

Stachybotrys sp. (Stack-ee-bot-ris)

A filamentous fungi found in the outdoor environment on decaying plant materials and soil. Indoors it may thrive on water damaged, cellulose rich materials such as sheet rock, paper, ceiling tiles, gypsum board, wallpaper, textiles, cellulose containing insulation backing, and wallpaper. It is an excellent indicator of water damage. Stachybotrys typically appears as a sooty black fungus. As a general rule, air sampling for Stachybotrys yields unpredictable results mainly due to the fact that it is usually accompanied by other fungi such as Aspergillus and Penicillium that are better aerosolized. It is usually difficult to find in indoor air samples unless it is physically disturbed. Stachybotrys is a potential allergen causing Type I allergies (asthma, hay fever). The presence of this fungus in buildings is

significant because of the mold's ability to produce mycotoxins. Exposure to these toxins can occur through inhalation, ingestion or dermal exposure. Symptoms include dermatitis, cough, rhinitis, nose bleeds, a burning sensation in the mouth and nasal passage, cold and flu symptoms, headache, general malaise, and fever. Inhalation of conidia may also induce pathological changes (pneumomycotoxicoses). The mycotoxin Satratoxin H has been reported to be abortogenic in animals and in high doses or chronic low doses it can be lethal. *S. chartarum* produces other macrocyclic and trichoverroid trichothecenes and, like *Memnoniella echinata*, produces phenylspirodrimanes which are immunosuppressive. The amount of toxins needed to produce adverse health effects varies widely among toxins, as well as each person's immune system.