

Basidiomycota

Invasion of Land

- **Borophytes**

Basidiomycota

- Decomposers- fungal groups discussed last lecture.
- Basidiomycota are those that you identify as mushrooms.
- Recognize mushrooms as fruiting bodies. The vast majority is under the soil as a form of mycelia and the basidiomycota is considered as the largest group that rests under the soil that you can't actually see.
- Basidiomycota has a septum associated with it and have structures known as dolipores. One of the structures found in the dikaryon state are the clamp connections and operate to basically maintain the $n + n$ state of the heteronuclei of the nuclei structure. Once you achieve diploidy, meiosis is involved in forming a basidiospore that is then released.
- Mushrooms include a range of different types of things that include a range of different things. Mushrooms that can get you high [hallucinations], kill you or are good for you. Some toxins present in the mushroom kill you slowly and there is no cure for it.
- Mushrooms with red caps - Amanita will kill you. When they're young they come up as buttons. This is due to the peculiarity going on in the dikaryon state that is not seen.
- Basidiomycota as a group will get you high or will kill you.
- The gasteromycetes (gastric-stomach) includes puffballs. Fungi generally like to disperse spores - use projectile stuff to spit them out. However in puff balls - the mycelial structure is below the ball. The puff ball is in a shape of a ball usually the size of a golf ball. Want to spread your basidiospore as far as possible- have spores inside a ball. Think about the hallucination ones*. It emits pheromones and chemicals that float into the air- you inhale the chemicals and then it has a hallucinatory effect on you. You end up jumping on the puff ball and then it disperses its spores. -Example of spore dispersal in basidiomycota.
- Have action potentials occurring inside a basidiomycota

[pg 53- lab manual] Life cycle of Puccinia- virulent strains of rust

- Has a virulent strain- can wipe out a large % of a food product- like wheat or