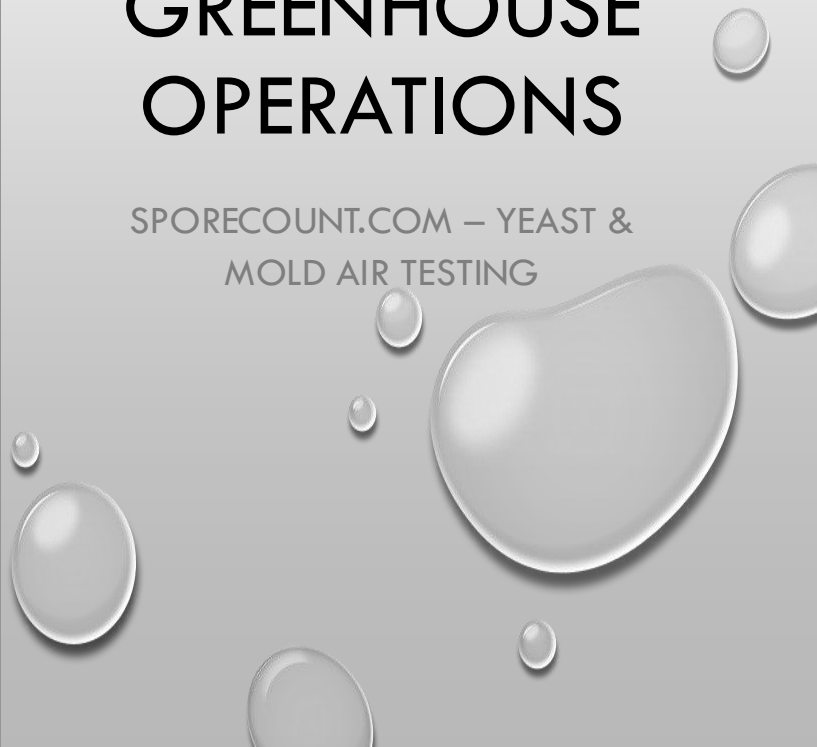




MOLD & FUNGUS IN GREENHOUSE OPERATIONS

SPORECOUNT.COM – YEAST &
MOLD AIR TESTING

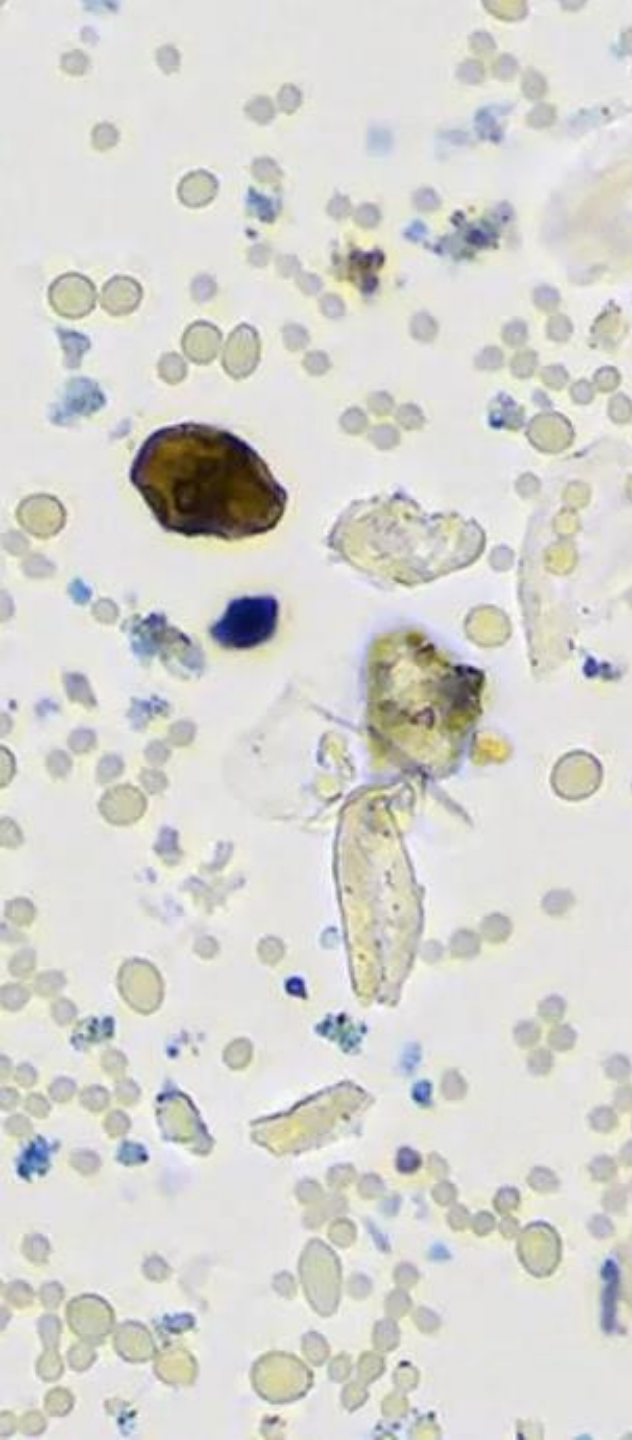


INTRODUCTION

Greenhouses create warm, humid conditions that promote fungal growth.

Mold outbreaks reduce plant health, yield, and quality.

Understanding the key fungi helps with prevention and rapid response.



ASPERGILLUS & PENICILLIUM

- ROUND SPORES, COLORLESS TO YELLOW/BLEU/BLACK.
- CAUSE POST-HARVEST ROT AND ALLERGENIC EFFECTS.
- THRIVE ON DECAYING PLANT MATTER.

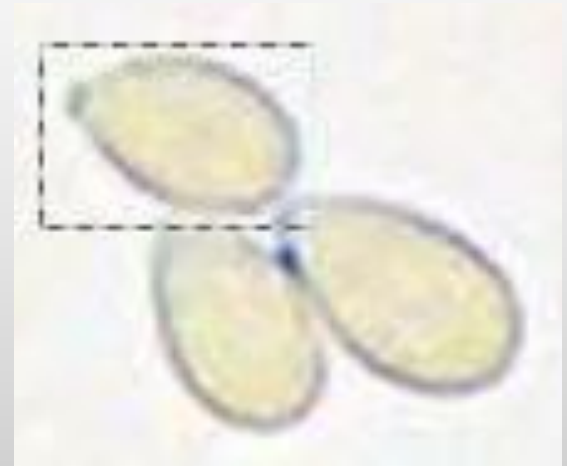
