The Performance of Lespedeza Strains on North Carolina Soils Infested with Root-knot Nematodes

C. H. Hanson, J. Lewis Allison, and D. S. Chamblee

In 1950 the estimated acreage of annual lespedeza in North Carolina was 630,000 (1). Two annual varieties, Korean (Lespedeza stipulacea) and Kobe (L. striata), constituted the bulk of this acreage. Both are susceptible to root-knot nematodes (Meloidogyne spp.). Infested plants are yellow and stunted with swollen and knotted roots; drought accentuates the symptoms.

Differences in susceptibility to root-knot nematodes have been reported among varieties of several crop plants (4). Lespedeza stipulacea has been reported to be more susceptible than L. striata (3), but no reference was found indicating that differences exist among strains within either species. In 1947, the senior author noted differences in the amount of growth and yellowing among annual strains of the two species in a preliminary test on root-knot nematode infested soil in the Lower Coastal Plains area at Willard, N. C. The present study was initiated the following year for a more comprehensive study of the performance of these strains on root-knot nematode infested soils at four locations in North Carolina. A site considered to be free of root-knot nematodes was included for comparison.