



Pest Cast

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

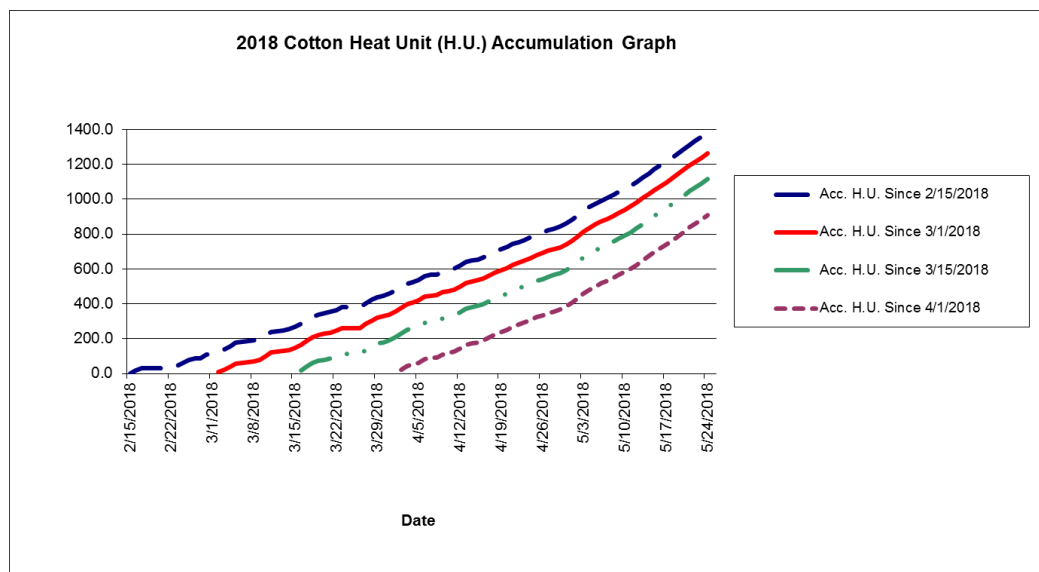
Danielle Sekula
IPM Extension Agent

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General Situation

Hot and dry. Temperatures were in the high 90s and lows in the mid-70s the past couple of weeks. We are forecasted for higher temperatures these next weeks in the 100s. Many growers with access to water are irrigating as many crops are stressed from lack of water and excessive dry heat.



Cotton

This week in cotton we saw many fields in full bloom with small to medium sized bolls on lower half of the canopy. Some growers started applying a PGR (plant growth regulator) this week to their cotton. Still seeing cotton stressed with red spidermites present in high numbers and the thrips that were once a threat in the early cotyledon stages are now predators eating red spidermite eggs when they



Figure 1: Cotton in Full Bloom

come across them. Be aware that prolonged periods of spidermite infestations in cotton can cause injury to the yield, fiber quality and seed. Cotton aphid populations remain low throughout majority of the valley. Still seeing a strong presence of adult fleahoppers present in many fields and even though majority of cotton is past small squaring stage there are still some late planted fields that will want to monitor fleahopper populations diligently and treat accordingly. Started to pick up on whiteflies this week in the Raymondsville and Lasara area when we have been seeing them now throughout the valley. Whiteflies can get out of hand quickly if not

controlled promptly and with plenty of water (10 to 15 gallons per acre) to ensure good coverage of the insecticide being used. The recommended treatment threshold for whiteflies in cotton is 3 to 4 adults per leaf and one large nymph per square inch of the bottom surface of leaves. Most growers are applying preventative sprays to avoid whitefly buildup. *Please see chart at the end of Pest Cast for Insecticide rates for control of spidermites, fleahoppers, and whiteflies in cotton*

Bollworms. In parts of Texas we have found evidence of bollworm resistant to one or more Bt genes in our Bt cotton. Fortunately for South Texas we have **not** seen or experienced increased bollworm pressure like in other areas of Texas. However, if you have a Bt cotton field that has bollworm pressure this year I would like you to please contact me, (Danielle Sekula, 956-968-5581) so we may collect the larvae. We would like to be ahead of any resistance issues and are asking for your cooperation in protecting our cotton crop.

