Far West Texas Cotton Insects Update

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Conchuela Stink Bugs in Coyanosa Cotton

Conchuela stink bugs were found in economically damaging numbers this week in a Coyanosa, TX cotton field. The infestation was very high in a 60 acre block, but not in surrounding younger cotton. This infestation has been treated.

Adult Conchuela stink bug

Little is known about the biology of this stink bug, which is of primary concern to cotton growers in Far West Texas. What is known about this stink bug comes from published information from the early 1900s. Conchuela stink bugs possess a wide host range including the cultivated crops cotton, alfalfa, corn, sorghum, grapes, peas, tomatoes, peppers and peaches. Wild hosts include mesquite, sage, yucca, mustards, and *Opuntia* or prickly pear cactus.

Adult Conchuela overwinter, coming out in spring to feed, mate, and lay eggs. In Far West Texas, conchuela stink bugs prefer mesquite when available and cherish mesquite beans. As with most stink bugs, conchuela is primarily a seed feeder preferring leguminous plants over other hosts. Once mesquite beans dry conchuela move to other more succulent plants including corn, sorghum, and cotton. Conchuela stink bugs prefer sorghum in the heading stage and alfalfa in the seed stage over cotton and will feed on sorghum and alfalfa seed until the seed begin to harden. Generally, conchuela stink bugs will not move into cotton until bolls are present. In addition, the more lush the cotton the better (for conchuela).

Conchuela stink bugs and other seed-feeding bugs feed by inserting their syringe like mouthparts into various parts of the plant and sucking up the juices. Their feeding activity usually causes small bolls to abort but results in wart like growths on the carpal wall and stained cotton lint in older bolls. This feeding activity also provides an

Carpal wall warting caused by stink bug feeding

Special points of interest:

- *Watch for Conchuela stink bugs*
- *Conchuela stink bug biology in Far West Texas*
- *Sampling for stink bugs*
- *Stink bug economic thresholds*
- *Don't confuse other seed feeding insects with Conchuela*
- *Suggested insecticides for stink bug control*
- *Be wary of cotton aphids after insecticide treatments*

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entrance for bacteria which can cause boll rotting.

Sampling for stink bugs can be accomplished by placing one's arm behind approximately 3 row feet of cotton plants then vigorously shaking the plants against the ground. Check for stink bugs that fall to the ground then move a few feet down for the next sample. Stink bugs; however, can easily be seen climbing about the cotton early in the morning before late morning heat, but sampling in this manor is not recommended because stink bugs may be present in the lower part of the plant and thus missed. Quarter sized bolls should also be checked for feeding damage.

Current Economic thresholds are ambiguous at best. Depending on your source, Ets can range from 1.5 to 5 stink bugs/10ft of row or 20% damaged bolls. The most recent and reliable information comes by way of research conducted in South Carolina. Research there has shown that 1 stink bug/6ft of row or 20% damaged bolls can cause significant economic loss.

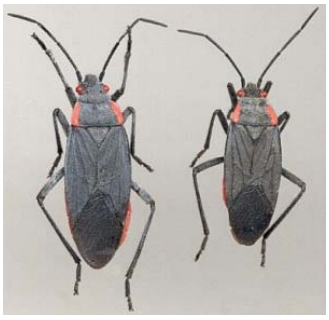
Other Common Seed-feeding Bugs in Cotton

Although conchuela is the most common stink bug found in Far West Texas cotton a small green species can also be seen on occasion. Until more is known about this species it should be counted along with conchuela when scouting cotton.

Several other species of seed-feeding bugs also occur in cotton. Some species like the red-shouldered bug can be confused with conchuela stink bug. An easy way to tell them apart is stink bugs are oval and nearly as wide as long, while other similarly colored bugs are much longer than wide.

Generally these bugs are not a concern; however, at times some species can be found in fairly high numbers in cotton. Whether these bugs cause damage similar to conchuela or cause little or no damage is unknown. Little research has been published on many of these species to document the results of their feeding activity in cotton. However, they do possess mouthparts similar to conchuela and may have the ability to pierce bolls. Thus, they should be taken into consideration when scouting cotton.

Mating pair of small green stink bug in cotton



Red Shouldered Bug

Lygaeid bug in cotton

Leaf-footed bug feeding on Mesquite beans

Suggested Insecticides for Stink Bug Management

Insecticides	Insecticide Class	Formulated Amount/Acre	Precaution Status	Re-entry Interval (hours)	Honey Bee Hazard
Acephate **(Address 75S)** **(Address 90S)** **(Orthene 90S)** **(Orthene 97)**	Organophosphate	 0.75 lbs 0.8 lbs 0.8 lbs 0.72 lbs	Caution	 24 24 24 24	High
Bifenthrin **(Capture 2E)**	Synthetic Pyrethroid	2.6 - 6.4 oz	Warning	12	High
Cyfluthrin **(Baythroid 2E)**	Synthetic Pyrethroid	1.2 - 2.6 oz	Danger	12	High
Cyfluthrin+Imidacloprid **(Leverage 2.7SE)**	Synthetic Pyrethroid + Neonicitinoid	3 oz	Warning	12	High
Cyhalothrin **(Karate 2.08CS)**	Synthetic Pyrethroid	1.6 - 2.56 oz	Warning	24	High
Deltamethrin **(Decis 1.5E)**	Synthetic Pyrethroid	1.6 - 2.56 oz	Danger	12	High
Dicrotophos **(Bidrin 8E)**	Organophosphate	8 oz	Danger	48	High
Methyl Parathion (4E)	Organophosphate	1 - 2 pts	Danger	4 Days	High
Oxamyl **(Vydate 3.77 C-LV)**	Carbamate	11.2 - 17.0 oz	Danger	48	High
Parathion (8E)	Organophosphate	8 - 12 oz	Danger	7 Days	High
Tralomethrin **(Scout X-tra 0.9E)**	Synthetic Pyrethroid	2.56 - 3.41 oz	Danger	24	High
Zeta-Cypermethrin **(Fury 1.5E)**	Synthetic Pyrethroid	2.8 - 3.8 oz	Warning	24	High

Keep an Eye Out for Cotton Aphids

Remember that all the listed insecticides above have broad spectrum activity and will cause off target mortality of natural enemies. This may lead to cotton aphid outbreaks, especially if using one of the synthetic pyrethroids. If aphids are present in your cotton try using a non pyrethroid insecticide or an insecticide with known aphicidal activity, such as Bidrin or Leverage.

Cupping of terminal leaves caused by cotton aphid feeding

Cotton aphids on underside of cotton leaf