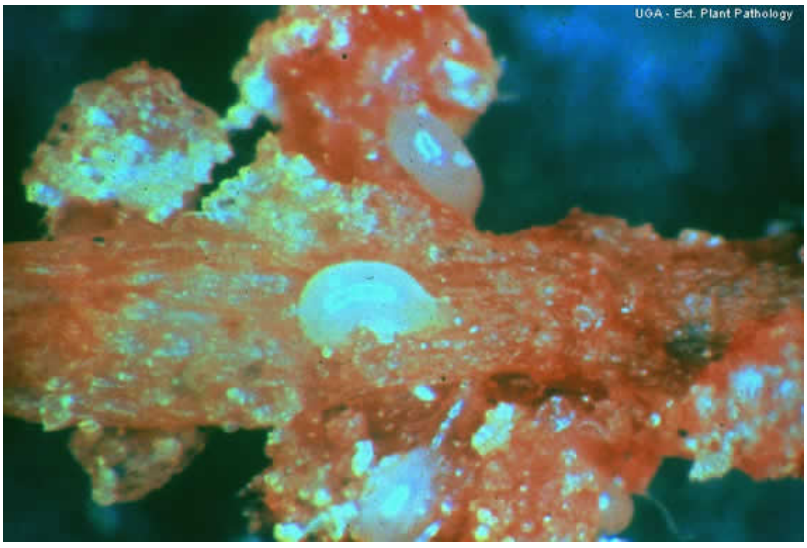
Reniform Nematodes



Reniform nematodes, *Rotylenchulus reniformis*, are not present in all Georgia counties and have a somewhat restricted host range. Larvae partially embed in the roots and remain throughout their lives. The nematode gets its name from the female bodies, which enlarge at maturity to become kidney-shaped. Life cycles can be very short under ideal conditions; an egg may hatch and develop into an egg-laying adult in as little as three weeks. The short life cycle can lead to a very rapid buildup of this nematode. Each female can lay about 40 to 70 eggs. Very high populations can develop on a favorable host. Fallowing land is not as effective for controlling reniform nematode as it is in controlling other nematodes because reniform nematodes can survive for longer periods in air-dried soil than other nematodes. This also increases the possibility of spreading the nematode to uninfested areas. Unlike most other nematodes, which tend to be highly aggregated, reniform nematodes can be distributed almost evenly through a field. When this happens, yield losses are uniform across the field and may be difficult to detect.

Most above-ground symptoms are similar to those caused by other nematodes, though infected cotton plants commonly appear to suffer from extreme potassium deficiency. Root symptoms produced by reniform nematodes are not distinctive. Infested root systems are slightly darkened and restricted. Reniform nematodes are not commonly found in the same fields with southern root-knot nematodes.

Plants susceptible to reniform nematodes include soybeans, cotton, tobacco, sweet potatoes, and many vegetables, ornamentals and weeds. Corn and peanuts are very poor hosts and small grains, sorghum and common bermudagrass are non-hosts. Management includes: rotation with non-host or poor host crops (corn or peanuts), nematicides, and weed control.

Richard F. Davis, Extension Nematology, University of Georgia