

Pathogenicity of *Alternaria alternata*, *Phoma sorghina* and *Fusarium moniliforme* on *Sorghastrum nutans* (L.) Nash. Madison Nelson and Josephine Taylor. Department of Biology, Stephen F. Austin State University, Nacogdoches, TX.

*Alternaria alternata*, *Phoma sorghina* and *Fusarium moniliforme* were cultured from leaves of *Sorghastrum nutans* (L.) Nash (indiangrass) exhibiting symptoms of leaf spot. Leaf sections from the margins of the damaged tissue were surface sterilized and plated onto potato dextrose agar (PDA). The three species were isolated and maintained in pure culture on PDA. Indiangrass seeds of the varieties Osage, Lometa and Rumsey were aseptically germinated on moist filter paper. Seedlings were transferred to 3 inch pots and grown to maturity in the greenhouse. A randomized block of 36 indiangrass plants, 12 of each genotype, was established under field conditions. Conidia of each suspected pathogen were suspended in aqueous Tween 80 and atomized onto healthy leaves in order to test these species for pathogenicity. Negative control plants were inoculated with a Tween 80 solution. Plants were covered with plastic bags for twenty four hours to maintain humidity and monitored daily for symptom development. At 10 days post inoculation all three indiangrass genotypes inoculated with *P. sorghina* developed necrotic lesions from which this species was subsequently isolated. Plants inoculated with *F. moniliforme* and *A. alternata* and negative control plants did not develop lesions. It is concluded that *P. sorghina* is pathogenic to the three Indiangrass genotypes tested, whereas *F. moniliforme* and *A. alternata* appear to be nonpathogenic to these varieties.