



BRIEF DESCRIPTION OF MOLD SPORES

Alternaria

Alternaria is a very common fungal saprophyte found on decaying wood, compost, plants, foods and in different types of soil. Its distribution is worldwide and it is frequently found in outdoor air, where in temperate climates spore levels reach their peak in late summer. Indoors it can be found in house dust, in carpets, on damp spots around showers and around window frames and any area where condensation occurs. Alternaria is one of the most important fungal allergens. Infection with Alternaria is extremely rare.

Ascospores

Spores from many related species are grouped together in this form-genus. They are often most abundant during rainy weather. They're known to produce positive skin-prick test reactions in other words very allergenic. They include cup fungi, mildews and Hyphaes.

Aspergillus

Aspergillus is a potent mycotoxin. There are approximately 200 different species of Aspergillus, sixteen of which have been documented as etiological agents of human disease. The diseases caused by these species rarely occur in individuals with normally functioning immune systems. These species are the most common cause of Aspergilloma and Aspergillosis. Toxin production is dependent on the species or a strain within a species and on the food source for the fungus. These fungi are found in soil, compost, plant debris and stored grain as well as in water damaged building materials.

Aureobasidium

This is one of several genera of "black yeasts". It is a common spore with worldwide distribution and is frequently isolated from soil. Aureobasidium facilitates the decomposing activity of other fungi. Common sources of this fungus are kitchens, bathroom, poorly maintained HVAC systems and other areas that may be periodically exposed to elevated moisture or humidity. Allergy to Aureobasidium is common. Infection is rarely reported. No known toxins.

Bipolaris

There are approximately 45 species. Bipolaris is a common saprobe and a common and important plant pathogen. It is a common cause of leaf spot on golf course turfs. Several species are well documented human pathogens but there are no known toxins. This fungus is usually deposited in the upper respiratory tract and never reaches the alveoli,

Cladosporium

Cladosporium is the most frequently found genus of fungi in outdoor air in temperate climates. The conidia easily becomes air borne and is transported over long distances. It has been isolated from many types of soils and is a major colonizer of plant litter. The enzymes of Cladosporium are especially suited for breaking down cellulose, pectin and lignin. This fungi is an important fungal airway allergen. It is found indoors as well but usually in less numbers and often in humid areas such as bathrooms. There are some toxic species.

Mucor

Mucor is a rapidly growing fungus that is usually dark gray or light olive gray when grown on typical laboratory media. One colony can easily cover petri dish in four days. Mucor is one of the quicker invading organisms able to contaminate many kinds of stored food product. Mucor has worldwide distribution and is often found in hay, stored seeds, horse manure and house dust, regardless of geographic location. It is also frequently found in air samples from indoor environments. Accumulated dust in HVAC systems and poorly maintained carpeting may contain high concentrations of Mucor spores. Mucor has no known toxins.

Nigrospora

This spore is considered to be allergenic. It produces rapidly growing colonies and is often found as a plant.



Paecilomyces

This is commonly found among dead plants and compost. It is also related to decomposition of food items. It is rarely a human pathogen.

Penicillium

Penicillium is a potent mycotoxin. There are approximately 200 species. Various toxins are produced by different species. A wide number of organisms have been placed in this genus, therefore, identification to a species is sometimes difficult. Penicillium is often found in aerosol samples. It is commonly found in carpet, wallpaper and in interior fiberglass duct insulation as well. Many species of Penicillium are common contaminants on various substrates such as drywall, wood and wood products and are known as potential mycotoxin producers.

Pithomyces

This mold grows on dead grass and organic matter. Spores of Pithomyces have demonstrated much allergenic activity in several reports, however the details of such activity are unknown.

Stachybotrys

Stachybotrys is a dark colored fungi, thrives on water damaged cellulose rich materials such as sheet rock, paper, ceiling tiles, cellulose containing materials. The presence of this fungi in buildings is significant because of the mold's ability to produce mycotoxins, which are extremely toxic.

Ulocladium

Ulocladium is commonly found as a saprophyte on plant material and soil. The fungi can be found on dead herbaceous plants, rotten woods, paper, textiles and cellulose materials. Ulocladium frequently occurs in air and dust samples and is also found on water damaged building materials such as gypsum board. Ulocladium can be very allergenic. There are no known toxins.