**Characterizing sources of resistance and fungicides to control black rot disease caused by *Ceratocystis fimbriata* in North Carolina**

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Black rot of sweetpotato caused by *Ceratocystis fimbriata*, is an important reemerging disease threatening sweetpotato production in North Carolina and other states across the United States. *C. fimbriata* causes black, sunken cankers on the developing roots, leading to stunting, wilting, chlorosis, and eventually death. Storage conditions favor the development of black, firm lesions in the root surface. Disease management relies primarily on the application of fungicides and cultural practices. In this study, we examined 16 commercial and advance sweetpotato breeding lines for black rot resistance using two isolates. None of the cultivars were completely resistant to the disease with most cultivars exhibiting similar levels of susceptibility. ‘Covington’, ‘Murasaki’, and ‘Orleans’ were the least susceptible significantly (*P* < 0.05) differing from ‘Burgundy’, the most susceptible cultivar. The two isolates exhibited similar levels of virulence to the sweetpotato cultivars screened for black rot resistance. Results of these experiments provide a basis for increased control options for black rot in sweetpotato.

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