

# Experimental B Insecticide Trial for Dark Tobacco 2008 - HRREC, Springfield, TN

- Narrowleaf Madole LC dark tobacco set June 6
- Experimental design: randomized complete block with 4 replications.
- Plots 4 rows, 40 ft. long
- Control data collected from all 4 rows, yield data collected from center 2 rows.
- Foliar treatments applied at worm threshold
  - 5 worms per 50 plants
  - 2 applications made (July 15 and August 8)
- Treatments applied at 15 to 17 gal/A broadcast over-the-top with 10X hollow cone nozzles.

# Experimental B Insecticide Trial for Dark Tobacco 2008 - HRREC, Springfield, TN Treatments

Treatment	Rate/A	Application Timing
Experimental B	10.1 oz/A	At worm threshold
Experimental B	13.5 oz/A	At worm threshold
Experimental B	20.6 oz/A	At worm threshold
Exp. B + MSO	20.6 oz/A + 0.5% MSO	At worm threshold
Orthene 97	0.774 lb/A	At worm threshold
Coragen (Rynaxypyr)	5 oz/A	At worm threshold
Untreated Check	-	-

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### Rating 2 – August 5 (3 wks after 1<sup>st</sup> application)

Treatment	# Worm Damaged Plants	# Hornworms/60 plants
Exp. B (10.1 oz/A)	7.5	3.25
Exp. B (13.5 oz/A)	4.25	0
Exp. B (20.6 oz/A)	6.5	2.5
Exp. B + MSO (20.6 oz/A)	4.5	1.25
Orthene 97 (0.774 lb/A)	6.25	2.25
Coragen (Rynaxypyr) (5 oz/A)	6.75	3
Untreated Check	7.25	2.75
LSD <sub>0.05</sub>	4.1	2.4

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### Rating 3 – August 14 (1 wk after 2nd application)

Treatment	# Parasitized Hornworms/60 plants	# Healthy Hornworms/60 plants
Exp. B (10.1 oz/A)	0	0
Exp. B (13.5 oz/A)	0.25	0
Exp. B (20.6 oz/A)	0.25	0
Exp. B + MSO (20.6 oz/A)	0	0
Orthene 97 (0.774 lb/A)	0	0
Coragen (Rynaxypyr) (5 oz/A)	0	0
Untreated Check	2	0.25
LSD <sub>0.05</sub>	0.9	0.3

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## Rating 4 – August 22 (2 wks after 2nd application)

Treatment	Hornworms/60 plants
Exp. B (10.1 oz/A)	0
Exp. B (13.5 oz/A)	0
Exp. B (20.6 oz/A)	0
Exp. B + MSO (20.6 oz/A)	0
Orthene 97 (0.774 lb/A)	0
Coragen (Rynaxypyr) (5 oz/A)	0
Untreated Check	0.25
LSD <sub>0.05</sub>	0.3

# Experimental B Insecticide Trial for Dark Tobacco 2008 - HRREC, Springfield, TN Rating 5 – August 29 (3 wks after 2nd application)

Treatment	Hornworms/60 plants	Budworms/60 plants
Exp. B (10.1 oz/A)	0	0
Exp. B (13.5 oz/A)	0	0
Exp. B (20.6 oz/A)	0	0
Exp. B + MSO (20.6 oz/A)	0	0
Orthene 97 (0.774 lb/A)	0	0
Coragen (Rynaxypyr) (5 oz/A)	0	0
Untreated Check	0.5	0.25
LSD <sub>0.05</sub>	0.56	0.28

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Rating 6 – September 17 (Preharvest - 6 wks after 2nd application)

Treatment	Hornworms/60 plants	% Worm Damage
Exp. B (10.1 oz/A)	0	2.25
Exp. B (13.5 oz/A)	0	1.3
Exp. B (20.6 oz/A)	0	1.1
Exp. B + MSO (20.6 oz/A)	0	0.5
Orthene 97 (0.774 lb/A)	0	1.25
Coragen (Rynaxypyr) (5 oz/A)	0	1.1
Untreated Check	0.75	5.63
LSD <sub>0.05</sub>	0.54	1.0

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### Total Yield/A and Quality Grade Index

Treatment	Total Yield (lbs/A)	Quality Grade Index (0-100)
Exp. B (10.1 oz/A)	3486	63.1
Exp. B (13.5 oz/A)	3490	70.3
Exp. B (20.6 oz/A)	3598	65.8
Exp. B + MSO (20.6 oz/A)	3451	69.9
Orthene 97 (0.774 lb/A)	3515	61.4
Coragen (Rynaxypyr) (5 oz/A)	3511	56.5
Untreated Check	3313	51.8
LSD <sub>0.05</sub>	275	11.8