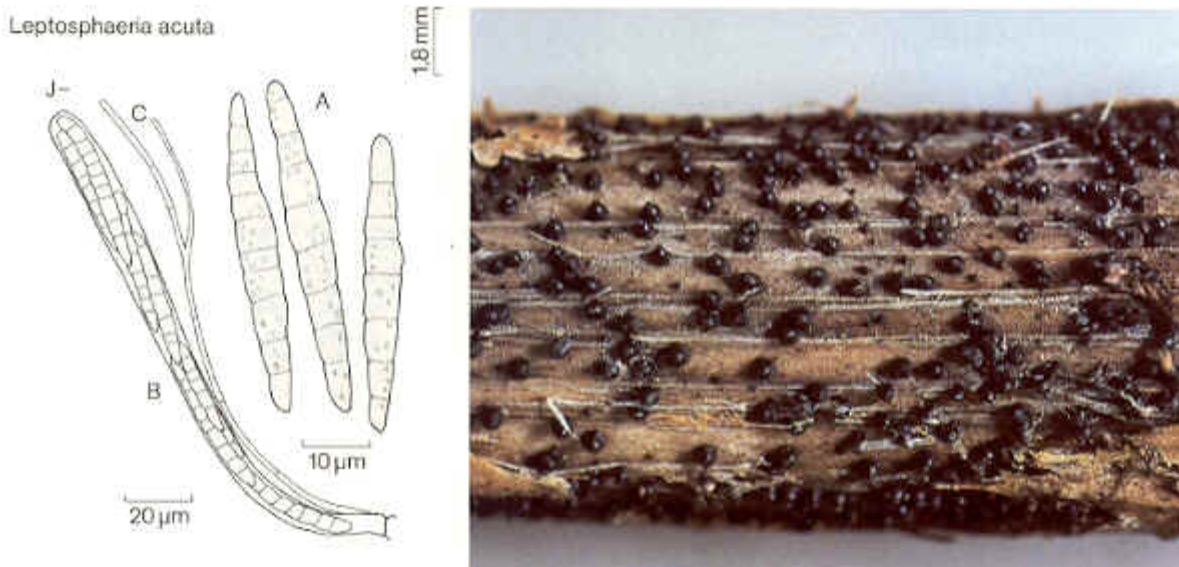


Mold of the Month September 2009

Leptosphaeria spp.



Colony Description

Colonies of *Leptosphaeria* grow slowly. The texture is woolly and the front color is dark olive with a gray margin. From the reverse, the color is dark olive to black and is again surrounded by a grayish margin.

Microscopic Features

Hyphae, ascomata (cleistothecia), asci, and ascospores are observed. Ascomata are without ostioles, globose to subglobose, and black in color. They carry the asci inside. Asci are clavate to cylindrical and bitunicate. Each ascus carries 8 ascospores inside. Ascospores are 4- to 9-celled, hyaline or pigmented, fusoid to curved, and with a constriction at each septum. *Leptosphaeria thompkinsii* forms ascospores with 6 septa and pointed ends while ascospores of *Leptosphaeria senegalensis* have 4 septa and rounded ends.

Ecology

Leptosphaeria is a dematiaceous (phaeoid, or dark-walled) filamentous fungus found in the soil. It grows in its teleomorphic phase. One of its species, *Leptosphaeria coniothyrium* has a known anamorphic growth form included in the genus *Coniothyrium*. *Leptosphaeria* is an occasional cause of human infections. *Leptosphaeria* currently has three defined species; *Leptosphaeria coniothyrium*, *Leptosphaeria senegalensis*, and *Leptosphaeria thompkinsii*.

Health Effect

Leptosphaeria spp. are among the causative agents of human mycetoma and phaeohyphomycosis. *Leptosphaeria senegalensis* mycetoma is seen mostly in Central Africa. In cases with mycetoma, black and soft grains with pale centers are observed. These grains are irregular in shape and about 1 mm in diameter.