CLADOSPORIUM

- YELLOW TO OLIVE SPORES, FOUND IN CLUMPS OR CHAINS.
- LEADS TO LEAF SPOTS, REDUCED PHOTOSYNTHESIS.
- VERY COMMON AIRBORNE MOLD, PERSISTENT IN GREENHOUSES.



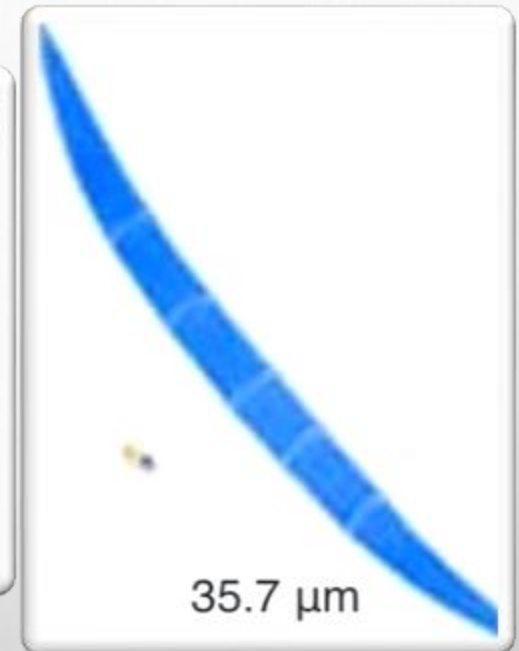
BOTRYTIS CINEREA (GRAY MOLD)

- TEARDROP-SHAPED SPORES, GRAY FUZZY GROWTH.
- ATTACKS FLOWERS, FRUITS, AND FOLIAGE.
- MAJOR GREENHOUSE PATHOGEN, THRIVES IN HIGH HUMIDITY.



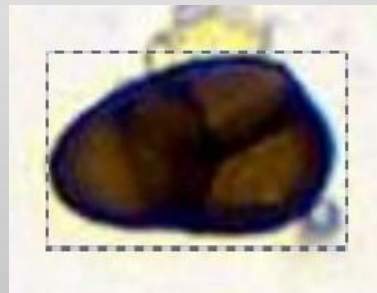
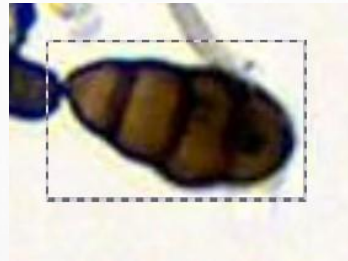
FUSARIUM

- LONG SEGMENTED SPORES WITH 'FOOT CELL.'
- CAUSES ROOT AND STEM ROT, WILTING.
- SOILBORNE AND HARD TO ERADICATE.



