

MYCELIUM POT MAKING

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Workshop offered at INDIGENOUS SCIENCE NIGHT
Fungus Among Us (Curated by Kori Czuy)
OCTOBER 18TH, 2024
At Spark Science Center



What is Mycelium?

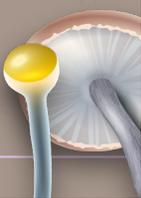
A mycelium is a network of fungal threads or hyphae. It is the main body of fungi. A single spore can develop into a mycelium. The fruiting bodies of fungi, such as mushrooms, can sprout from a mycelium.

Mycelia are crucial for soil health. They break down organic material, making its raw materials available again for use in the ecosystem.

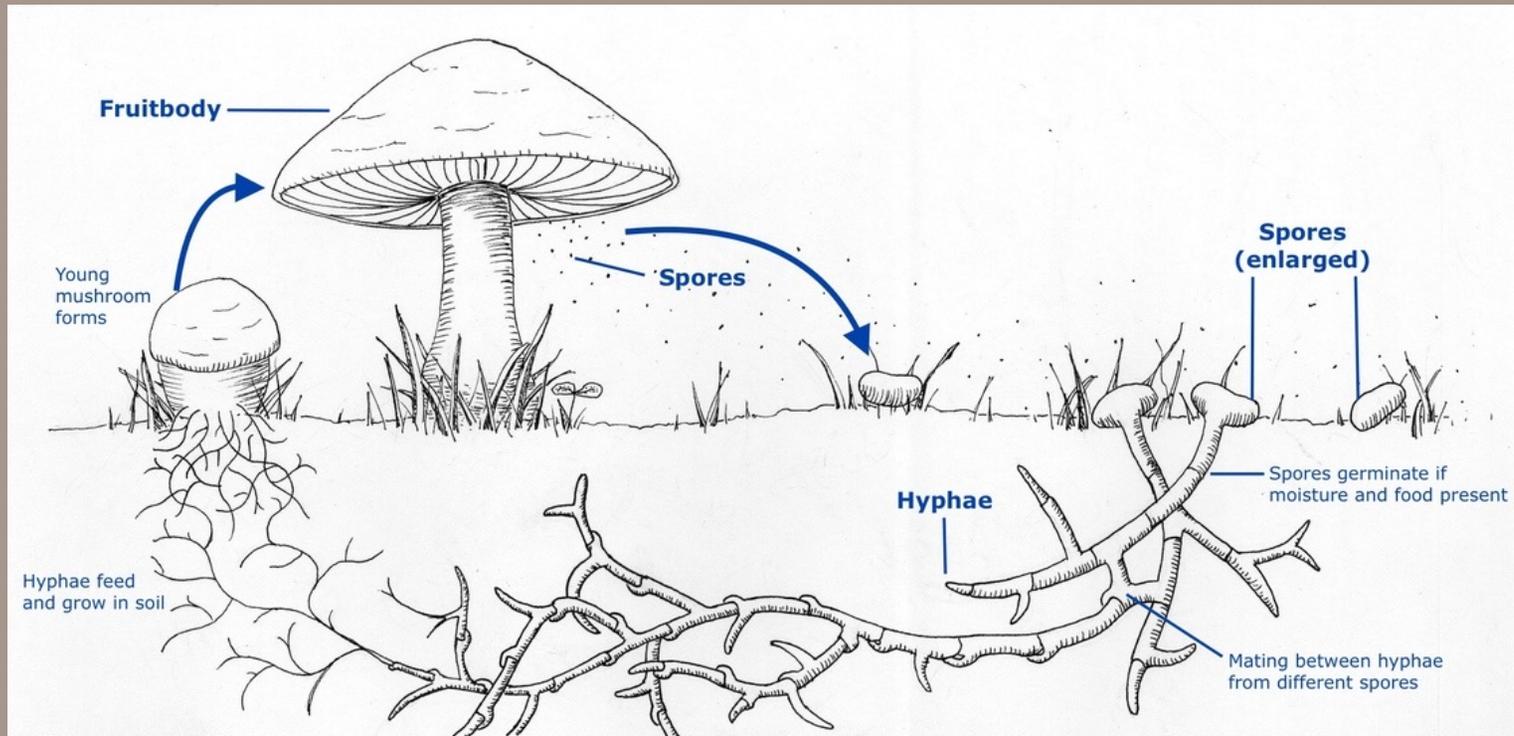
Plants extensively communicate through mycelia and often form symbiotic relations with it where mycelia gets sugars from plants in exchange for minerals



Oyster mushroom (*Pleurotus ostreatus*) mycelium growing in a petri dish on coffee grounds (Wikimedia commons)

