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## Crop Production Guide Series

### Pink Bollworm Management Tips I

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Pink bollworm infestations have become more of a problem in the Gaines, Yoakum, Dawson and Terry County areas. This is an expansion over the 2002 infestations. Increasing “pinkie” problems may be due in part to the movement of seed cotton from infested areas to gins in this area, increased survival due to mild winters the past several years, the recent drier climate, and maybe even the increased incidence of picker-harvested cotton in the area. Less insecticide use targeting other pests may have also reduced their mortality. For whatever reason, more “pinkies” means more headaches for producers.



Pink bollworms pass the winter in diapause as a mature caterpillar within bolls, seed or in the soil. Overwintering can take place in either previously infested fields or where there is cotton debris. Early planting enhances the chance that emerging moths will find matchhead-sized squares or larger fruit needed for survival. Late planting on the other hand, will lead to a



preponderance of late maturing bolls that will be vulnerable to damage when pinkies are at their highest levels. Winter or spring irrigations will cause pink bollworms to emerge early, increasing their suicidal emergence. However, these findings are based on furrow irrigation and probably do not apply to sprinkler or drip irrigation situations. Dry planting, then “watering-up” cotton is not a good practice for pinkie cultural management. Producers could also plant one of the many Bollgard varieties and achieve

over 99% control of pink bollworms with the added benefit of some lesser control of other caterpillar pests. This would be my recommendation if you have experienced any infestation in previous years.

Insecticide control prior to bloom would probably be warranted if pheromone traps catch more than 5 moths per trap per night on average. These traps should be in place prior to pinhead-sized squares at a density of one per 30 acres. Check traps at least twice weekly. Traps are not always 100% reliable in determining which fields to treat. They certainly do tell you if there is

significant moth activity in the area and an increased chance of an egg lay. Insecticide applications should be terminated once 1/3-grown squares are present to allow natural enemies to rebuild their populations prior to the first bollworm egg lay. Control can resume, if necessary, once bolls are present. Follow-up applications are needed 5-7 days after the first application if moth catches remain high or boll infestation is above the threshold. Continue this process until you are satisfied that the top crop you are trying to make is fairly “safe”.

Management of the pink bollworm can be tough during periods of migration. These migrations occur in the latter part of the season as bolls are maturing. Pinkies can enter fairly old bolls. Once bolls are “rock hard”, they will be safe. This may take 30 days or more following bloom. This could be as much as 600-650 heat units following Nodes Above White Flower=5 (cutout).



Producers and consultants have two management choices. They can either take the proactive approach and spray based on pheromone trap catches or they can wait until a larval infestation is established and spray when 10-15% of the quarter-sized bolls examined are infested. A boll is considered infested if the carpal wall has an entry wart on its interior or lint and seed show some evidence of feeding or larvae are present. The best approach may be the former because once an infestation is established it is often extremely difficult and costly to neutralize.



Use pyrethroids for pinkie control. Apply these at dusk when moths are flying. These insecticides are adulticides, i.e., they kill moths not caterpillars. After all, the worms are buried in bolls upon egg hatch. How often you must retreat can depend upon the residual activity of the application. You can enhance residual activity by using higher rates and/or using cottonseed oil in the application.

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