



INSECTS AND WEEDS IN FOCUS

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COASTAL BEND IPM COTTON INSECT REPORT



Again, no significant rainfall to report the past week. A rain right now would greatly facilitate proper boll filling and development. Much of the

area's grain and corn, though not all, is past the point at which rain would be beneficial to grain weight and quality. Once the black layer is laid by the grain or kernels, water is no longer of any benefit except to further strengthen the stalks. Cotton growers and those with young sorghum could use a good rain.

Kleberg County. Almost every field in Kleberg County is now in bloom. Some fields in the county are at or will reach physiological cutout this week. The few fields still at 1/3 grown square should begin bloom this week. Aphids remain light across the county. The fields still susceptible to fleahopper damage generally had light fleahopper abundance, with one exception by the naval airbase. Essentially, in Kleberg County all that remains to be concerned about is a little rain and bollworms. While I can't predict nor do anything about the rain situation, I can tell you that bollworm egg and worm abundance has not changed greatly across the county. Of the 2,900 plants scouted this past week in the 28 cotton fields across the county, we found 27 bollworm eggs and 13 worms. No field had more than 6% eggs or 4% worms. Most fields had no more than 8% worm damaged squares; however, one field between Ricardo and Kingsville did have 16%. Besides the 16% worm damaged squares, in this field we found 1% eggs and 4% worms (1 medium and 3 small). In this situation I would continue to caution against

making an insecticide application until you start finding worms. The damaged squares we found might have been from a previous worm flurry that was beginning to die back at the time of our sampling. So, what I'm saying is we can't spray for damage, you can only spray for worms!

Nueces County. Cotton in Nueces County ranges from mature boll to match-head square. Fields are pretty evenly split between those at bloom and those not blooming yet. Aphids and fleahoppers remain very light throughout the county. Despite there being a lot of susceptible cotton, no field had more than 13% fleahoppers last week. As in Kleberg County, the bollworm situation is now the focal point of producers, consultants, and Extension personnel regarding the cotton situation throughout the Coastal Bend area. And, as in Kleberg County, the bollworm situation remains relatively static. This past week on 1,250 cotton plants in 10 fields, we found 22 bollworm eggs and 4 worms. However, 9 of the eggs were found in 1 field on the east side of the county, so the general bollworm situation remains favorable. Only 2 fields in the IPM Program had any worm damaged squares; both were below 4%.

San Patricio County. San Patricio County cotton is now well into bloom, with many fields holding mature bolls. Within the next week or so a great many fields will reach cutout. Aphids and fleahoppers were very light last week. Most fields are moving out of the fleahopper damage window anyway. So, again I'm left with the chore of talking about bollworms, a pest that fortunately hasn't shown up yet. This past week on 800 plants scouted in 11 fields, we found 18 bollworm eggs and 4 worms. However, 8 of these eggs and 2 of the worms were found in 1 field between Edroy and Mathis. None of the 11 fields had greater than 8% worm damaged squares. Hence, like Nueces and Kleberg Counties, the bollworm situation remains stagnant, but positive. EDB

COASTAL BEND BOLL WEEVIL AND BEET ARMYWORM REPORT



Well, I'm not going to start off with how great things are concerning the boll weevil here in the Coastal Bend. But, let it suffice to say that the boll weevil program's success has made my job a

lot easier. This entire season so far I think I've seen just 2 feeding punctured squares. The reporting period from May 24 to May 30 (Week 22) showed continued reduction in boll weevil trap captures. The Kingsville area, which caught only 1 weevil during Week 21, caught 30 weevils this reporting period. This is still a decrease of 82.5% versus this time last year. Since the cotton in Kleberg County is so advanced (at or near cutout), Dr. Parker suggests that these are 2nd or 3rd generation weevils and could possibly be leaving the fields. The Sinton District caught 462 weevils in 15,424 traps. Again this is up from Week 21 (305 weevils trapped) and may be signaling that the weevils are moving as the cotton approaches cutout. Versus last year at this time this is still a reduction of 80%. Robstown trap catches were up also, catching 251 weevils this reporting period versus 130 during Week 21. This is still down over 88% versus last year at this time.

