## GROWER-AGENT PERCEPTIONS OF NEMATODE MANAGEMENT

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## **Abstract**

County agents in 14 Arkansas, 50 Georgia, and 25 South Carolina counties returned mailed surveys on their perceptions of nematode management in their county. A second survey was conducted at the Nematode Management Workshop at the 1995 Beltwide Cotton Conference in which 125 growers and consultants completed questionaires. Results from these surveys show that most growers and county agents recognize nematodes as a problem but do not make nematode management a high priority on their farms. Sampling fields for nematodes is the first step in developing a good nematode management program. In the Workshop questionaire 98% of growers said they were aware of nematodes as a cotton pest but only 46% sample their fields for nematodes. Selection of biologically sound and cost effective control strategies is the second step in nematode management and relies on knowledge of the nematode species present. Root-knot nematode was reported by county agents as being present in at least 68% of all counties. Reports of the incidence of reniform and Columbia lance nematodes were much less than root-knot and appeared to be fairly accurate, however reports of sting nematode appeared to be rather high. Fiftyeight percent of growers and 29% of county agents said they regularly use rotation for nematode management. In most areas nonhost rotation crops are either unavailable or are not economically feasible. The use of resistant cultivars was reported by 41% of growers and 46% of county agents, yet resistance to the most commonly reported nematode species, root-knot, is not present in most commercially available cotton cultivars. Temik 15G was the most commonly used nematicide by a wide margin over Nemacur formulations or Telone II. County agents report that about 29% of the acreage is treated with less than 3.5 lb/A of Temik 15G for nematodes, yet in the states surveyed over 85% of the acreage is treated with these rates of Temik 15G for thrips. Apparently growers are not aware that the Temik 15G that they apply for thrips also controls nematodes. The low priority of nematode management in most production programs and the belief that rotation and resistant cultivars is controlling the problem has created a

situation where more less than 50% of growers surveyed were willing to spend more than \$20/A on a problem that could easily cost them \$75/A. County agents in Georgia and South Carolina rated insects and weeds as their #1 and #2 most important pests in terms of dollars lost with nematodes rated 3rd in South Carolina and 4th in Georgia. Poor soil fertility was rated 4th in S. Carolina and 3rd in Georgia. Proper varietal selection was rated 5th in both states. Although these may be accurate rankings, they show a great disparity in the levels of concern shown for nematodes versus insects and weeds. It is apparent from this and the misconceptions about the availability of resistant cultivars and the value and prevalence of crop rotation that this ranking of nematodes versus other pests leads to low interest in learning about nematodes, insufficient time spent on management decisions, and an unwillingness to spend money on appropriate levels of nematicides.