

Epicoccum

Mitosporic ("mitosis" and "sporic") fungus. Hyphomycetes.

Characteristics

Distribution

Ubiquitous; cosmopolitan. Two species.

Where Found

Plant debris, soil. Secondary invader of damaged plant tissue.

Mode of Dissemination

Dry spore. Wind. Spores also released by hygroscopic movement.

Growth Indoors

Yes, on many different substrates including paper, textiles, and insects. Aw=0.86-0.90 (minimum). Matures within 7 days.

Growth Outdoors

Epicoccum is most often found on aging or decaying plants. It is known to invade various parts of dead plants such as the seeds of corn, barley, oats, and wheat. Can also invade insects.

Potential Health Effects

Allergens

Common. Type I allergies (hay fever, asthma).

Potential Opportunist or Pathogen

Not believed to be infectious in humans or animals. Although, one reported case of fatal hematogenous mycosis in a severely immunosuppressed allogeneic hematopoietic stem cell transplant recipient possibly attributed to Epicoccum.

Potential Toxin Production

Antibiotic substances produced: flavipin, epicorazine A & B, indole-3-acetonitrile. Secondary metabolites and mycotoxins which may be useful as biocontrol agents against bacteria, fungi, and viruses.

Laboratory Notes

Growth/Culture Characteristics

Grows well on general fungal media, although sporulation may be strain dependent. Colonies typically have orange reverse pigment.

Spore Trap Recognition

Intact spores are distinctive. Young spores or spore fragments may be confused with Ulocladium, Stemphylium or possibly Alternaria. Commonly found in outdoor air.



