

PEST MANAGEMENT NEWSLETTER

News about Integrated Pest Management for producers in Dawson and Lynn Counties

Do you remember this newsletter? It has been awhile since one was sent out with the drought last year and the slow start this year. This week is the second week of our scouting program; we just had nine new fields added this week and there are a few fields we are still waiting on.

This year the field scouting will be conducted by Mary Flores, returning for her 8th - 9th - 10th year I do not remember for sure but she does have experience, and yours truly.

CROP CONDITION

Despite the slow start, fields look good. Crop stage ranges from second week of blooming to first week of squaring. Percent square set ranges from a low of 80% to a high of 100%.

INSECT SITUATION

Cotton Fleahopper

I have been waiting for Cotton Fleahoppers to become a major problem especially with the mowing of the highway-right-of-ways and "barrow ditches." However, to this point they have been pretty quiet.

Fleahoppers build in number on several different weed and cultivated hosts. Silver leaf nightshade (white weed) is one of the primary weed hosts, while alfalfa is one of the primary cultivated hosts. Cotton closely associated with either of these hosts need to be scouted regularly, as do all fields which are now/still squaring, these fields are the most vulnerable to fleahopper damage. Fleahoppers feed in young squares and will destroy a square before we can detect the presence of those squares. With this already delayed crop, we need to set our early fruit so it has time to mature fully and not rely on the plant to compensate.

Fleahopper field counts range from 0 to 10 per 100 plant terminals. The established threshold for fleahoppers is 25 fleahoppers per 100 plants combined with a 90% square set during the first week of squaring, 85% square set during the second week of squaring and 75% square set from the third week of squaring to first bloom. As cotton enters the blooming stage cotton fleahopper becomes less of a concern until about the second week of bloom where it is considered as a beneficial - they feed on bollworm eggs.

To scout for fleahoppers, approach the plants to be scouted with caution; any disturbance will cause the adults to take to flight and chase the immatures down the stem of the plant. You do not want your shadow to fall across the plants to be checked. Watch for any immatures running down the stem when you open up the area of the terminal. Fleahopper adults are about 1/8 inch long, flat with an elongated oval outline and prominent antennae. The body is usually a greenish shade with black hairs and spots on the upper surface. The immature stage is pale green with prominent, often reddish eyes.

If a chemical must be applied to control fleahopper, keep in mind the consequences of using a pyrethroid at this time; **The use of synthetic pyrethroid insecticides may increase cotton aphid numbers.**

Aphids

Aphids are becoming more of a concern at this point and are being detected in every field. The majority of the aphids we are seeing are in the terminal area, on the stem, petioles, bracs, squares and flowers.

We need to be monitoring the aphid population in each field closely. Aphids, although small, can hurt a crop, especially during the boll fill process. I know some of these fields are a ways away from starting the boll fill process, however we can not allow any further delay in the development of this crop and aphids can do just that, especially to the younger plants.

The aphid threshold for insecticidal control should be delayed until infestations exceed 50 aphids per leaf. This level can be reached rapidly so constant scouting is very important. By the time the average individual determines that they have 50 aphids

per leaf in all reality they probably have about 100 - 150 aphids per leaf.

To sample for aphids and to determine if the population is increasing, staying the same or decreasing use the following techniques to help you.

1) Sample two leaves, the fourth mainstem leaf down from the terminal and another mainstem leaf from the bottom third of the plant. Do this in several locations throughout the field. Total the number of aphids and divide by the total number of leaves sampled, this will give you the aphids per leaf count.

2) Place a flag next to several plants throughout the field and monitor the aphid activity on these indicator plants. This will help you in deciding if the population is increasing decreasing or staying about the same.

The fields and the areas in a field which we have seen the highest aphid numbers have a skippy stand of cotton. Watch these areas and fields.

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® 70WP	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
Dimate® 4E	4 - 8 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® 0.5E	----	2.56-3.84 oz
Prolex® 1.25E	----	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® 40WG	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.

Suggested Insecticides for control of aphids in cotton

Insecticide	Rate per acre
Intruder® 70WP	0.6-1.1 oz
Lorsban® 4E	8-32 oz
Bidrin® 8E	4-8 oz
Bidrin® 8E + Ovasyn® 1.5E	4-8 oz + 0.67-1.33 pt
Bidrin® 8E + Curacron® 8E	4-8 oz + 2-4 oz
Provado® 1.6F	3.75 oz
Trimax® 4F	1.5 oz
Lannate® 2.4 LV	12 oz
Parathion 8E	4-6 oz
Curacron® 8E	8 oz
Centric® 40 WG	2 oz