

Techniques for Field Research with Soilborne Pathogens of Peanut

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Peanut is subject to attack by a variety of soilborne pathogens, primarily fungi and nematodes, that can cause serious crop loss if not properly managed. Genetic resistance is a foundation of management for many of these, and our increasing knowledge of the peanut genome and plant breeding techniques has increased the demand for reliable phenotypic data. Another key management approach is the use of fungicides, and there is an ongoing need for consistent data required for the development of new products. Achieving this data requires a combination of very specific cultural practices and management, and may include field inoculations with the pathogens of interest. This presentation will focus on summarizing the techniques and methods developed over many years to consistently produce disease epidemics in the field and evaluate them appropriately to generate reliable data. The focus will be on the details of experimental design and methods that can make all the difference between success and failure, but may not be generally known or appreciated.