RENIFORM NEMATODE- AN INTRODUCTION

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Abstract

The reniform nematode (*Rotylenchulus reniformis*) is found in 11 states in the southeast and mid-south regions of the U.S. The incidence of this nematode has increased during the past 5-10 years as a result of additional spread and detection by producers and scientists. Reniform nematode has a fairly extensive host range and causes economic injury to a number of crops including cotton, soybeans, and sweet potato. Several major agronomic crops that are considered poor hosts include corn, rice, sugarcane, peanuts, and grain sorghum. The life cycle of reniform is fairly short (17-23 days) resulting in rapid population development. Populations of this nematode may increase 2-100 fold in most cotton fields but development is dependent upon cotton variety, initial nematode levels, environmental constraints, and biological interactions with other soil microorganisms. Most populations of reniform nematode in Louisiana (82%) have been found to be less than 10,000 per 500 cm^3 of soil. A number of disease interactions have been implicated between reniform nematode and disease organisms or agents including *Fusarium*, *Verticillium*, *Erwinia*, and eggplant mosaic virus. Reniform nematode tends to favor finer-textured soils occurring more in loams, silt loams, or silty clay loams in states such as Texas and Louisiana.

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