Good news too on the beet armyworm front. Trap catches in all Coastal Bend districts are down an average of 82%. Also, our scouts are just not seeing beet in the field. This past week we found a grand total of 4 worms, all of them in Kleberg County. We found no beet armyworm hits anywhere throughout the Coastal Bend. EDB

HEAT UNITS FOR COTTON - CORPUS CHRISTI

Date	Daily H.U. ¹	Acc. H.U. ¹	Date	Daily H.U. ¹	Acc. H.U. ¹
Mar	-	250.7 ²	6/3	21.5	1308.2
Apr	-	428.3 ²	6/4	22.0	1330.2
May	-	565.1 ²	6/5	22.6	1352.8
6/1	21.7	1265.8	6/6	21.9	1374.7
6/2	20.9	1286.7			

¹ H.U. = heat units. Accu. H.U.= accumulated heat units

² Monthly accumulation

RDP

STINK BUGS IN COTTON

Stink bugs have been observed with increasing frequency in cotton fields along the Gulf Coast near Houston. Species encountered so far include the brown stink bug (Euschistus servus), dusky stink bug (E. tristigma), in about equal numbers, and red shouldered stink bug (Thyanta custator), in low numbers. Studies in North Carolina showed that adult brown stink bugs can cause significant boll damage and subsequent yield loss. The dusky stink bug is also known to be a pest of cotton but little is known about damage in cotton by the red shouldered stink bug. I would consider the two Euschistus species equally in making field counts. Other species that could be encountered include green and southern green stink bugs. In field cage studies by Barbour et al. in North Carolina in 1990, infestations of 3 adult green stink bugs per plant for only 6 days caused significant yield reductions, and inferior seed and reduced fiber quality. It appears that damage to bolls can occur over a large range in ages from 0-22 days and there is evidence that the bugs can transmit decay fungi to bolls. Other studies have shown bolls to be safe at about 18 days of age (there may be several additional papers on stink bugs in the 1999 Beltwide Cotton Conferences Proceedings).

An average of 5 or more stink bugs per 10 row feet can cause excessive loss of squares and small bolls may damage the lint in larger bolls. Treatment at this level, in my opinion, can be easily justified but even fewer bugs may be the correct treatment threshold. A report at the 1998 Beltwide Cotton Conference listed 1 stink bug (2nd instar-adult) per 6 row feet as the treatment threshold. RDP

CREONTIADES BUGS IN COTTON

One of the true bugs (Creontiades spp in the family Miridae) has been observed in low numbers so far this season along the Gulf Coast but reports were received that some fields in the Lower Rio Grande Valley required treatment this season. The adult is several times larger than a cotton fleahopper, brilliant lime green and somewhat elongated. They tend to move away rapidly when observed. This insect can cause shedding of large squares and small bolls. In fields where fruit is not being shed due to cutout, this insect should be given consideration for control. A treatment threshold has not been established but numbers of 10-15 per 100 plants or more seem appropriate for control consideration. With a sweep net, possibly 20 bugs per 50 sweeps (counting each nymph as two) could be used on which to base control. This sweepnet threshold might be too high since these bugs tend to hide under square and boll bracts which would interfere with sweeping efficiency. Good control results have been reported with Vydate CLV (8.5 oz/acre) and pyrethroids. Where fields are shedding due to cutout, control measures would not be appropriate. RDP

INTERESTING INSECTS

The two major types of fleas are **dog fleas** (*Ctenocephalides canis*) and **cat fleas** (*Ctenocephalides felis*). However, despite what it sounds like, dog fleas aren't only found on dogs, and cat fleas aren't only found on cats. The main difference between the two is geographic. Dog fleas are found in Europe and cat fleas in North America. So if you live in the United States, your dog (if it has fleas) has cat fleas.

RDP

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