

A MICROSCOPIC INVESTIGATION OF THE FUNGUS *PHOMA SORGHINA* AND ITS INTERACTION WITH INDIANGRASS (*SORGHASTRUM NUTANS* (L.) NASH)

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Phoma sorghina was isolated from leaf spots on indiangrass in Nacogdoches County, TX. *P. sorghina* reproduces asexually by darkly pigmented, flask-shaped pycnidia. Single celled, hyaline conidia escape the pycnidium through an ostiole in a mass known as a cirrus. The pathogenicity of *P. sorghina* to indiangrass was tested using Koch's postulates. *P. sorghina* was grown in pure culture and placed in complete darkness for one month to trigger asexual reproduction. Healthy seedlings of the varieties Osage, Lometa and Rumsey were inoculated with a suspension of conidia (800×10^4 spores ml⁻¹) in sterile water containing 0.01% Tween 80. Negative controls were atomized with the Tween 80 solution only. At 10 days post inoculation all three indiangrass genotypes inoculated with *P. sorghina* developed necrotic leaf spots from which the species was reisolated, thus completing Koch's postulates.