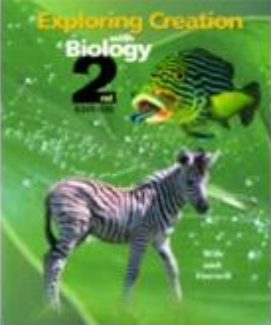





# M04 L1 General Discussion of Fungi

Thursday, March 05, 2009  
11:27 AM

About 20 min lecture

VoiceThread	<a href="http://voicethread.com/share/210161/">http://voicethread.com/share/210161/</a>
Cmap	<a href="http://cmapspublic2.ihmc.us/rid=1210771614201_1059278962_31593/Kingdom%20Fungi.cmap">http://cmapspublic2.ihmc.us/rid=1210771614201_1059278962_31593/Kingdom%20Fungi.cmap</a>

Slides	Notes
 <h2>Module 04: Kingdom Fungi</h2> <p>☞ Lecture 1: General Discussion of Fungi Lecture 2: Clasification in Kingdom Fungi Lab Day Interactive Practice</p>	<p>Just two lectures</p>
<h2>Start preparing for your lab now</h2>   	<p>Bread must stay moist. Mist bottle or bag.</p> <p>Faster and better outdoors but protect from animals.</p> <p>Caution for mold allergies. Someone else get a slide full and toss it</p>

## 👉 General Characteristics of Fungi

Fungi Reproduction

Symbiosis in Kingdom Fungi

Mushrooms, yeast, lichen - very different.

So start with similar

### Characteristics:

All are heterotrophs

Most are saprophytic, although a few are parasitic

Cell walls of chitin (tough and flexible)

They digest their food outside of their bodies

They reproduce using spores



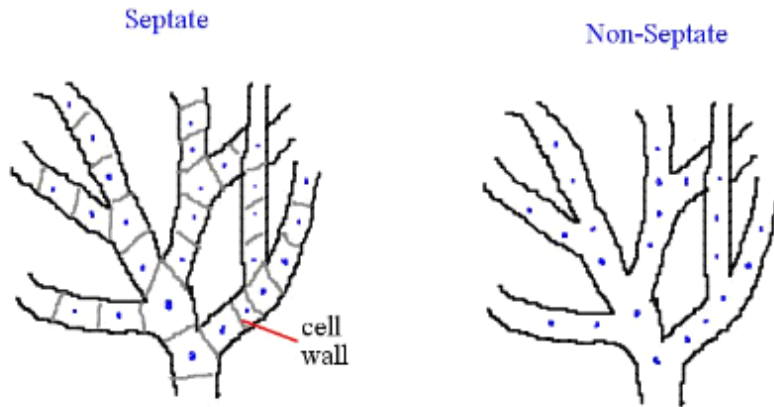
**mycelium** are different than plant roots

It actually IS the organism. The part you see above ground is merely reproductive.

It is made up of filaments called hypha (plural is hyphae).

# Hyphae

Structural Options



Hole in wall so cytoplasm will flow even in the septate one.

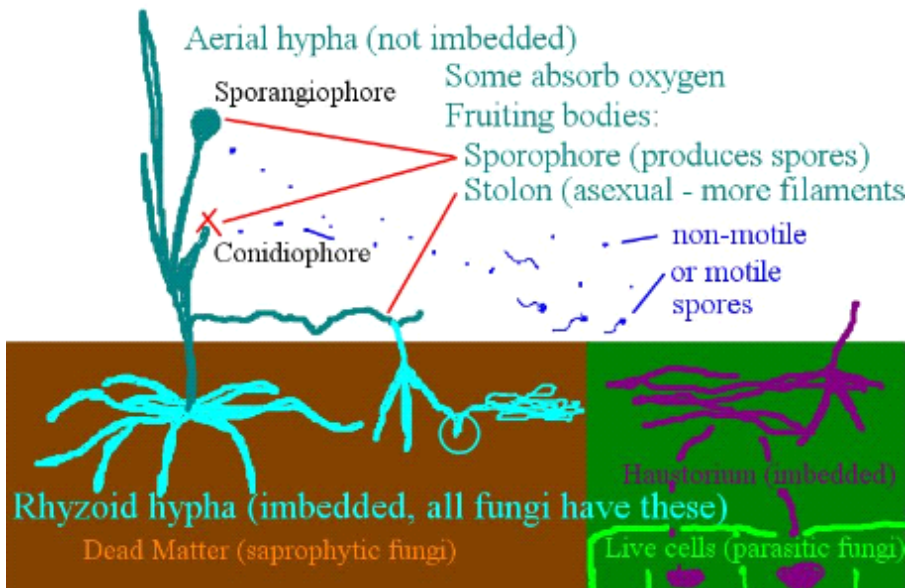
The cytoplasm is shared in a more obvious way in the non-septate.

## General Characteristics of Fungi

👉 Fungi Reproduction

Symbiosis in Kingdom Fungi

## Hyphae Specializations



Take your time here - lots of information!

The side is brown represents the saprophytic fungi.

The side in green is the parasitic type.

# General Characteristics of Fungi

## Fungi Reproduction

### 👉 Symbiosis in Kingdom Fungi

## Symbiosis: Lichens



### Fungus + algae

Fungus gets food from the algae. Algae gets support and protection from the fungus.

sporedium contain spores from both.

Fungus cannot live without the algae, so it sends out a spore of both - called sporidium.

## Symbiosis: Mycorrhizae

80% of all plants with a root system involved



Fruiting body



Increases the absorbing capacity of roots by 700%

Increases root's tolerance to ...

drought

high soil temperatures

high salinity

heavy metals

More efficient to support mycorrhizae than to produce the equivalent in roots

MushroomExpert.Com



Identifying North American Trees can be crucial for mushroom identification



### Studying Mushrooms Edibility

Guidelines for Study

Making Spores Prints  
Microscopic & Macroscopic  
Identifying Mushrooms  
Determining Color and Taste  
Physiological Latin Names  
Testing Chemical Reactions  
Preparing Spores Prints  
Using a Microscope  
Mushroom Taxonomy

 Identification Page

USA & Mushroom Professionals  
Global Professionals List  
Specialized Mushrooms

Using 2000 Mushrooms

Mushroom Toxicity  
Mushroom Tax for Activities

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9am: <http://www.virtualhomeschoolgroup.com/mod/quiz/view.php?id=10855>  
2:30 pm: <http://www.virtualhomeschoolgroup.com/mod/quiz/view.php?id=13861>  
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