

HUB OF THE PLAINS PEST MANAGEMENT REPORT

A newsletter about integrated pest management for growers in Lubbock County

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IN THIS ISSUE:

- * **CURRENT CROP CONDITIONS**
- * **WHAT THE SCOUTS ARE FINDING**
- * **COTTON BOLL DEVELOPMENT**

CURRENT CROP CONDITIONS

Most of the program fields are in the second or third week of bloom with few pest problems to report. Cotton is ranging from eight to four nodes above white bloom with the bulk of the program fields sitting at six to seven nodes. Row water fields and some pivots are headed into cutout at a very rapid pace. For example, we have fields last week sitting at seven to eight nodes above upper most first position white bloom and these same fields are at four to five this week. I will predict that most of the program cotton will reach four nodes above upper most first position white bloom in the next seven to ten days.

WHAT THE SCOUTS ARE FINDING

Bollworms or bollworm damage can be found in most fields, but in very low numbers. Eggs are being found in most program fields during the morning hours but become hard to find or nonexistent by mid afternoon. Larval populations are ranging from zero to 2,000 per

acre, with most of these larvae not making it to ½ inch in size. Most of the higher populations are being found in late planted fields that have at least seven nodes above white bloom.

Cotton Boll Development

(excerpts from NCC Cotton Physiology Newsletter)

Mark Brown, CEA-Agriculture

Cotton bolls can range in size from under three grams to over 6 grams per boll. This translates to 200 to 400 bolls to produce a pound of lint. Boll development and boll set is determined by many factors including: variety, temperature, sunlight intensity, water and nutrient availability and plant hormone balances.

The leaf-like bracts that surround the boll are photosynthetically active. They can supply about 10% of the carbohydrates required by the boll.

Boll growth begins with pollination of the flower at early to mid-morning. A boll reaches full size in about 20 to 25 days. During the first three weeks, maximum boll size, maximum seed size and maximum fiber length are all established. However, the maturation period is dependant upon temperature. Approximately 750 heat units are required for full maturity. This might take as few as 40 days or as many as 70 days when fall approaches.

The cotton plant will adjust its' fruit load to match the supply of available nutrients and moisture. Our short season management system relies heavily on

first position bolls. Insects may cause all sizes of squares or small bolls to shed. However, environmental stress typically causes the plant to shed only small bolls and small-to-medium-size squares. The best management strategies to minimize fruit shed include: optimum planting date, adequate but not excessive nitrogen, efficient irrigation, lower plant densities, use of growth regulators if warranted, proper insect control and reduced weed and disease pressure.



Brant Baugh
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Suggested Insecticides for control of bollworms

Insecticide	Formulated amount per acre
Capture® 2 E *	2.6 - 6.4 oz
Baythroid ® 2 E *	1.6 - 3.2 oz
Leverage ® 2.7 SE *	3.75 oz
Karate ® 2.08 CS *	1.6 - 2.56 oz
Ammo ® 2.5 E *	2 - 5 oz
Decis ® 1.5 E *	1.62 - 2.56 oz
Asana XL ® 0.66 E *	5.8 - 9.6 oz
Steward ® 1.25 SC	9.2 - 11.3
Lannate ® 2.4 LV	1.5 pts
Methyl Parathion (4E)	2.5 - 4 pts
Curacron ® 8 E	8 - 16 oz
Tracer ® 4 SC	2.14 - 2.9 oz
Larvin® 3.2 F	1.5 - 2.25 pts
Scout® X-tra 0.9 E *	2.56 - 3.37 oz
Fury ® 1.5 E *	2.82 - 3.83 oz

* The synthetic pyrethroid insecticides recommended for control of bollworms also will control boll weevil.