

Summary for 2006 Alabama On-Farm Cotton/Nematode Tests
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Introduction:

Regional Extension agents placed field trials in several regions of the state to determine the effect of selected nematicides on cotton production in nematode infested fields. The tests were placed on farms that had suffered substantial yield losses from either reniform nematodes or from root-knot nematodes. The agents worked with the farmers to put in the nematicide tests and assisted the farmers in taking and recording cotton yield data at the end of the season. Agents also collected soil samples from these fields and had them analyzed for nematodes to determine nematode species and degree of infestation. In fields where root-knot nematodes were a problem, cotton roots were examined and rated for nematode damage.

The six tests were located in Cherokee, Elmore, Macon and Tuscaloosa counties. Three fields were infested with high populations of reniform nematodes and three fields had high populations of root-knot nematodes.

Results and Discussion:

This past season (2006) was not a good year for testing nematicides' efficacy on cotton production in nematode infested fields. In fact, there was little or no difference among nematicide treatments in any of the tests conducted in 2006. Growing conditions were either very good for some fields (Tests 3-6) or very poor for other fields (Tests 1 & 2). Reniform nematode and root-knot nematode (to a lesser degree) are known as "stress pathogens". That is, they cause the most damage to cotton when growing conditions are unfavorable for cotton development and production—especially from mid-season until harvest. That was the case in test fields 3-6 which received timely rains from mid-season through harvest. Likewise, fields (tests 1 and 2) where cotton conditions were unfavorable for cotton production also showed little difference among treatments. In this situation, it is quite possible that Temik was not activated due to dry conditions at planting. It is not known why Avicta did not increase cotton yields in these two aforementioned tests.