

PEST MANAGEMENT NEWSLETTER

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

CURRENT CROP CONDITIONS

All but one dryland field in Dawson County have reached physiological cutout and most are sitting at less than 3 NAWF, indicating the end is getting close. As I write this newsletter, I do not have the numbers for Lynn County fields and I have a training in Lubbock first thing in the morning. But the decision process is still relevant.

Heat unit accumulation is decreasing as we get deeper into the season. This is illustrated in the numbers below for August through yesterday.

| Week | Total for Week | Dailey Average |
|-------------------|----------------|----------------|
| Aug. 5 - 11 | 154 | 22 |
| Aug. 12 - 18 | 133 | 19 |
| Aug. 19 - 25 | 140 | 20 |
| Aug. 26 - Sept. 1 | 112 | 16 |
| Sept. 2 - 5 | 60 | 15 |

Knowing that it takes about 800 - 850 HU for a white flower to develop into a mature boll and that over the past 33 days we averaged 18 HU per day, gives an indication of which set of blooms have a realistic chance of developing fully. Now we can still make pounds with later set flowers but the lint quality will be lacking.

I am continually asked if we can set September 1 blooms. My answer is "yes but," the quality will be lacking and the percent of the total yield contributed by those blooms is minimal. August 25 seems to be about the breaking point where we can develop blooms to bolls with good quality lint and still contribute significantly to the final yield. I know that with a young crop we need these late season blooms to make but we also need to be realistic on what we can achieve and base our management decisions on these factors.

INSECT SITUATION

Aphids

I have not seen one this season but we will soon be having bolls cracking and opening. When the open boll stage is reached, the aphid threshold drops for the purpose of managing against sticky cotton. The threshold that has been suggested is 10 - 15 aphids per leaf. The average individual will not even know aphids are present on the leaves at this level of infestation.

Once lint has been contaminated very little can be done to alleviate the problem. Research has shown that a rainfall event or overhead irrigation of 1/4 inch or more can reduce the sticky deposits. However, if aphids remain on the plants following a rain or irrigation, the lint remains susceptible to further contamination.

Factors that increase late season aphid populations include late irrigations or rainfall with warm fall temperatures which lead to regrowth and late pyrethroid applications.

Keep in mind that the use of synthetic pyrethroid insecticides targeting other pests may increase cotton aphid numbers.

Bollworms

Bollworms activity is very light, a worm here or there but nothing approaching a threshold. In the late maturing fields, I would raise my threshold up to about 10,000 treatable worms (less than a half inch) per acre.

Research has indicated that developing bolls resist penetration by bollworms at about 350 HU past white flower. Now we are talking about fresh hatched worms and not a "hog-sized" worm already feeding in the field. So, when the last bolls you expect to harvest reach 350 HU past white flower the field is considered "safe" from new worm infestations and insecticide applications can be terminated.

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 |

Suggested Insecticides for control of bollworms in cotton

| Insecticide | Rate per acre |
|-----------------------|----------------|
| Capture® 2 E * | 2.6 - 6.4 oz |
| Baythroid ® 2 E * | 1.6 - 2.6 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 |
| Proaxis ® 0.5 E | 3.20 - 5.12 oz |
| Prolex ® 1.25 E | 1.28 - 2.05 oz |
| Steward ® 1.25 SC | 9.2 - 11.3 oz |
| 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 |
| Mustang ® 1.5 E | 2.82 - 3.83 oz |
| Mustang ® Max 0.8 E | 2.64 - 3.6 oz |

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