Grain Sorghum

These past two weeks several of us had to spray for sorghum midge. As little as one sorghum midge per head can warrant a spray treatment. Many fields are already in soft and hard dough stages well on their way to harvest. However for those who have late planted sorghum now just starting to bloom please check as we are seeing several midges per sorghum head. In the La feria, Santa Rosa, and other mid Valley areas we were finding on average 1 to 3 headworms per sorghum head feeding. Also starting to see rice stinkbug adults, nymphs, and eggs on sorghum heads. Majority of fields were pretty clean but a handful I ran into had high rice stinkbug populations and low headworms. The economic injury level for headworms in commercial sorghum is about 1 to 2 larvae per grain head. When

Table 10. Whitefly action thresholds

Insecticide option	Silverleaf whitefly	
Adulticide	When ≥40% of the 5th node leaves are infested with 3 or more adults	
Insect growth regulator (IGR)	When ≥40% of the 5th node leaves are infested with 3 or more adults and nymphs are present	When ≥40% of quarter-sized disks* contain at least one large nymph
Cotton stage	Bandedwing whitefly	
Before open bolls	50 whitefly nymphs per 5th node leaf	
After open bolls	25 whitefly nymphs per 5th node leaf	

*Quarter-sized area taken between the main middle vein and one of the main lateral veins from a 5th node leaf

Figure 2: Whitefly threshold table taken from: Managing Cotton Insects in Texas Guide 2018



Figure 3: Sorghum midge

scouting for headworms first inspect the sorghum plants for frass on leaves and for frass on the ground between rows. Take a white bucket and beat the heads to dislodge the smaller inconspicuous larvae. To get a good idea of what’s going on in your field make sure to beat at least 30 heads. For rice stink bugs the control threshold is generally around 1rice stinkbug per head and you would use a beat bucket as well to bang them off the sorghum heads into the bucket to get a good estimate of populations in the field. Sorghum fields have been pretty clean of sugarcane aphids this year. In fact I have only heard of a handful having to be sprayed for sugarcane aphids this year while the rest have had low to no SCA present.



Figure 4: Left, Rice stinkbug nymphs just emerged from eggs, on Right Adult rice stinkbug



Figure 5: Head worm on sorghum, in this case corn earworm

Table 21. Suggested insecticides for controlling grainhead-feeding bugs.

Insecticide	Concentrate per unit area	Days from last application to:	
		Harvest	Graze
Carbaryl (Sevin®) (4F)	32-64 oz	21	14
(80S or 80WSP)	1.25-2.5 lb	21	14
(4XLR+)	32-64 oz	21	14
Cyfluthrin (Baythroid® 2E)	1.3-2.8 oz	14	14
Cyhalothrin (Karate® 1E)	2.56-3.84 oz	30	—
(Warrior® 1E)	2.56-3.84 oz		

Remarks

Carbaryl. Direct spray into heads for optimum control.

Cyfluthrin. If one or two applications are made, green forage may be fed or grazed on the day of treatment. If three applications are made, allow at least 14 days between last application and grazing.

Cyhalothrin. Do not graze livestock in treated area or harvest for fodder, silage or hay.

Figure 6: Table taken from Managing Insects and mite pests of Sorghum 2007 Guide, Texas A&M AgriLife

Corn, Sesame, and Sunflowers

Corn is maturing nicely as these past few weeks we have encountered a little bit of corn earworm damage here and there. Sesame too is progressing well with little pest activity as it continues to bloom. Sunflowers are getting heavy as the seeds fill and mature.



Figure 7: Sesame in bloom

Table 11. Insecticides Labeled for Control of Insect Pests of Cotton (continued)

