

Southern Region Small Fruit Consortium Proposal Public Abstract

Title: Distribution of Botryosphaeria stem blight in blueberry production of Alabama

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Blueberry stem blight caused by fungi in the family of Botryosphaeriaceae is a top limiting factor for the blueberry industry of Alabama and neighboring states. Despite crop losses to stem blight, limited data is available on its occurrence, distribution, and causal pathogens in Alabama. This project aims to identify the distribution and causal pathogens of blueberry stem blight in Alabama and nearby regions. Surveys of the occurrence of Botryosphaeria stem blight were conducted in eight locations of Alabama, Georgia, and Mississippi between September 2021 and May 2022 to identify common species of Botryosphaeriaceae. A total of 41 symptomatic samples were collected, from which 49 isolates have been cultured. DNA samples of the isolates were extracted, amplified, and sent for sequencing for the ITS region. Fungal samples confirmed to be in the family of Botryosphaeriaceae based on both DNA sequence and morphological characteristics will be further sequenced for the β -tubulin (BT) gene and 1-alpha (EF) gene to confirm their genera and species. Information and fungal isolates obtained from this study will serve as the foundation for the development of resistant cultivars and more effective management strategies.