

XII. RESPONSE OF COTTON TO NEMATICIDE TREATMENTS (COTNEMA106 - R.L. Smith Farm, Branchville)

- A. PURPOSE: To compare the efficacy and benefits of nematicide treatments for nematode control
- B. EXPERIMENTAL DESIGN:
1. Four randomized complete blocks with 15 ft alleyways between blocks
 2. Split-plot design with main plots of treatments and subplots of varieties
 3. Two 30-ft rows per plot with 36-in. row spacing
- C. APPLICATION OF TREATMENTS: Granular treatments were applied in-furrow (F) at planting or 8-in. band over rows (B) with cultivation on 10 Jul. Seed treatments (S) were applied by Syngenta Crop Protection as an overcoat on top of the seed company's standard fungicide treatment.
- D. TREATMENT AND RATE (Main plots):
1. Untreated Check
 2. Avicta Complete Pak (S)
 3. Temik 15G 5 lb/A (F)
 4. KC791230 (in-furrow) 5 lb/A (F)
 5. Temik 15G 5 lb/A (F) + 5 lb/A (B)
- E. VARIETY: Sub-plots
1. ST 4575 BR (71.50% cool germ)
 2. ST 5599 BR (68.50% cool germ)
- F. PLANTING DATE:
- G. ADDITIONAL INFORMATION:
1. Location: R.L. Smith Farm, Branchville
 2. Crop history: cotton 2005, 2004; soybean 2003
 3. Land preparation: rip-and-strip till in wheat cover crop
 4. Planting date: 3 May 2006
 5. Soil fertility report (Mar 2006):

pH	5.7	K	32 ppm
Ca	234 ppm	Zn	1.2 ppm
Mg	34 ppm	Mn	3.5 ppm
P	53 ppm	Soil type	loamy sand
 6. Herbicide:
 - Pre-plant – Prowl 1.3 pt/A (20 Apr)
 - Post-emergence - Roundup Ultra Max 22 fl oz/A (20 May, 10 Jun)
 - Dual Magnum 12 fl oz/A (10 Jun)
 - Envoke 0.1 oz/A (26 Jun)
 7. Insecticide:
 - Orthene 97S 4 oz/A (20 May); 8 oz/A (31 May)
 - Baythroid 1.6 oz/A (1 Aug); 2.6 oz/A (8 Aug)
 8. Growth regulator: Pix 8 oz/A (26 Jun, 10 Jul)
 9. Defoliant/Boll opener: Dropp 1.6 oz + Finish 24 fl oz/A (16 Sep)
 10. Cultivation: 10 Jul
 11. Fertilization:
 - 7-18-36 300 lb/A (1 Apr)
 - Ammonium sulfate 300 lb/A (15 Jun)
 12. Harvest date: 21 Oct