

Evaluation of Belt Insecticide for Worm Control in Dark Tobacco

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Belt Insecticide

- Belt (Bayer CropScience)
 - Registration for tobacco in US expected 2008
 - Active ingredient flubendiamide
 - Disrupts calcium balance in muscles of budworm/hornworm
 - Safe to many beneficials
 - 1 to 5 fl oz/A
- Objective of Experiment:
 - Evaluate foliar applications of Belt for worm control in dark tobacco compared to local standard applications.
 - Randomized complete block with 4 replications
 - Plots 4 rows, 40 ft. long (60 plants/plot, data from 30 plants/plot)
 - All rows treated, data collected from center 2 rows

2007 Belt Trial

UKREC, Princeton, KY

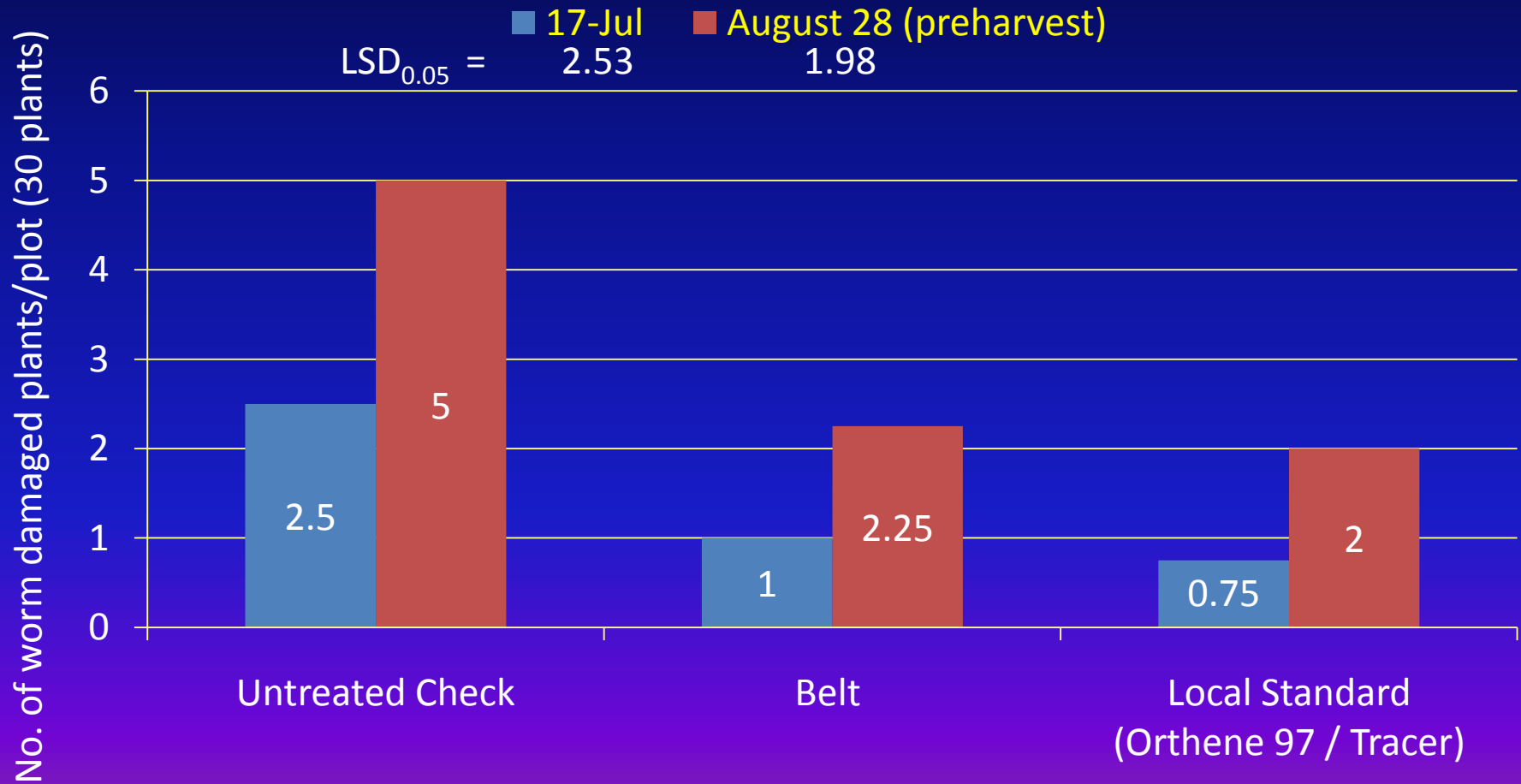
Treatment	Rate/A	No. of Foliar Applications
Untreated Check	0	0
Belt SC	3 oz/A	2
<u>Local Standard:</u> Orthene 97 Tracer	0.77 lb/A Orthene 97 2 oz/A Tracer	2 (1 Orthene, 1 Tracer)

