

# Lower Rolling Plains Pest Management News

Jones

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Scurry

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## Cotton

Cotton is making good progress with the better growing conditions. More fields are beginning square initiation. Temperatures have moderated with daily highs in the lower to mid 90 degrees.

By the second week in July, we should not have to worry about cotton thrips. But after the newsletter was sent last week, we came across some fields south of Roscoe where cotton thrips were in relatively high numbers in both squaring and seedling cotton. Thrips numbers in the squaring cotton

ranged from 20 to a couple hundred (200+) per plant and ranged from 6 to 24 on cotton with 2 to 6 true leaves. In all situations, thrips numbers exceeded the economic threshold of 1 thrips per leaf and damage symptoms were evident in these fields. The concern for the cotton in the 2 to 6 true leaf stage is that the feeding damage will further delay the growth and maturity of this cotton. In the squaring cotton, the concern is thrips damage reducing photosynthesis and damage to the plant terminals. Populations may decline in time, but for both of these situations it is worth monitoring to determine if spray applications will be needed. Even though your fields may not be in the Roscoe area, checking for thrips may be needed. When applications are warranted, Tracer® (2 oz./ac), Centric® (2 oz./ac), and Intruder® (1.0 oz./ac) should provide good results and still be somewhat gentle on the beneficials. Acephate (Orthene®) and dimethoate will be effective in killing thrips, but these products are harsher on the beneficials.

### Suggested Insecticides for control of cotton fleahoppers and Lygus.

Insecticide	Formulated amount per acre	
	Fleahopper	Lygus
Address® 75S	4 - 5.33 oz.	10.66 - 21.33 oz
Address® 90S	3.34 - 4 oz	9 - 17.77
Orthene® 90S	3.34 - 4 oz	9 - 17.77
Orthene® 97	3.10 - 3.71 oz	8 - 16 oz
Intruder 70 WP	0.6-1.1 oz	----
Capture® 2E	----	2.6 - 6.4 oz
Baythroid® 2E	----	1.6 - 2.6 oz
Leverage® 2.7SE	----	3.75 oz
Karate® 1E	----	2.56 - 3.84 oz
Karate® 2.08 CS	----	1.28 - 1.92 oz
Ammo® 2.5 E	----	2 - 5 oz
Decis® 1.5 E	----	1.11 - 1.62 oz
Lorsban® 4E	6 - 16 oz	----
Bidrin® 8E	0.8 - 3.2 oz	8 oz
Dimethoate® 2.67E	5.3 - 10.5 oz	10.7 oz
Dimethoate® 4E	4 - 8 oz	8 oz
Dimethoate® 5E	3.2 - 6.4 oz	6.4 oz
Asana XL® 0.66E	----	5.8 - 9.6 oz
Proaxis 0.5 E	----	2.56 - 3.84 oz
Prolex 1.25 E	----	1.02 - 1.54 oz
Provado® 1.6F	3.75 oz	3.75 oz
Trimax 4F	1.5 oz	
Steward® 1.25SC	9.2 - 11.3 oz	----
Lannate® 2.4LV	6 - 12 oz	0.75 pt
Methyl Parathion 4E	3.2 oz	1 - 2 pts
Vydate® 2L	1 pt	1 pt
Vydate® 3.77 C-LV	8.5 oz	12.7 - 34.0oz
Centric 40 WG	1.25-2.5 oz	
Parathion 8E	----	8 - 16 oz
Scout® X-tra 0.9E	----	2.28 - 2.84 oz
Fury® 1.5 E	----	2.99 - 4.26 oz

The use of synthetic pyrethroid insecticides may increase cotton aphid numbers

**Squaring cotton should be monitored for cotton fleahoppers.** Fleahopper numbers in our program fields have been as low as 0 to a high of 40 per 100 plants with 67.6% to 96% square set. Both nymphs (about 1/3 to 1/2 of the population) and adults are being found in the cotton terminals. To repeat what was included in the [July 3rd, vol. 11 no. 6 newsletter](#), our current management guide suggest control be implemented during the first week of squaring, when there are 25 to 30 cotton fleahoppers per 100 terminals combined with less than 90 percent square set. In the second week of squaring, when there are 25 to 30 cotton fleahoppers per 100 terminals combined with less than 85 percent square set. And, starting with the third week of squaring up to first bloom, treat when there are 25 to 30 cotton fleahoppers per 100 terminals combined with less than 75 percent square set.

