

Lab #1 Bio 1B OUTLINE Algae, Plants, and Fungi

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- The following slides outline the organisms you may see in Lab #1

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Lab #1 Bio 1B Tree of Life

Prokaryotes (*Cyanobacteria*, *Anabaena*)

Eukaryotes

- **Early derived eukaryotes** (slime molds, water molds, diatoms, algae)
- **Land Plant Bryophytes** (liverworts & mosses)
- **Fungi** (Zygomycota, Ascomycota, Basidiomycota)

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Lab #1 Bio 1B Fungi

- ***Rhizopus stolonifer*** is bread mold in Zygomycota
- ***Penicillium*** in Ascomycota
- **Lichen** is Ascomycota fungus in symbiosis with green algae or cyanobacteria
- ***Agaricus bisporous*** is common edible mushroom in Basidiomycota

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Lab #1 Bio 1B Early Derived Eukaryotes

- **Slime mold:** *Physarum*
- **Water Mold:** *Saprolegnia*
- **Diatoms**
- **Brown algae:** *Fucus* (example of heteromorphic alternation of generations with dominant sporophyte and independent gametophyte)
- **Red Algae:** *Porphyra* (nori) and agar
- **Green Algae:** *Spirogyra*, *Volvox*, *Ulva* (*Ulva* is example of isomorphic alternation of generations)

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Lab #1 Bio 1B Land Plant Bryophytes

heteromorphic alternation of generations
with dominant gametophyte
and dependent sporophyte

- **Liverwort** (*Marchantia*)
- **Moss** (*Polytricum*)

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