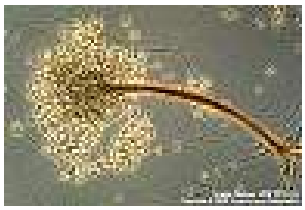
Mold of the Month June, 2009

Graphium sp



Mature Synemmata of Graphium

Young Synemmata of Graphium

Colony Description

Graphium colonies grow rapidly and mature within 7 days. The texture is woolly to cottony. It is gray in color from the front. The reverse is pale initially and becomes darker as the colony gets older.

Microscopic Morphology

Graphium produces hyphae, conidiophores, synnemata, conidia, and rhizoid-like structures. Hyphae are septate and conidiophores are simple, long, and dark in color. Synemmata are bundles of erect hyphae and conidiogenous cells bearing conidia. The conidia are one-celled, oval, and colorless. They form clusters at the apex of each synnema. Rhizoid-like structures may be observed at the base of the synnema.

Ecology

Graphium is a filamentous fungus found in soil and plant material. While *Graphium* may be isolated as an occasional contaminant, its telemorphs, *Petriella*, *Pseudallescheria*, and *Ceratocystis* may cause diseases. Most isolates of *Graphium* isolated in the clinical laboratory are synanamorphic forms of *Pseudallescheria boydii* or secondary forms with *Scedosporium apiospermum***.**

Health Effect

One of the telemorphic forms of *Graphium* is included in genus *Pseudallescheria*, the pathologies caused by *Pseudallescheria boydii* in humans are relevant for the genus *Graphium*. In addition, a mixed subcutaneous infection in a captive dolphin has been found to be due to *Petriella setifera*, the other telemorphic state of *Graphium*.