Recent research indicates the percentage square set during the first and second week of squaring could be lowered to 75% to 80%. But, for late planted fields or replanted fields the previous square set percentages may need to be utilized for making treatment decisions. Also, results from the studies suggest waiting until the second week of squaring, to apply a single insecticide application, may be better than making a single application during the first week of squaring. This may be because there are very few fruiting positions and number of square during the first week of squaring.

Scouts are finding relatively good numbers of minute pirate bugs, spiders, big-eyed bugs, and lady beetles in most fields.

Wrangler® @ 1.0-1.5 fl.oz./acre is another insecticide that is available for fleahopper control. It is another imidacloprid product like Provado® and Trimax® Pro.

**Scout Safety.** If you have a field being scouted in the IPM scouting program and you will be spraying it with an insecticide, please contact the scout or me prior to spraying. We do not want the scouts to be unnecessarily exposed to chemicals. Thanks for your cooperation.

## Grain Sorghum

I have noticed grain sorghum fields in Jones county showing signs of moisture stress. Head worms are being found in fields in the flowering and grain filling growth stages. The larvae range from 1/8 th inch to 1 inch in size. So far, I have not found any stink bugs in the sorghum heads.

Last week I included information from our sorghum guide for determining economic damage thresholds. This may have been a little confusing so let me try to make it simpler. First, there are two formulas to use for determining the treatment level (number of larvae/head). If larvae are medium size (1/4 to 1/2 inch) use the following formula:

$$\begin{array}{l} \text{Number of medium-size} \\ \text{larvae per head} \end{array} = \frac{\text{Cost of control as} \\ \text{\$ per acre} \times 9754}{\text{Grain value as \$ per cwt} \times \\ \text{heads per acre} \times 0.19}$$

For example, if control cost = \$8.00/acre, grain value = \$9.50/cwt, and the number of heads per acre = 36,000.

$$\begin{array}{l} \text{Number of medium-size} \\ \text{larvae per head} \end{array} = \frac{\$8.00 \text{ per acre} \times 9754}{\$9.50 \text{ per cwt} \times 36,000 \text{ heads per acre} \times 0.19}$$

**Treatment threshold will be 1.2 or more medium size worms per head.**

If majority of the worms are larger than 1/2 inch in size the following formula should be used to calculate the treatment threshold:

$$\begin{array}{l} \text{Number of large} \\ \text{larvae per head} \end{array} = \frac{\text{Cost of control} \\ \text{as \$ per acre} \times 9754}{\text{Grain value as \$ per cwt} \times \\ \text{Heads per acre}}$$

Then if all factors are the same, as previously stated, calculations will be:

$$\begin{array}{l} \text{Number of medium-size} \\ \text{larvae per head} \end{array} = \frac{\$8.00 \text{ per acre} \times 9754}{\$9.50 \text{ per cwt} \times 36,000 \text{ heads per acre}}$$

**The treatment threshold for large larvae will be a minimum of 0.2 larvae per head (or at least**

**1 larvae per five heads).**

This shows the damage potential of large larvae and the importance of making applications when larvae are from 1/4 to 1/2 inch in size.

As reported last week, small larvae (up to 1/4 inch) consume very little grain (about 10 percent of the total) and about 80 percent of them die in this stage. **Therefore, small larvae should not be considered in determining the economic injury level.** If most headworms are this size, sample the field again in 3 to 4 days.

**Grower Meetings**

<b>Monday –July 14</b>	<b>Tuesday—July 15</b>	<b>Wednesday—July 16</b>	<b>Thursday—July 20</b>
Scurry County Inadalaе Coop Gin – US Hwy 84 8:30 a.m.	Nolan County UAP office 8:30 a.m.	Mitchell County Producers Coop Gin 8:30 a.m.	Jones County Farmers Coop Gin—Stamford 8:30 a.m.

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