2007 Regional Dark Tobacco Sucker Control Trial

HRREC, Springfield, TN

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

2007 Sucker Control Trials

• Disclaimer:

The 2007 production season was extremely dry in west KY/TN, with sucker growth and vigor being minimal. As a result, sucker control from treatments applied in 2007 are somewhat higher than would be expected in a season where average rainfall occurred.

- Variety: Narrowleaf Madole LC transplanted early June (42" row spacing, 32" plant spacing)
- All sucker control treatments applied over-the-top
 (OT) with 3 nozzles/row (TG3s on sides, TG5 on top)
 - All applications made with JD Hi-Boy sprayer
 - 61 gal/A, 25 psi, 4 mph
 - First topping July 30, second topping August 7
- Data collected: % sucker control, sucker number/10 plants, sucker weight/10 plants, dark tobacco yield, quality grade index, revenue.

Treatment	Rate (gal/A)	Application Timing	Application Method
FA fb MH	2 gal fb 1.5 gal	1 st top fb 2 nd top	ОТ
FA fb MH+Butralin	2 gal fb 1.5 gal+0.5 gal	1 st top fb 2 nd top	ОТ
FA fb MH+Prime+	2 gal fb 1.5 gal+0.5 gal	1 st top fb 2 nd top	ОТ
FA fb FA+Butralin	2 gal fb 2 gal+1 gal	1st top fb 2nd top	ОТ
FA fb FA+Prime+	2 gal fb 2 gal+1 gal	1 st top fb 2 nd top	ОТ
2 FA (topped not suckered check)	2 gal fb 2 gal	1 st top fb 2 nd top	ОТ

^{*}fb=followed by; FA=fatty alcohol (Sucker Plucker); MH was Royal MH-30; OT=over-the-top applications.

Late-season plots evaluations: 5 wks after treatment

Treatment	% Sucker Control (0-100%)	Sucker Number per 10 plants/plot	Sucker Weight (lbs) per 10 plants/plot
FA fb MH	70 d	35.1 a	5.25 ab
FA fb MH+Butralin	88 ab	16.5 b	2.17 b
FA fb MH+Prime+	90 a	8.8 c	1.35 b
FA fb Butralin+FA	81 c	7.8 c	2.67 b
FA fb Prime+ +FA	85 b	7.8 c	1.51 b
2 FA only	0 e	29.8 a	14.48 a
LSD _{0.05}	3.6	6.6	10.88

Dark Tobacco Yield, Quality Grade Index, and Gross Revenue/A

*Grade Index and Revenue based on 2004 USDA Grade and Price Support for Type 22 Eastern Dark-Fired Tobacco.

Treatment	Total Yield (lbs/A) Total trash,lug, sec, leaf	Quality Grade Index (0-100)	Gross Revenue (\$/A)
FA fb MH	2553 ab	74.1 ab	5408 ab
FA fb MH+Butralin	2598 ab	68.6 c	5198 b
FA fb MH+Prime+	2639 ab	72.5 bc	5486 ab
FA fb Butralin+FA	2685 a	77.0 a	5783 a
FA fb Prime+ +FA	2534 ab	73.0 abc	5282 ab
2 FA only	2401 b	71.4 bc	4937 b
LSD _{0.05}	278	4.5	570