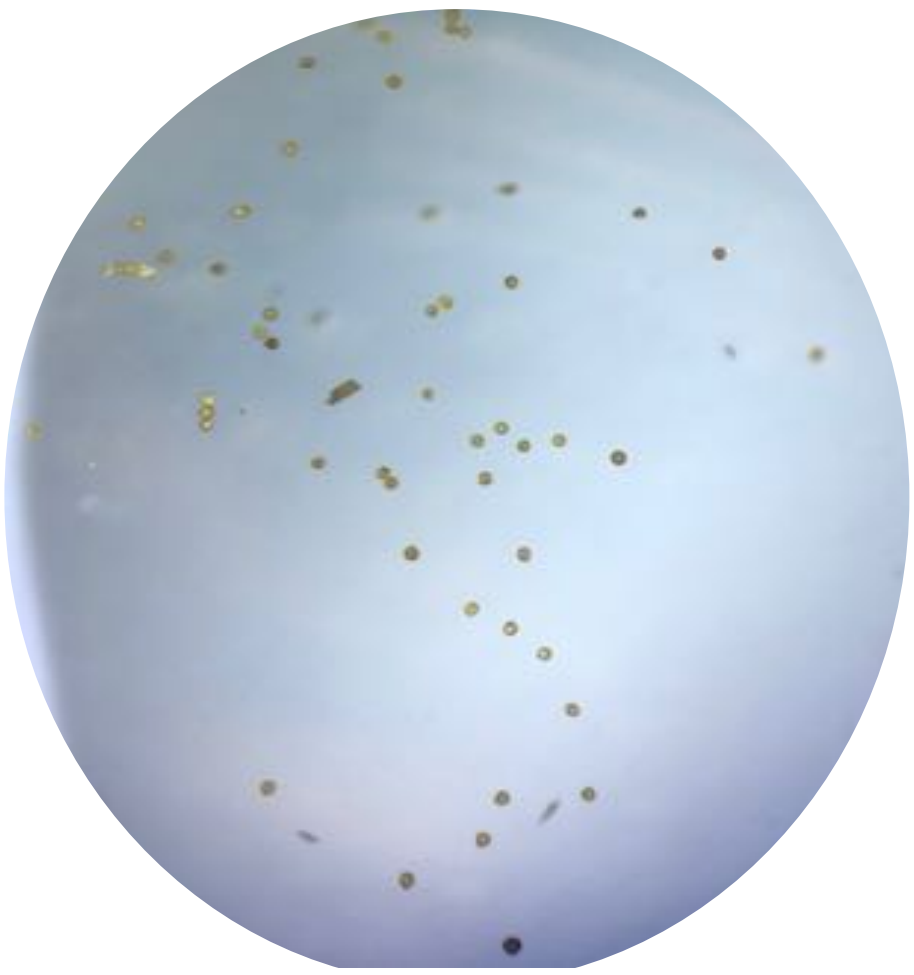

**Figure 2.** *Funneliformis geosporum* spores obtained using the spore isolation protocol.

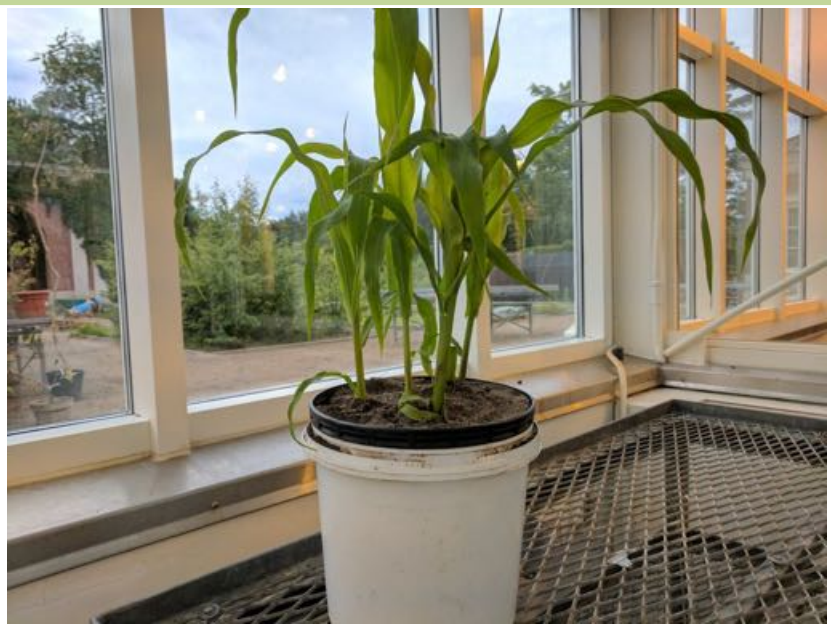

**Figure 1.** Corn plants grown in a trap pot, used to propagate *Funneliformis geosporum*.

## Methods

Arbuscular Mycorrhizal Fungus (AMF) from saltmarsh sediment was propagated using *Zea mays* as a host.

Sediment was homogenized, washed, and filtered through 500µm, 150µm and 45µm sieves.

Organic material from the smallest two sieves was centrifuged and re-filtered (45µm). Remaining material was transferred and centrifuged in a 0%/40% glucose gradient.

AMF Spores were collected from density gradient between the two solutions, then washed with distilled water. Spores were stored a maximum of 2 days prior to analysis.

## Future implications

This method will allow for the determination of spore density in saltmarsh sediment. Spore isolation will also allow for AMF to be inoculated into plants for saltmarsh restoration purposes.

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