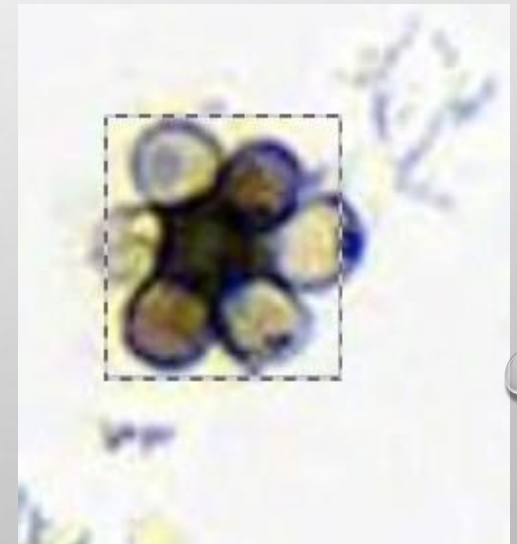
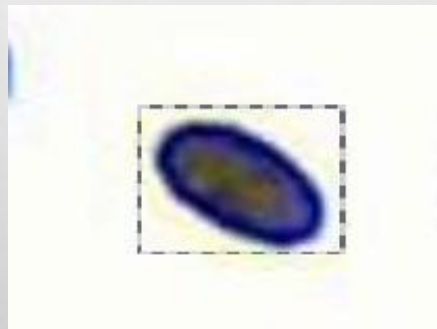
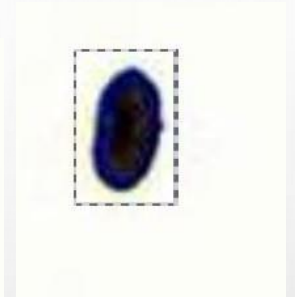
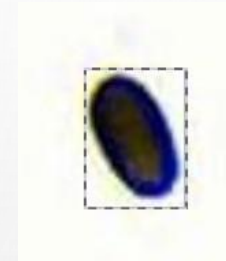
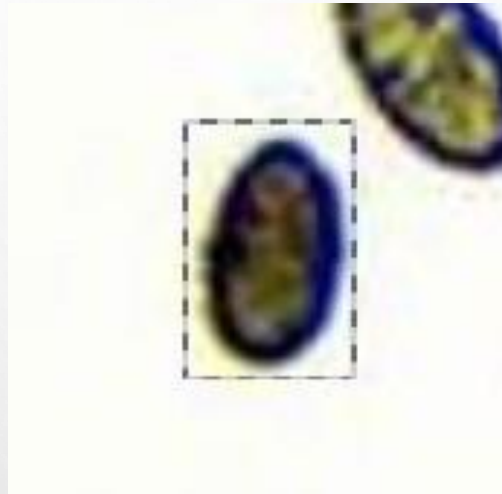
ALTERNARIA & ULOCLADIUM

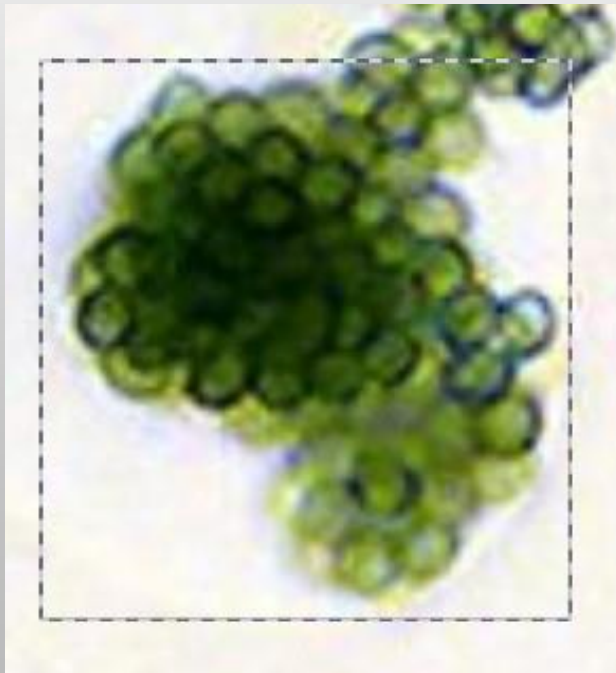
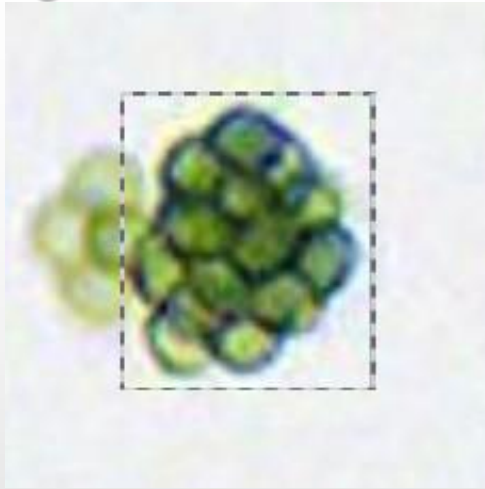
- LARGE, CLUB-SHAPED, BEAKED SPORES.
- CAUSE LEAF BLIGHT AND BLACK SPOTS ON FOLIAGE.
- ALTERNARIA IS AGGRESSIVE; ULOCLADIUM OFTEN CO-OCCURS.



