

Table 2. Yields in Pounds of Seed Cotton per Acre.

Treatments	Rate/Acre	Lbs. Seed Cotton per Acre
Check	--	1449 a
Pydrin Penetrator	0.075 10 oz	2756 b
Pydrin	0.075	3254 bc
Pydrin Penetrator	0.10 10 oz.	2956 bc
Pydrin	0.10	3674 c

Application Intervals with Pydrin for Pink Bollworm Control

Dale Fullerton and John Morgan

Summary

A test conducted at Yuma was designed to determine if synthetic pyrethroids could be used at lower dosage rates or extended application intervals to maintain effective pink bollworm control. Based on the results of this test, it was difficult to conclude that extended intervals were feasible, even though yield differences did not exist, primarily because of the erratic application intervals and the possibility of adverse effects from small plots. However, there appears to be some validity in pursuing this direction of insecticide management in an effort to reduce control costs and increase efficiency.

Pre-treatment boll samples indicated an average boll infestation of 9 percent for the test area. Table 1 shows the percent of infested bolls at each sampling date after the initial application. No significant differences occurred between treatments after the first application was applied. The next 4 samples showed a significant difference between the check and the interval treatments but not between treatments. On the final sample taken August 14, Pydrin at 0.1 lb. on a 6-day interval had a lower boll infestation than did Pydrin at 0.05 lb. on a 6-day interval and Pydrin at 0.1 lb. on a 12-day interval. However, this difference was not reflected in a significant yield increase as indicated in Table 1. No yield differences occurred between the interval treatments but all produced more seed cotton than the untreated check.

Although yield differences did not occur, Pydrin at 0.1 lb. on a 6-day schedule was the only treatment that reduced boll infestations to what is generally considered acceptable levels. A gradual decrease in boll infestations in the untreated check may indicate that plot size was too small to maintain extreme population pressures and this could have affected other treatments.

Table 1. Percent Boll Infestation and Harvested Yields.

Treatments	Date Bolls Collected						Yield -lbs. Seed Cotton/A.
	6/29	7/8	7/16	7/22	7/30	8/14	
Untreated Check	23 a	78 a	55 a	60 a	50 a	45 a	1368 a
Pydrin .05 6- day interval	14 a	38 b	20 b	12 b	14 b	15 b	3335 b
Pydrin .1 6-day interval	14 a	33 b	17 b	7 b	7 b	6 c	3603 b
Pydrin .1 9-day interval	12 a	40 b	18 b	12 b	13 b	12 bc	3382 b
Pydrin .1 12-day interval	15 a	33 b	18 b	16 b	17 b	19 b	3133 b

Means followed by the same letter are not significantly different at the 5% level.