- All plants in all plots received Admire Pro (0.5 oz/1000 plants) tray drench application one day prior to transplanting.
- Variety: Narrowleaf Madole LC, fire-cured.
- Tobacco transplanted May 21 (40" rows, 32" plant spacing = 4900 plants/A)
- Applications made June 21 and July 10 (broadcast at 15 gal/A)
- Plot evaluations made 7 days after 2nd application (July 17) and preharvest (August 28)

2007 Belt Trial

UKREC, Princeton, KY

In-season plot evaluations

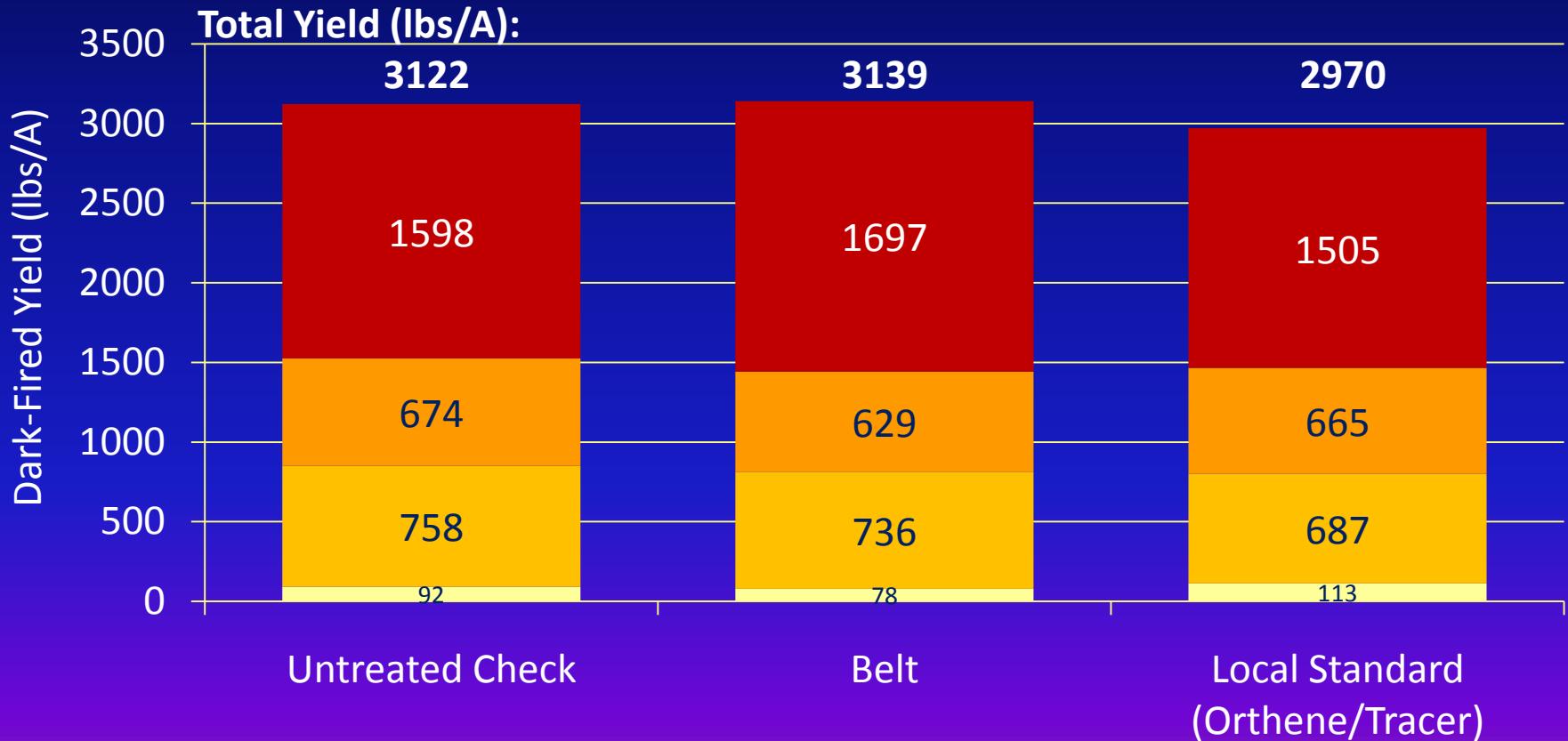


2007 Belt Trial

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Dark Fire-Cured Yield

LSD_{0.05} = 81 267 118 446 597 (total)
 ■ Trash ■ Lug ■ Second ■ Leaf



2007 Belt Trial

UKREC, Princeton, KY

Dark Fire-Cured Quality Grade Index and Gross Revenue/A*

*Based on 2004 USDA Grades and Price Support for Type 22 Eastern Dark-Fired Tobacco.

LSD_{0.05} = 1025 9.1 (Grade Index)



2007 Belt Trial

UKREC, Princeton, KY

- Trial Summary:
 - Performance of Belt insecticide for budworm and hornworm control was equivalent to the local standard of Orthene and Tracer.
 - Dark-fired yield, grade index and revenue from tobacco treated with Belt was equivalent to tobacco treated with Orthene and Tracer.