

Pest Cast

The Row Crops IPM Newsletter for the LRGV, a cooperative project of Texas AgriLife Extension Service, the Texas Pest Management Association, and the Cotton & Grain Producers of the lower Rio Grande Valley

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Very hot and windy again this week as temperatures were averaging out to about 103 all week with plenty of heat advisory warnings. Perfect weather for harvesting as many grain sorghum fields were cut this week. Those with access to irrigation were watering their cotton or young sorghum as it is very dry and there is very little to no moisture across the Valley. This week we saw many open bolls in cotton on the lower portion of the plants that are already at cutout. Most of the cotton is in full bloom, cutout already, or somewhere in between.

General Situation

Cotton

We are still seeing low to moderate **fleahopper** populations in most areas but again many cotton fields are either at full bloom or past so not too concerned with their populations. We are finding mainly low populations of **Tarnished and Verde plantbugs** as most treatments applied these last two weeks have provided good control.



Figure 1: open boll cotton



Figure 2: Chilli thrips on underside of leaves in cotton

Remember each field is different and it is best to inspect fields and decide if treatment is necessary based on what is present and what stage your cotton is in (dime sized bolls & squares are most susceptible to plantbug damage). Picked up on low to moderate whitefly populations along river in cotton that has just been irrigated. Whiteflies can populate very quickly, and when they feed they excrete the sugars causing a black sooty mold to eventually grow and cover plant leaves inhibiting photosynthesis plant growth. Control of whiteflies is necessary so that way when bolls open we avoid lint being stained by black sooty mold ruining the fiber quality. We detected lots more chilli thrips this week in cotton along the river near Mission, and in the Edinburg, La feria, Hargill areas that are close by to citrus groves. I have noticed that if you have cotton nearby citrus the chilli thrips tend to be more present in those areas as chilli thrips have many hosts but during this time of year they prefer citrus and cotton. The high heat temperatures also encourage chilli thrips to pupate out of the soil. If there are numerous immature bolls present, treatment may be justified to prevent yield loss and/or reduction in lint quality. I recommend treating to control chilli thrips

if cotton is still in full bloom to prevent defoliation. Other than leaf desiccation due to feeding, they do not

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Figure 4: Desiccation of leaves caused by high populations of chilli thrips feeding in cotton

Figure 3: Bronzing on cotton leaves caused by chilli thrips

produce honeydew or create any threat to open bolls so at least that. As chilli thrips feed their damage causes a bronzing appearance on the upper and lower sides of the leaves (see Figure 4). Below is an insecticide efficacy trial done on chilli thrips last year in July 2022 and here is a link for more information on chilli thrips.

https://southtexas.tamu.edu/files/2022/05/chilli-thrips-in-cotton 2022.pdf

For insecticides labeled for use on fleahoppers & tarnished & verdes plantbugs click on link to cotton insect mgmt. guide:

<u>https://southtexas.tamu.edu/files/2023/05/Managing-Cotton-Insects-in-Texas-ENTO-075_2019.pdf</u> For all other helpful resources or pictures of these pests and others go to South Texas IPM website and scroll down to find what you need:

https://southtexas.tamu.edu/programs-and-services/ipm/

Mean No. Chilli Thrips in Cotton Efficacy Spray Trial July 2022												
	Mean # of chilli thrips larvae/ 10 leaves				Mean # of chill thrips adults/ 10 leaves				Mean # of total chilli thrips / 10 leaves			
	21-Jul	28-Jul	4-Aug	11-Aug	21-Jul	28-Jul	4-Aug	11-Aug	21-Jul	28-Jul	4-Aug	11-Aug
Insecticide Treatments	Precounts	7 DAT	14 DAT	21 DAT	Precounts	7 DAT	14 DAT	21 DAT	Precounts	7 DAT	14 DAT	21 DAT
untreated control	315.25 b	145.75 a	213.50 a	154.50 a	55.75 a	47.75 a	30.00 a	51.25 ab	371.00 b	193.50 a	243.50 a	205.75 a
Agrimek @ 3 oz/A (abemectin)	292.5 b	89.50 abc	64.50 b	112.50 ab	53.25 a	37.50 ab	18.00 ab	64.75 ab	345.75 b	127.00 ab	82.50 b	177.25 a
Acephate @ 1 lb/A	357.25 ab	52.75 bc	71.50 b	94.00 ab	70.00 a	24.50 ab	26.00 ab	77.75 a	427.25 ab	77.25 bc	97.50 b	171.75 a
Excirel @ 16 oz/A (Cyantraniliprole)	421.00 ab	58.00 bc	61.50 b	91.00 b	49.25 a	26.25 ab	17.00 ab	48.00 ab	470.25 ab	84.25 bc	78.50 b	139.00 ab
Leverage @ 3oz/A (imidacloprid and β-cyfluthrin)	454.25 ab	106.75 ab	168.25 a	153.50 ab	53.25 a	38.00 ab	26.75 ab	44.00 b	507.50 ab	144.75 ab	195.00 a	197.50 a
Radiant @ 6oz/A (spinetoram)	345.25 b	25.75 c	51.25 b	27.00 c	46.00 a	17.25 b	11.75 b	36.50 b	391.25 ab	43.00 c	63.00 b	63.50 b
PQZ @ 3.2 oz/A (Pyrifluquinazon)	576.25 a	104.00 ab	204.75 a	153.00 ab	58.00 a	37.25 ab	31.00 a	60.00 ab	634.25 a	141.25 ab	235.75 a	213.00 a
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*All Insecticide treatments included 0.25 % v/v Dyne-amic. Controls were Not sprayed. Means within a column followed by the same letter are not significantly different (P>0.05; PROC ANOVA; Mean comparison by LSD [SAS 9.4]). Reference to specific products is provided for informational purposes. Experiments with pesticides on non-labeled crops or pests is part of the insectide registration process, it does not imply endorsement or recommendation of non-labeled uses of pesticides by Texas A&M University. All pesticide use must be consistent with current labels

Figure 5: Chilli thrips efficacy trial 2022

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Grain Sorghum

Lots of grain sorghum was being harvested this week. In very young vegetative sorghum we were finding 1-2 fall armyworm per heads and recommended immediate treatment. In flowering sorghum, we have noticed a sharp decline in midge and didn't find any in flowering sorghum this week . In soft dough sorghum we are still seeing low to moderate populations of headworms and rice stinkbugs (1-2 per head). Check fields and treat accordingly.

All insecticides to use for pests in sorghum can be found at this link below:

https://southtexas.tamu.edu/files/2023/05/managing-insect-and-mite-pests-of-texas-sorghum.pdf



Figure 6: Fall armyworm in young V4 sorghum

Lots of beautiful sesame across the Valley blooming producing pods. We did pick up on some shotgun hole damage caused by corn earworms in sesame but nothing of concern. Other worm damage was caused by yellow striped armyworms feeding on sesame that migrated out of weeds that were being controlled.



Figure 7: Yellow striped armyworm

Sesame



A pyrethroid was recommended for control of the yellow striped armyworms. Majority of sesame was clean of pest damage.

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