

INSECTS AND WEEDS IN FOCUS



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SOUTH TEXAS FARM & RANCH SHOW

Enclosed is the agenda of activities for the farm show in Victoria October 22-23, 2002. Look over the agenda for subjects of interest. It will be possible to obtain 7 Certified Crop Advisor (CCA) education units; for details call (361) 575-4581 by October 18 to preregister. Also CEU's for TDA credits will be available. RDP

CHINCH BUG & MEXICAN CORN ROOTWORM RESEARCH RESULTS

Field experiments are conducted each year throughout the Coastal Bend Extension District to measure the effectiveness of new and older insecticides on key insect pests of our crops. One of these studies was conducted in Lavaca County near Shiner. Rainfall was not timely enough to produce outstanding yields, but good information was obtained on chinch bug and Mexican corn rootworm (MCR). We have been evaluating the seed treatments Prescribe (labeled) and Commander (experimental) for several years. We still have not determined how consistent Prescribe or Commander will perform on MCR; it will require more evaluations. In this experiment all products performed equally on MCR (see root damage ratings). It is obvious from all our tests that the two seed treatments are very effective on chinch bugs. Note the very low numbers observed in Commander treated corn. Use of these insecticides resulted in an average yield

increase of 20 bu/acre. Additional studies from several locations will be published this winter. RDP

Table 1. Comparison of insecticides for control of chinch bugs and Mexican corn rootworm, L. Hinze Farm, Lavaca County, TX, 2002.

Insecticide (rate)	Chinch bugs /20 plants	Root da. rating ^a	Yield (bu/acre)
Prescribe 600F (1.36 mg AI/seed)	4.7 bc	3.03 b	51.7 a
Commander 600F (1.25 mg AI/seed)	0.3 c	3.24 b	56.9 a
Aztec 2.1G (6.7 oz/1000 ft row)	24.3 a	2.33 b	51.6 a
Untreated	17.3 ab	4.59 a	33.7 b
LSD (P=0.05)	14.4	1.02	10.4
P > F	.0208	.0089	.0067

LOCAL COTTON INSECTICIDE EXPERIMENTS

Yields results from two area field studies are provided in Table 1. Additional results from these two studies and others will be published during the winter months. Although we could not show statistically that treatments impacted yield results, the trend is generally in agreement with that observed for the past 20 year period. Possibly the thrips numbers (these have not yet been counted from plant specimens in alcohol) and other data will help to clear-up some unanswered questions.

Table 1. Lint yields from cotton treated with systemic soil insecticides (seed or granular treatments), 2002.

Insecticide (rate)	Pounds lint/acre		
	Jon Prince Farm Nueces Co.		John Barrett Farm San Patricio Co.
	Hand harvest	Machine harvest	Hand harvest ^a
Temik 15G (4 oz/1000 row ft)	1154 a	958 a	962 a
Cruiser 5FS (7.6 oz/CWT seed)	1126 a	924 a	955 a
Gaucho (8 oz /cwt seed)	-	-	876 a
Untreated	1058 a	913 a	891 a
LSD (P = 0.05)	115.4	117.1	118.1
P > F	.1697	.5834	.2697

Means in a column followed by the same letter are not significantly different by ANOVA.

^a This cotton was badly damaged by hail but responded with excellent yield.

BOLL WEEVIL ERADICATION UPDATE

We continue to measure a decline in boll weevil numbers in the middle of the South Texas/Winter Garden Boll Weevil Eradication Zone compared with past years (Table 1). **However, an outbreak of significant numbers has occurred in southern sections of Duval, Jim Wells and Kleberg counties.** For a period of time, I thought it might be migration from fields outside the zone, but numbers appear to be too high for that scenario. I think high reproduction occurred in fields within boundaries of the eradication zone whether it be known fields, possibly non-detected fields, or from fields that failed in early season. Reasons for the outbreak are not known at this time. Treatments are currently being made to fields in that region. Again, I ask that everyone be especially diligent in destroying cotton plants as soon as possible. This situation along with increased cost last year, in my opinion, will result in a longer period to pay the debt than originally projected. Even so, benefits of the program have been obvious throughout the zone, except possibly in a few geographic areas that never had significant boll weevil numbers until late-season. I submit that even in those areas cotton yields have increased due to harvest of additional late bolls and lack of a need for early-season treatments for overwintered boll weevils.

Table 1. Boll weevils per pheromone trap per month, Texas Cooperative Extension operated traps.

