Evaluation of Experimental Insecticides for Worm Control in Dark Tobacco

> Andy Bailey Tobacco Extension Specialist Univ. of KY / Univ. of TN

2007 Experimental Worm Control MSU West Farm – Murray, KY

- 'Narrowleaf Madole' dark tobacco transplanted June 5
 - 40" row spacing, 32" plant spacing (4900 plants/A)
 - Admire Pro (0.5 oz/1000 plants) applied tray drench 24 hr prior
- All foliar insecticide applications broadcast at 15 gal/A
- RCBD with 4 replications, plots 4 rows, 40 ft. long
 60 plants/plot
- Data collected:
 - Crop injury (no tobacco injury seen from any treatment)
 - Worm damage (budworm/hornworm): # damaged plants/plot
 - Fire-cured tobacco yield by stalk position (lug, second, leaf, total)
 - Quality grade index

2007 Experimental Worm Control MSU West Farm – Murray, KY

Treatment	Rate/A	No. of Applications
Untreated Check	0	0
Experimental	6 oz/A	4
Experimental	9 oz/A	4
Experimental	12 oz/A	4
Local Standard: Orthene 97, Tracer, Tracer, Dipel DF	0.77 lb/A (Orthene 97) 2 oz/A (Tracer) 1 lb/A (Dipel DF)	4

Application dates were: App. 1-July 3; App. 2-July 27; App. 3-August 9; App. 4-August 19

2007 Experimental Worm Control MSU West Farm – Murray, KY Plot Evaluation



2007 Experimental Worm Control MSU West Farm – Murray, KY Late-Season Plot Evaluation: September 19 (preharvest)



2007 Experimental Worm Control MSU West Farm – Murray, KY Dark-Fired Tobacco Yield



2007 Experimental Worm Control MSU West Farm – Murray, KY Quality Grade Index and Gross Revenue/A*

*Quality Grade Index and Gross Revenue based on 2004 grade and price support for Type 23 Western Dark-Fired Tobacco



2007 Experimental Worm Control MSU West Farm – Murray, KY

• Trial Summary:

- Novaluron at 9 and 12 oz/A performed as well as the local standard of Orthene/Tracer/Dipel for Lepidoptera worm control through the growing season and was all Novaluron rates (6, 9, or 12 oz/A) were more effective that the local standard and the late-season preharvest evaluation.
- No statistical differences in yield or gross revenue from any treatment, but tobacco that received 4 applications of Novaluron at 12 oz/A had the highest numerical yield and gross revenue/A.