

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 Aw = 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









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