Pest	Product Name/ Common Name	Active Ingredient/s	Formulated Rate (fl oz or oz/A)	lb A/A	Acres Treated per gallon/lb	Signal Word	Insecticide Class (*IRAC Groups)	Re-entry Interval	Pre-harvest Interval
Stink Bugs continued									
	Brigade 2EC	bifenthrin	2.6–6.4	0.04–0.10	49.23–20	Warning	Pyrethroid (3A)	12h	14
	Bidrin 8	dicrotophos [^]	4.0–8.0	0.25–0.5	32–16	Danger	Organophosphate (1B)	6d	30
	Baythroid XL	beta-cyfluthrin	1.6–2.6	0.013–0.021	80–49.23	Warning	Pyrethroid (3A)	12h	0
	Mustang Maxx	zeta-cypermethrin	2.64–3.60	0.0165–0.0225	48.49–35.56	Warning	Pyrethroid (3A)	12h	14
	Mustang	zeta-cypermethrin	2.8–3.8	0.033–0.045	45.71–33.68	Warning	Pyrethroid (3A)	12h	14
	Silencer	lambda-cyhalothrin [^]	3.2–5.12	0.025–0.04	40–25	Warning	Pyrethroid (3A)	24h	21
	Silencer VXN	lambda-cyhalothrin	3.2–5.12	0.025–0.04	40–25	Caution	Pyrethroid (3A)	24h	21
	Declare	gamma-cyhalothrin	1.28–2.05	0.0125–0.02	100–62.44	Caution	Pyrethroid (3A)	24h	21
	Karate	lambda-cyhalothrin	1.60–2.56	0.025–0.04	80–50	Warning	Pyrethroid (3A)	24h	21
	Warrior II	lambda-cyhalothrin	1.60–2.56	0.025–0.04	80–50	Warning	Pyrethroid (3A)	24h	21
Spider Mites									
	ABBA Ultra	abamectin [^]	2–8	0.00469–0.01875	64–16	Warning	Avermectin (6)	12h	20
	Agri-Mek SC	abamectin	1.0–1.25	0.00547–0.00684	128–102.4	Warning	Avermectin (6)	12h	20
	Oberon 4SC	spiromesifen	3–8	0.09–0.25	42.7–16	Caution	Tetronic and Tetramic acid derivatives (23)	12h	30
	Zeal 72WSP	etoxazole	0.67–1	0.03–0.045	23.88–16	Caution	Etoazole (10B)	12h	28
	Portal	fenpyroximate	16–32	0.05–0.10	8–4	Warning	METI Acaricides (21A)	12	14
Fall Armyworm									
	Prevathon	chlorantraniliprole	14–27	0.047–0.09	9.14–4.74	Caution	Diamide (28)	4h	21
	Steward EC	indoxacarb	9.2–11.3	0.09–0.11	14–11.5	Caution	Oxadiazines (22A)	12h	14
	Lannate LV	methomyl	24–36	0.45–0.68	5.5–3.5	Danger	Carbamate (1A)	72h	15
	Orthene 97	acephate [^]	16	0.974	8	Caution	Organophosphate (1B)	24h	21
	Blackhawk	spinosad	2.4–3.2	0.054–0.072	6.67–5	Caution	Spinosyn (5)	4h	28
Whiteflies									
	Intruder Max 70WP/Strafer Max	acetamiprid [^]	1.7–2.3	0.075–0.1	941–6.96	Caution	Neonicotinoid (4A)	12h	28
	Acephate 90 Prill	acephate [^]	8.9–17.6	0.5–0.99	1.8–0.9	Caution	Organophosphate (1B)	24h	21
	Orthene 97	acephate	8–16	0.487–0.974	2–1	Caution	Organophosphate (1B)	24h	21
	Oberon 4SC	spiromesifen	3–8	0.09–0.25	42.7–16	Caution	Tetronic and Tetramic acid derivatives (23)	12h	30
	Knack	pyriproxyfen	8–10	0.054–0.067	16–13	Caution	Pyriproxyfen (7C)	12h	28
	Centric 40 WG	thiamethoxam	2.0–2.5	0.05–0.0625	8–6.4	Caution	Neonicotinoid (4A)	12h	21
	Sivanto 200 SL	flupyradifurone	10.5–14.0	0.137–0.183	12.19–9.14	Caution	Butenolide (4D)	4h	14
	Admire Pro	imidacloprid [^]	1.3–1.7	0.0467–0.0611	9846–75.29	Caution	Neonicotinoid (4A)	12h	14

Figure 8: Insecticides used on cotton pests, table taken from the Managing Cotton Insects Guide 2018, Texas A&M AgriLife

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**Thank you to all our Veterans. Have a great and safe Memorial Day weekend.
Seimpre Fi / Lcpl Dustin Sekula/ KIA April 1 2004**