# Air-borne fungi

Lab 13-2

#### A typical air sample may have a great variety of fungi



 There are several thousand genera and almost 100,000 species of fungi.
At any one time, dozens of species can be found during routine air sampling

# Cladosporium

 Species of *Cladosporium* make up 60% of the spore population outside, but may represent as much as 90% of the indoor population. Most are greyishgreen to olive-brown in colony color.



# Penicillium

• They make up close to 30% of the spores found in the indoor environment. It is important that species are identified correctly because certain species are pathogenic to man, causing, as we will see in our chapter on medical mycology, eye, ear, nose, throat, and lung infections referred to as Penicilliosis.



# Aspergillus

• While spores of *Aspergillus* are found rather consistently in air samples, they are not as frequent as those of Cladosporium and Penicillium. Again, species should be identified correctly because some of them can also cause a disease in man called Aspergillosis, which is similar to Penicilliosis.



# Alternaria

- They were some of the first fungi proven to be allergenic.
- Their colonies, like *Cladosporium*, are olive-brown to black and their spores are <u>large</u>, <u>multicelled</u>, <u>obclavate and have both vertical</u> and horizontal septa



#### Epicoccum

 Species of *Epicoccum* are common airborne fungi that produce dark brown, globose, multicelled spores in clusters on short stalks. In culture, they begin as a bronze colony that later become darker as spores mature



## Trichoderma

 frequently found on damp building materials and are some of our most widespread contaminants. They are white to greenish in culture and form their spores in whorls of three stalks



### Penicillium and Aspergillus





# Cladosporium and Alternaria



# Epicoccum and Trichoderma



