

Lance Nematodes

Lance nematodes, *Hoplolaimus* spp., are large nematodes which are highly resistant to effects of temperature extremes and dry soil conditions. One species, *H. columbus*, causes severe damage to soybeans and cotton but is not found in all Georgia counties. Another more widely distributed species, *H. galeatus*, is primarily a pathogen on grasses. Lance nematodes feed externally along root surfaces but may also feed with at least part of the body embedded in the root.

Larvae look similar to adults except that they are smaller.

This group of nematodes is easily detected with soil sampling. Population densities do not fluctuate as much throughout the year as the population densities of other nematodes. Population densities do not increase rapidly. The life cycle of this nematode takes about 30 days under ideal conditions, and females lay eggs singly rather than in a mass. Though a female may lay as many as 100 eggs in a lifetime, that lifetime may last an entire growing season.



Roots damaged by lance nematodes may be darkened and restricted in their development. Above-ground symptoms include yellowing, stunting, and sometimes death of plants. Cotton, soybeans, corn,



small grains, and several weeds and grasses are known hosts for these nematodes. Peanuts appear to be a non-host crop and could be used in a rotation to reduce lance nematode populations. There are no varieties of any crop which have a high level of tolerance to lance nematodes, though some soybean varieties are believed to have some level of tolerance. A control program can be built around nematicide use and rotations where feasible. Weed control, in-row subsoiling, and good cultural practices can also be incorporated into a lance nematode management program.

Richard F. Davis, Extension Nematology, University of Georgia