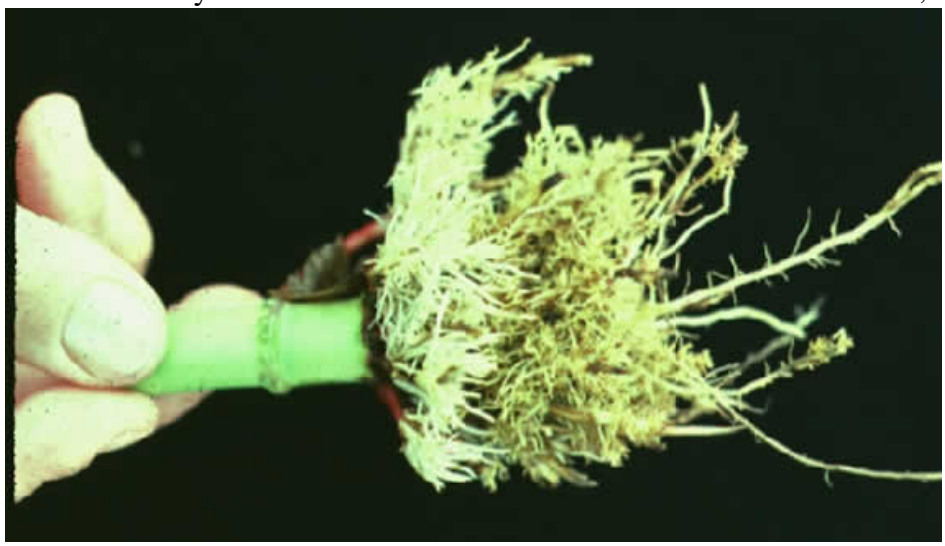
Sting Nematode

Sting nematodes, *Belonolaimus longicaudatus*, are some of the largest and most damaging plant-parasitic nematodes in Georgia. However, the economic losses are low because of their limited distribution. They are found only in coarser-textured, sandy soils of middle and lower coastal plains counties, and occasionally in the sandy putting greens of golf courses in other parts of the state. Sting nematode populations will remain at relatively low levels if the soil contains moderate amounts of silt, clay, or organic matter. Even at low population densities, sting nematodes can be extremely damaging.



Sting nematodes do not normally enter the roots, but feed on root surfaces. They feed at root tips and along the sides of succulent roots, causing root pruning and stubbing of the root system. Symptoms of sting nematode injury depend on the kind of plant involved, the nematode population level, and the age of the plants when roots are first attacked. When young plants are attacked by high populations of nematodes, long roots with short stubbed-off side roots may develop. On older roots, sting nematodes may feed on lateral root buds which further inhibits root system development. A coarse root system without feeder roots is a distinct symptom of sting nematode injury. Plants such as soybeans may develop a shallow root system free of sting injury in the upper three or four inches of soil. Above-ground symptoms are yellowing, stunting and, frequently, death of plants.

A partial list of susceptible plants includes strawberries, corn, sorghum, small grains, soybeans, cotton, tomatoes, green beans, squash, sweet potatoes, pasture grasses, many ornamentals, many vegetables, and many weeds and grasses. The wide host range makes control through crop rotation difficult, though rotation to a non-host is an effective control measure if host weeds are controlled. Resistant crop varieties are not available. Other control measures include nematicides and weed control. Constant, moderate moisture may increase sting nematode problems, so irrigation may increase problems and make control more difficult.

Sting nematodes can be extremely damaging on golf course putting greens which typically have very high sand contents and are irrigated. Care must be taken to not spread sting nematodes when moving sod, aerifying greens, or doing anything else that may move soil.

Richard F. Davis, Extension Nematology, University of Georgia