Fungal Biology

- Ubiquitous mycelia
- Generally decomposers
- Numerous parasites
Fungal Biology

- Unique reproductive structures
- Sexual and/or Asexual
Fungicides

- 1880s: first commercial fungicides
- Generally decreasing toxicity and dose.
- Resistance since 1970s.
- Currently, resistance in 55% of ag. diseases.
Resistance

Initial population

Sensitive individuals disappear

Resistant individuals increasingly appear

Selection

New, selected population

Sensitive individual

Intermediate individual

Fungicide application

Regeneration
Fungal diseases are a growing threat to plants, animals, and humans.
Climate change, land-use change and global trade intensify risks.
Emerging Diseases