STACHYBOTRYS (BLACK MOLD)

- DARK CYLINDRICAL SPORES, OFTEN IN CLUMPS.
- GROWS ON PLANT DEBRIS AND MOIST SURFACES.
- INDICATOR OF POOR SANITATION AND EXCESS WATER.





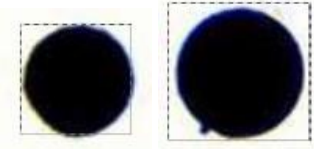
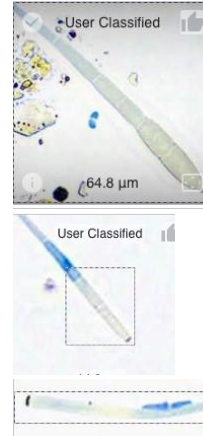
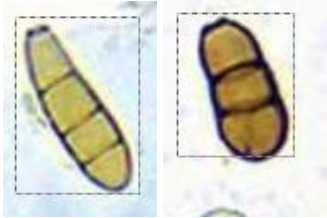
TRICHODERMA

- SMALL, GREEN CLUMPED SPORES.
- USED AS A BIOCONTROL AGENT BUT CAN OUTCOMPETE SEEDLINGS.

POWDERY MILDEWS (OIDIUM, PERONOSPORA)

- BARREL-SHAPED OR OVOID SPORES, WHITE POWDERY GROWTH ON LEAVES.
- COMMON FOLIAR DISEASE IN CUCUMBERS, TOMATOES, ORNAMENTALS.
- EASY TO SPOT BUT DIFFICULT TO FULLY ELIMINATE.





OTHER RELEVANT FUNGI

- NIGROSPORA – LEAF SPOT DISEASES.
- CURVULARIA – DAMAGES TURF & ORNAMENTALS.
- PITHOMYCES – LINKED TO LEAF SPOTS.

SUMMARY



Greenhouses face constant fungal pressure.



Key threats: Botrytis, Fusarium, Cladosporium, Alternaria, Powdery Mildews.



Prevention is more effective than cure.



Sporecount.com helps with early detection and targeted action.

Other Trained Classes

- Algae
- Alternaria-Like
- Animal Skin
- Arthrinium
- Ascomycete
- Aspergillus
- Aspergillus niger-like
- Aspergillus/Penicillium
- Basidiospore
- Bipolaris
- Bipolaris Type 1
- Bipolaris Type 2
- Bispora
- Botrytis
- Brachysporium-Like
- Carbon
- Cercospora
- Chaetoconis
- Chaetomium
- Chaetomium Long
- Cladosporium
- Coelomycete
- Curvularia
- Epicoccum
- Exosporium
- Fibers
- Fungal
- Fusarium
- Fusicladium
- Gliomastix
- Hyphal
- Insect
- Insulation
- Lasiosphaeria
- Mitospores
- Monodictyes
- Glauc
- Myrothecium
- Myxomycete
- Nigrospora
- Oidium
- Paecilomyces
- Particulate Matter
- Periconia
- Peronospora
- Pestilotiopsis
- Pine
- Pithomyces
- Pithomyces Type I
- Pithomyces Type II
- Pollen
- Polythrincium
- Pomegranate
- Pyricularia
- Rhizopus
- Rust
- Scopulariopsis
- Skin
- Small Skin
- Smut
- Soil
- Spegazzinia
- Spegazzinia Smooth
- Spegazzinia Spiny
- Stachybotrys
- Stemphylium
- Talcum
- Tetraploa
- Torula
- Trichocladium
- Trichoderma
- Ulocladium
- Urediniospores
- Wallemia
- Zygomycetes
- Zygomphala