

2011 Coragen Post-Transplant Experiment

UKREC, Princeton, KY

Objectives

- Continue to evaluate residual activity of Coragen in transplant water applications and compare foliar applications to Belt.
- Determine if Coragen can be soil applied and cultivated in following transplanting to allow root uptake and residual worm control similar to transplant water applications.



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Trt #	Insecticide	Rate	Timing
1	Coragen	5 oz/A	Transplant water Foliar (5 oz/A) at threshold
2	Coragen	7 oz/A	Transplant water Foliar (5 oz/A) at threshold
3	Coragen	5 oz/A	First cultivation (3 wks – June 24)
4	Coragen	7 oz/A	First cultivation (3 wks – June 24)
5	Coragen	5 oz/A	Foliar at threshold
6	Belt	2 oz/A	Foliar at threshold
7	Untreated Check	0	-

*All treatment applications were followed up with Lannate foliar (1 pt/A) when threshold reached.

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Hornworm and Budworm per plot, UKREC, Princeton, KY

Wks after TP (thresh reached)	4	5	6	7 (1)	8	9	10 (2)	11	12 (3)	13
<i>Treatment</i>	June 30	July 7	July 14	July 22	Aug 1	Aug 4	Aug 11	Aug 18	Aug 26	Sept 1
Cor (5 oz/A) TPW	0 a	0 a	0.3 a	0.8 b	0.8 b	2.8 b	16.5 a	0 b	9.5 b	0 b
Cor (7 oz/A) TPW	0 a	0 a	0.3 a	0.5 b	0.5 b	1.8 bc	6.3 a	0.5 b	10.8 b	0 b
Cor (5 oz/A) CULT	0 a	0 a	0.5 a	4.8 a	0.3 b	1.3 bc	13.8 a	0 b	16.8 b	0 b
Cor (7 oz/A) CULT	0.3 a	0 a	0.5 a	2.3 ab	2 ab	2.8 b	18.5 a	0 b	15.3 b	0 b
Cor (5 oz/A) FOL	0.8 a	0.5 a	0.3 a	3.3 ab	0.5 b	0.8 bc	4.8 a	0.3 b	0 c	0 b
Belt (2 oz/A) FOL	0.5 a	0.3 a	0.5 a	3.5 ab	0.5 b	0.5 c	5.5 a	0.3 b	0 c	0 b
Untreated	1.3 a	0.5 a	0.3 a	3.3 ab	4 a	5.5 a	22.8 a	31.3 a	34.8 a	5 a

 = Lannate (1 pt/A) foliar

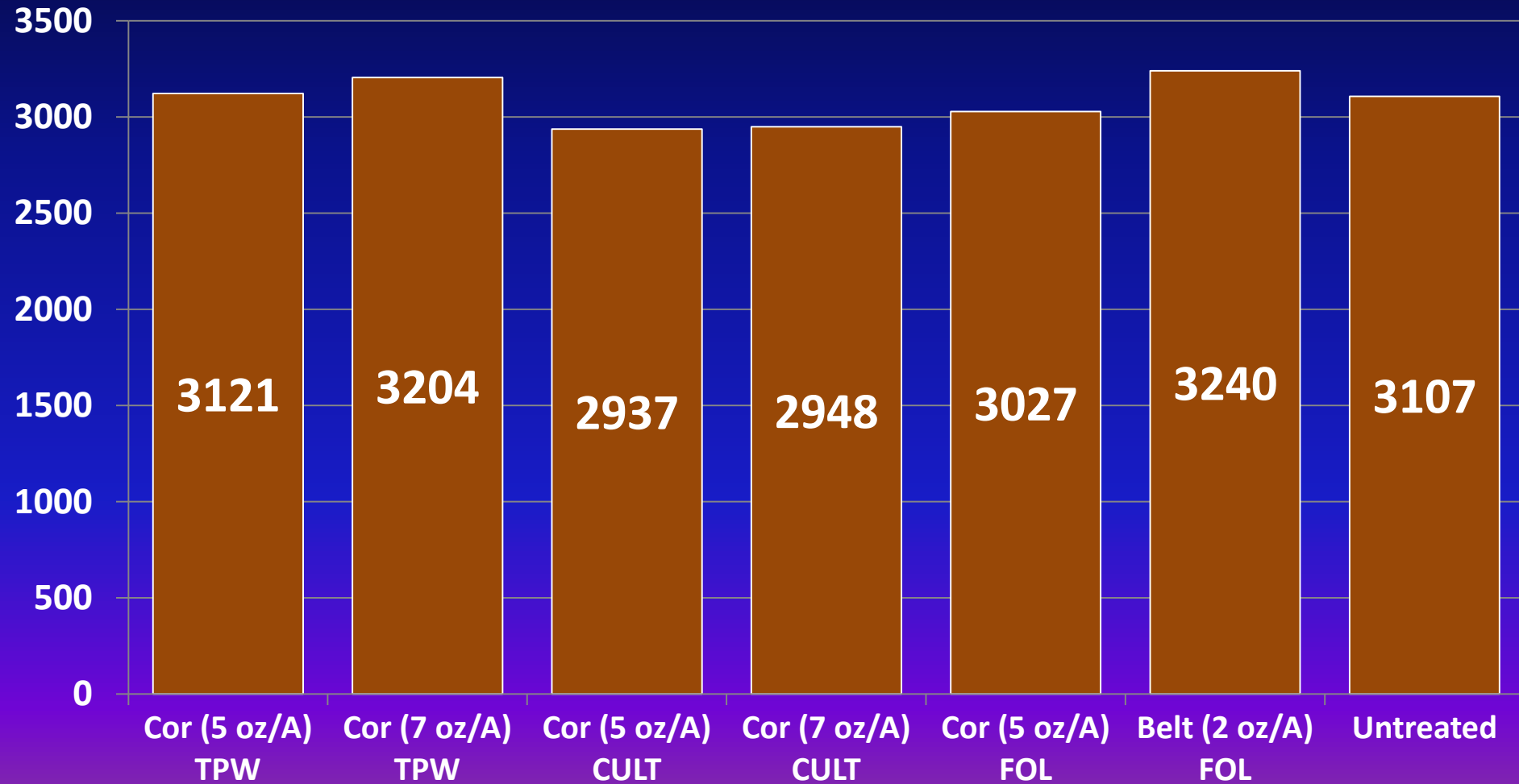
 = Coragen (5 oz/A) or Belt (2 oz/A)

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UKREC, Princeton, KY – Dark-Fired Yield

LSD (0.10) = 378

■ Total Yield (lbs/A)



Coragen Post-Transplant Summary

- Coragen TPW applications provide effective control of hornworm and budworm for at least 8 weeks after transplanting
- Soil applications of Coragen made at first cultivation did not provide residual control compared to TPW
- Foliar Coragen applications made near topping provide residual control that is similar to Belt and superior to contact insecticides like Lannate.
- Disadvantages of Coragen:
 - Slow: may take up to 5 days to see complete worm death following foliar applications
 - Costly: \$25 to \$35 per acre per application, compared to \$6 to \$18 for other commonly used insecticides.