

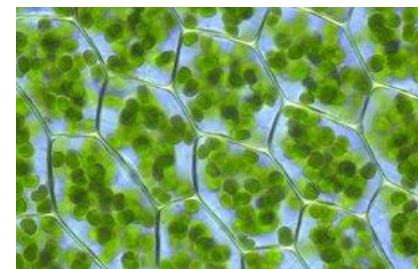
The use of multispecies swards to improve the soil microbiome

Natalie Oram, John Finn, Fiona Brennan

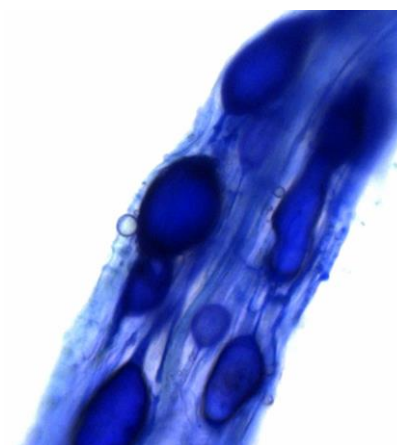


The soil microbiome

- Plants and microbes
 - Have evolved together over millions of years
 - Symbioses improve plant health, growth, and allow plants to better deal with stress
- Soil microbes drive nutrient and carbon cycling
- The functioning of the soil microbiome is central to sward functioning



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Managing the microbiome with multi-species swards

- A full Irish breakfast or dry toast?



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Less diversity
microbiome is
reduced sward functioning
Community in multi-species
swards has less plant-feeding nematodes
and more that can control pests. Less yield
losses to pests such as leatherjackets.

Can we drought-proof our swards?



Multi-species swards
could mitigate negative
drought effects

By including multiple
stress-coping
strategies



Which could increase
sward **resilience**

By fostering a diverse
soil microbiome



Take-home messages

- Plants are intimately connected to the soil microbiome – one can not thrive without the other.
- Multi-species swards foster a diverse soil microbiome that can better provide the functions that support sward growth and resilience.