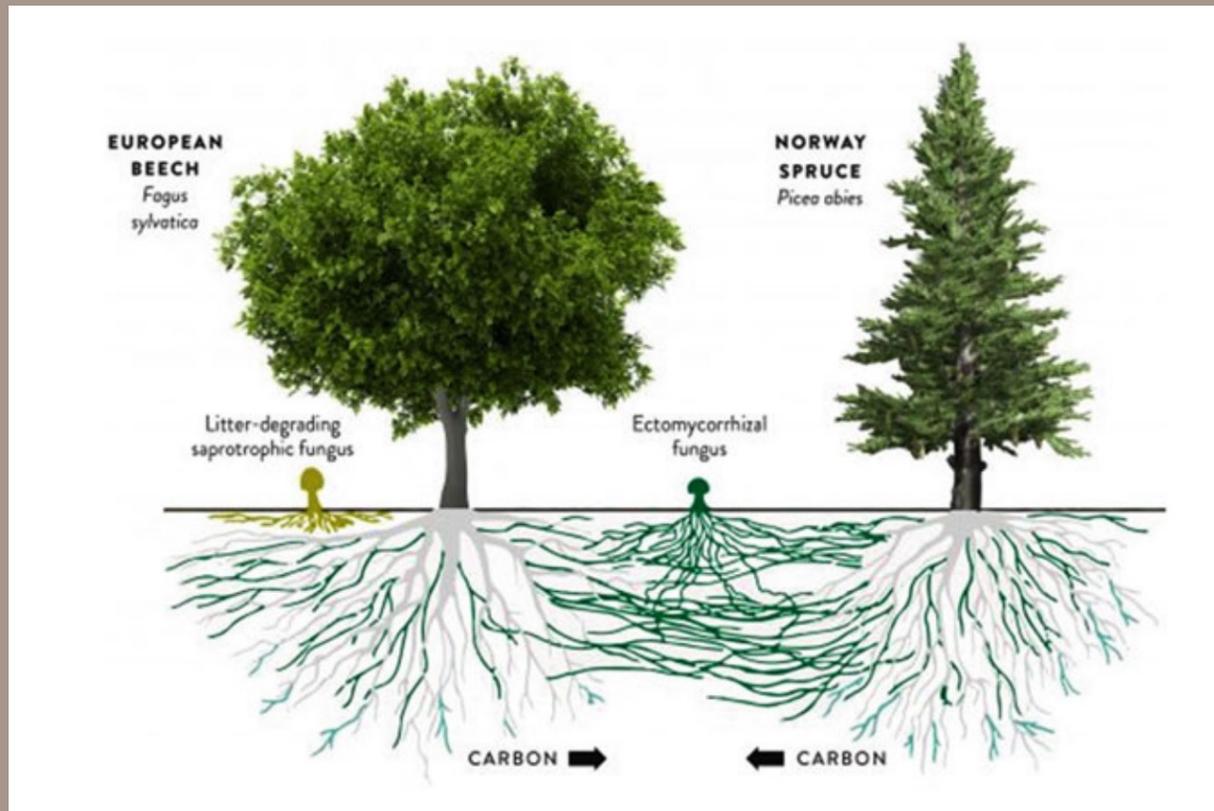


Mushroom Life Cycle



<https://www.sciencelearn.org.nz/images/3689-mushroom-life-cycle>

How Trees Talk to Each Other

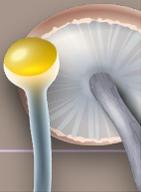


Carreon-Ortiz and Oscar (2023)

Mycelium based innovations and design



High Chitin Mushrooms



Growing your mycelium pot!

A timeline of the process



Sanitize container and mix hemp & mycelium mixture with some flour. Add it to the pot cast you want to create

Day 18-21



Day 26-30



Mycelium Pot is ready!

Day 0

Grow mycelium on organic substrate like hemp, sawdust to make grow medium.

We are starting here



Day 22-25

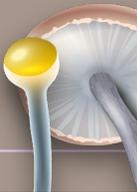
Poke holes in the cling wrap for some aeration and keep in a dark, warm (21-26°C) place for 4-5 days



Take out the planter when white. Place it in a container or plastic bag with slight aeration to grow more mycelium around the edges and sides

Day 30-34

After 4-5 days, heat it in the oven to dry for 4-6 hours at 200°C. Alternatively place it outside on a wire rack



Taking care of the pot

- DON'T overwater the pot.
- Keep some distance between the water tray and the pot so that the bottom remains dry.



Further resources

Carreon-Ortiz, Hector, Fevrier Valdez, and Oscar Castillo. "A New Continuous Mycorrhiza Optimization Nature-Inspired Algorithm." *Hybrid Intelligent Systems Based on Extensions of Fuzzy Logic, Neural Networks and Metaheuristics*. Cham: Springer Nature Switzerland, 2023. 147-164.

Sheldrake, Merlin. *Entangled life: How fungi make our worlds, change our minds & shape our futures*. Random House Trade Paperbacks, 2021.

Stamets, Paul. *Mycelium running: how mushrooms can help save the world*. Ten speed press, 2005.

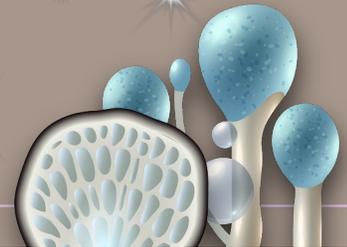
Simard, Suzanne. *Finding the mother tree: Uncovering the wisdom and intelligence of the forest*. Penguin UK, 2021.

