

NEMATODE SAMPLING PROCEDURES FOR A NON-TRADITIONAL NEMATICIDE
Steve L. Rideout and David H. Long
Syngenta Crop Protection
Greensboro, NC

In 2003, Syngenta conducted trials in over 30 locations across the cotton belt examining the efficacy of a novel seed treatment nematicide. The use of a seed treatment (STAN-Seed Treatment Against Nematodes) offers many obvious benefits to producers, including, controlled application environment, precision seed to seed loading, reduced soil loading, and ease of use. Data from these trials indicates that STAN reduced numbers of nematodes present in the soil and the plant, reduced galling, and increased plant vigor in areas infested with root-knot, Columbia lance, and reniform nematodes. Yields from STAN-treated plots were similar if not better than Temik applied at 5 lb/A. Additionally, no issues with phytotoxicity or crop safety were observed in STAN-treated plots. Numerous assessment methods were employed in this project. Nematode control by STAN was observed primarily early in the growing season (prior to 45 days after planting). Additionally, plant sampling proved to be more informative than soil sampling as variability was reduced and more significant differences in nematode presence were detected. Further testing in 2004 is planned by Syngenta with more emphasis being placed on early season plant and root samples in order to better understand the degree of nematode control offered by this unique product.