Month	Nueces & San Pat. Co.			Wharton Co ^b
	6 yr avg ^a	2000	2001	2002
Jan	5.3	9.93	0.00	.05
Feb	5.5	1.60	0.00	.00
Mar	7.7	1.72	0.11	.10
Apr	7.4	1.27	0.11	.05
May	2.8	0.83	0.17	.05
Jun	4.9	0.67	0.00	.00
Jul	188.9	12.89	0.35	.00
Aug	645.7	14.04	0.94	.17
Sep	309.7	1.39	0.11	.00
Oct	165.4	0.72	0.06	-
Nov	55.3	0.50	0.11	-
Dec	15.7	0.03	0.00	-
Avg	117.9	3.80	0.16	

^a 6 yr. avg. is 1977-1982 by Segers et al.

^b Traps operated by Dan Fromme, IPM agent, outside the boll weevil eradication zone. They initiated a diapause program this season.

Table 2. Average number of boll weevils per pheromone trap reported by Boll Weevil Eradication Foundation District offices for 2002.

Location (District office)	Boll weevils/trap inspection	
	Week ending (9/22)	Year to date
Uvalde	0.135	0.017
Robstown	0.144	0.019
Sinton	0.001	0.002
Kingsville	3.863	1.030
Victoria	2.486	0.174

A BOOK OF HISTORY

If you like to read history, I again encourage reading of the book, Boll Weevil Eradication in the United States Through 1999. It is number 6 in the Cotton Foundation Reference Series. Call Lee Holland at 800-269-9925 for a copy. The price is \$25.00 for the 627 page hardback. RDP

UNUSUAL WASP IN HOMES

Cricket-hunter wasps make their living capturing, stinging, and transporting live crickets to their underground nest. The female wasp prepares its victim as food source for its offspring by laying on it a single egg. When the larva hatches it begins feeding immediately on its helpless prey. One cricket probably provides enough food for a single wasp to develop.

So what are these critters doing in houses?

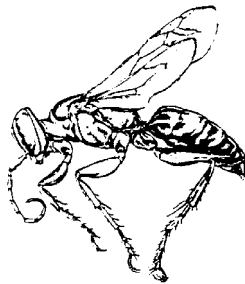
In the wild, female cricket-hunter wasps use existing holes or openings in the ground, such as rodent burrows, as nest sites. In urban areas these wasps appear to be taking advantage of a suitable and abundant supply of natural cavities in the form of weep holes and other openings in walls and foundations of buildings.

After the wasp larva completes its development it pupates next to its now-devoured host and emerges shortly as an adult. Its first task is to seek a convenient exit from its protected nest site. Unfortunately, this frequently results in adult wasps emerging indoors (e.g., around window sills or air conditioning vents).

Female cricket-hunter wasps provision their nest with enough food for six or more offspring, and other females of the same species may share the same nest site. Because of this, a number of wasps may emerge from the same general vicinity, giving the false impression that a large nest is present in the wall.

While it may be difficult to prevent adult cricket-hunter wasp emergence into a building once the walls have been provisioned with crickets, wall voids can be fogged or dusted to kill emerging wasps. The best solution, however, is a thorough sealing of outside openings that wasps might use to gain access to the building. Screening weepholes and patching loose siding or mortar should go a long way toward preventing a similar occurrence next year. In the meantime, adult wasps can be killed with a fly swatter or aerosol spray, or captured and released outdoors to continue their worthy pursuit of pesky crickets. The information was provided by Dr. M. Merchant, Extension Urban Entomologist, Dallas.

RDP



INTERESTING INSECTS

Many insects are colored so that they blend perfectly with their background. Many grasshoppers are colored like the ground on which they alight; many moths are colored like the bark of a tree; and many beetles, bugs, flies, and bees are colored like the flowers they visit. Many insects resemble objects in their environment, in both color and shape. Walking-sticks and inchworms resemble twigs, so much so that it sometimes takes a keen eye to detect them when they remain motionless. Certain treehoppers resemble thorns. Some of the butterflies resemble dead leaves; some beetles resemble bits of bark or clods of dirt; and some caterpillars resemble bird droppings.

Several years ago I saw a small snout weevil drop to the ground, but when it folded its legs in, I could not pick it out from the surrounding bits of dirt. Only when it unfolded its legs again was I able to find it. The species had never been recorded as occurring in the Western Hemisphere.

RDP

View our newsletter earlier on the internet on the TPMA website (<http://www.tpma.org>) by selecting "IPM newsletter" on the drop-down menu by going to "Coastal Bend" and "go". Another site is <http://agfacts.tamu.edu/~rparker>. Also pest management information is available at www.txaac.org.

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