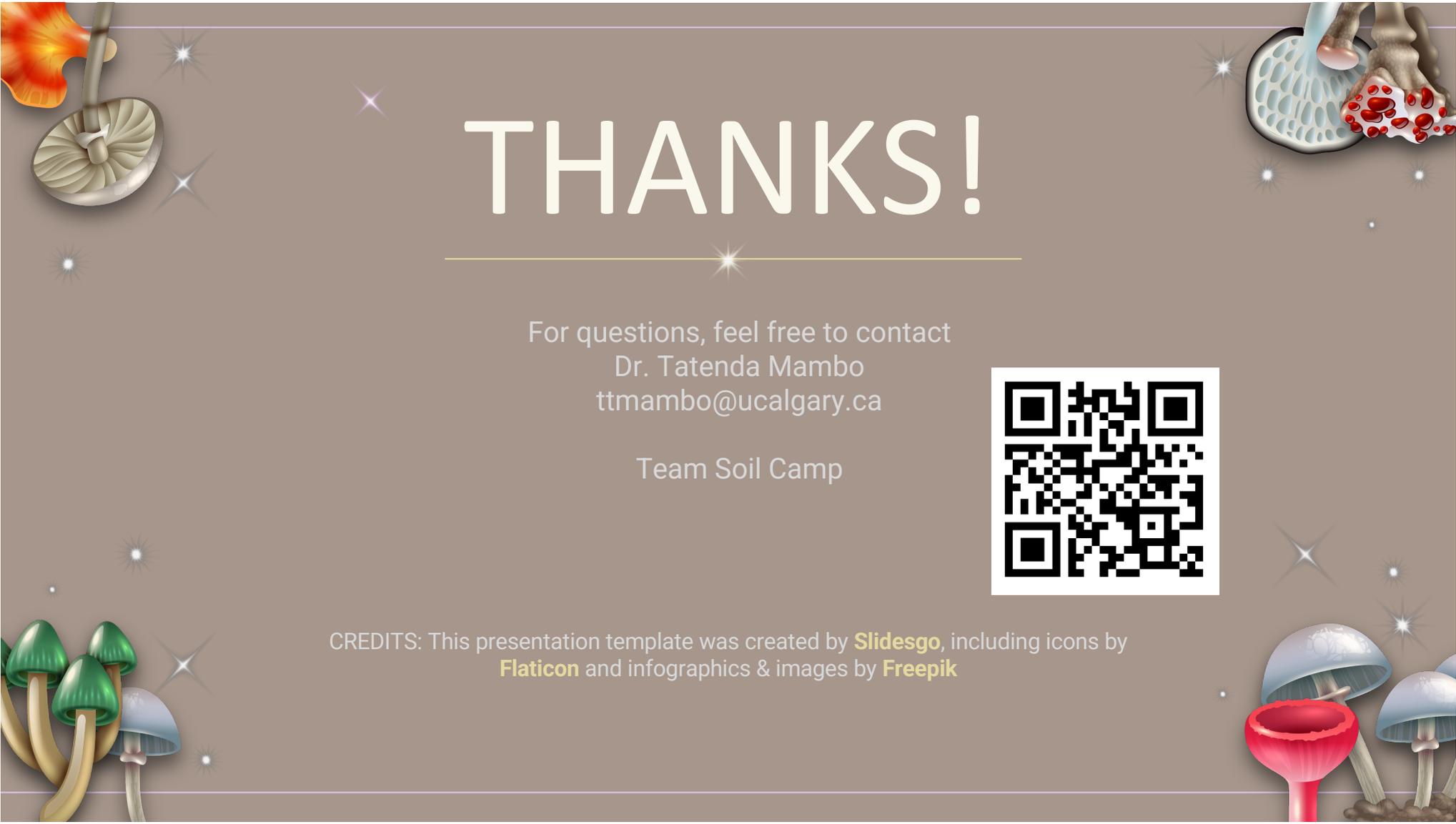
<https://www.mycohab.com/>

<https://uncomp.uwe.ac.uk/research/>

<https://www.sciencelearn.org.nz/resources/2664-fungal-life-cycles-spores-and-more>

<https://grow.bio/>



The slide features a brown background with decorative elements including mushrooms and soil. In the top left, there is a green mushroom with a red cap and a white mushroom. In the top right, there is a blue mushroom with a red cap and a white mushroom. In the bottom left, there are several green mushrooms with white stems. In the bottom right, there are several blue mushrooms with white stems. The word "THANKS!" is centered in large white letters, with a thin yellow line underneath it. The text "For questions, feel free to contact Dr. Tatenda Mambo ttmambo@ucalgary.ca" is centered below the line. The text "Team Soil Camp" is centered below the text. A QR code is located on the right side of the slide. The text "CREDITS: This presentation template was created by Slidesgo, including icons by Flaticon and infographics & images by Freepik" is located at the bottom of the slide.

THANKS!

For questions, feel free to contact
Dr. Tatenda Mambo
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Team Soil Camp



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