

Fungal Glossary



Laboratory Testing Services Since 1981

Aspergillus

Natural Habitat	<ul style="list-style-type: none">◆ Soil◆ Plant debris
Suitable Substrates in the Indoor Environment	<ul style="list-style-type: none">◆ Grows on a wide range of substrates indoors◆ Prevalent in water damaged buildings
Water Activity	<ul style="list-style-type: none">◆ Aw=0.75-0.94
Mode of Dissemination	<ul style="list-style-type: none">◆ Wind
Allergenic Potential	<ul style="list-style-type: none">◆ Allergic bronchopulmonary aspergillosis (ABPA) which is common in asthmatic and cystic fibrosis patients◆ Aspergillus sinusitis◆ Invasive aspergillosis in immunocompromised patients
Potential Opportunist or Pathogen	<ul style="list-style-type: none">◆ Aspergilloma and chronic pulmonary aspergillosis in people with lung disease
Industrial Uses	<ul style="list-style-type: none">◆ <i>A. sojae</i> is used for fermented food and beverages in Asia◆ <i>A. oryzae</i> is used in soy sauce production◆ <i>A. terreus</i> produces mevinoxin which is able reduce blood cholesterol◆ <i>A. niger</i> produces enzymes used to make some breads and beers and is also used in plastic decomposition◆ <i>A. niger</i> and <i>A. ochraceus</i> are used in cortisone production
Potential Toxins Produced	<ul style="list-style-type: none">◆ 3-Nitropropionic acid, 5-metoxystermatocystin, Aflatoxin B1, B2, Aflatoxin G1, G2, Aflatoxin M1, M2, Aflatoxin P1, Aflatoxin Q1, Aflatoxins, Aflatrem (alkaloid), Aflatrem (indole alkaloid), Aflavinin, Ascalidol, Aspergillilic acid, Aspergillomarasmin, Aspertoxin, Asteltoxin, Austamid, Austdiol, Austins, Austocystins, Avenaciolide, Brevianamide A, Candidulin, Citreoviridin,, Citrinin, Clavatul, Cyclopiazonic acid, Cyclopiazonic acid, Cytochalasin E, Emodin, Fumagillin, Fumigaclavine A, Fumigatin, Fumitremorgens, Fumitremorgin A, Gliotoxin, Griseofulvin, Helvolic acid, Kojic acid, Kotanin, Malformins, Naphtopyrones, Neoaspergillilic acid, Nidulin, Nidulotoxin, Nigragillin, Ochratoxin A, Ochratoxin B, Ochratoxin C, Ochratoxins β, Ochratoxins α, Ochratoxins (A,B,C,α, β, γ), Orlandin, Oryzacinin, Paspaline, Patulin, Penicillic acid, Phthioic acid, Secalonic acid A, B, D and F, Sphingofungins, Spinulosin, Sterigmatocystin, Terphenyllin, Terredional, Terreic acid, Terrein, Terretinin, Terretinin, Territrem A, Tryptoquivalines, Verruculogen, Versicolorin A, Viomellein, Viriditoxin, Xanthocillin, Xanthomegnin, β-nitropropionic acid
Other Comments	<ul style="list-style-type: none">◆ It is the second most common opportunistic pathogen following <i>Candida</i>