

Alternaria

Natural Habitats Common saprobe and pathogen of plants. Typically found on plant tissue, decaying wood, and foods. • Soil • Air outdoors

Suitable Substrates in the Indoor Environment

Indoors near condensation (window frames, showers) • House dust (in carpets and air)
• Also colonizes building supplies, computer disks, cosmetics, leather, optical instruments, paper, sewage, stone monuments, textiles, wood pulp, and jet fuel

Water Activity $A_w = 0.85-0.88$

Mode of Dissemination Wind

Allergenic Potential Type I allergies (hay fever, asthma) • Type III (hypersensitivity pneumonitis)

Potential Opportunist or Pathogen Phaeohyphomycosis {causing cystic granulomas in the skin and subcutaneous tissue} • In immunocompetent patients, *Alternaria* colonizes the paranasal sinuses, leading to chronic hypertrophic sinusitis

Industrial Uses Biocontrol of weed plants • Biocontrol of fungal plant pathogens

Potential Toxins Produced Alternariol (AOH) • Alternariol monomethylether (AME)
• Tenuazonic acid (TeA) • Altenuene (ALT) • Altertoxins (ATX)

Other Comments *Alternaria* spores are one of the most common and potent indoor and outdoor airborne allergens. Additionally, *Alternaria* sensitization has been determined to be one of the most important factors in the onset of childhood asthma. Synergy with *Cladosporium* or *Ulocladium* may increase the severity of symptoms



LAB SERVICES: Asbestos, Mold, Bacteria, Industrial Hygiene, Metals, Allergens, PCR-Polymerase Chain Reaction (DNA), Silica, Volatiles Scan, Formaldehyde by HPLC, Water and Materials Testing.



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