Caterpillar Invasion

In the past couple of days I have received several contacts about caterpillars in town, fields, and pastures. Scott Strawn, County Extension Agent - Ochiltree County, e-mailed me about calls he had been getting about worms in town. He identified them as hornworms and fall armyworms. The fall armyworms were coming across a fallowed wheat field. Then I received a call from Stephen Cox, a crop consultant at Sunray, about large hornworm caterpillars crawling all over the ground next to a milo field (see photo of the caterpillar). The caterpillars were not feeding on the milo, but he was concerned that the larvae might. This morning Ted McCollum, Extension Beef Cattle Specialist - Amarillo, came into the office telling me he has been receiving calls from ranchers about high numbers of large dark colored worms with two yellow stripes, an orange head and a horn on the rear. The caterpillars were eating on portulaca (aka purslane). And, Blayne Reed, IPM Extension Agent - Hale and Swisher Counties, called to let me know he had seen the hornworms a couple weeks ago feeding on purslane in pastures from Floyd to Tulia. These are the caterpillars of the white-lined sphinx moth and are known to feed on willow, apple, evening primrose, elm, grape, tomato, purslane, and fuchsia, and probably other undescribed weeds and plants. I would not expect the caterpillars to eat just any plant, but would be plant specific. As one rancher told Ted, the caterpillars were not eating the tomato plants but were eating the basil. As large as the caterpillars are, they should be pupating soon to begin developing into the moth.

Late Planted Corn and Sorghum Headworms

Monti Vandiver, IPM agent in Bailey and Parmer Counties recently treated a late planted non-Bt corn field for extremely heavy infestations of fall armyworm (FAW) and southwestern corn borer (SWCB) larvae. The field was chest high at application of 14 fl oz/acre Prevathon®. Control of the SWCB was good, but with the high numbers of FAW the low rate of Prevathon® did not clean up the FAW. Our moth trapping captures has seen an increase in FAW moth activity in several counties (Gray, Hale, Lipscomb, Moore, Ochiltree, Parmer, and Randall Counties) the past few weeks (Graph on page 2). This indicates that late planted corn fields will need...
to be monitored closely (specifically if fields are planted to non-Bt hybrids). Dr. Pat Porter writes “There is not much that can be done once fall armyworms are in the ear, but late corn that is just tasseling should be scouted and treated promptly if necessary. We don’t have economic thresholds for fall armyworm but we do know they can do an awful lot of damage. The July 5th edition of FOCUS discusses our research on yield loss to fall armyworm and optimal spray timing.

Also, Dr. Porter has an excellent write-up about sorghum headworm control for fields with and without spider mites. The following is Pat’s write-up (by permission) from this week’s edition of FOCUS (http://lubbock.tamu.edu/files/2013/08/August_03_2013.pdf):

Some area sorghum also has significant levels of spider mites, and choosing the wrong headworm control option could make the spider mite situation significantly worse. This is a bit complicated, but chemical choice for headworms should depend upon 1) the proportion of fall armyworm to corn earworm in the field AND 2) the presence of mites.

1) When spider mites are not present. If mites are not present then a pyrethroid can be used without fear of flaring mites. However, pyrethroids, while generally effective on the corn earworm/cotton bollworm part of the headworm complex, are not especially effective on fall armyworms, especially medium to large fall armyworms. Pyrethroids should not be the sole insecticide in situations where fall armyworm comprises a significant percentage of the headworm population. Tank mix options are Lannate, Lorsban etc. presented in our guide referenced above. Belt or Belt + pyrethroid is also a good option.

2) If spider mites are present in established colonies. It now becomes important to preserve the beneficial insects because these usually provide significant control of mites (and our miticides take many days to begin working). In the case where mites are present, then, if a pyrethroid or Lannate, Lorsban or any chemical hard on beneficials is to be used, it should probably be combined with a miticide such as Comite or Onager. (Onager was recently labeled for sorghum.) A different approach would be to forego the insecticides that are hard on beneficials and use Belt, which provides good control of both fall armyworm and corn earworm/cotton bollworm in headed sorghum. (Other insecticides are available as well but we don’t have enough recent headworm experimental data to suggest them yet. I am certainly not saying not to use them, I am just saying that we don’t have the data. Additionally, I should also note that Prevathon and Besiege, which are very good on fall armyworm and corn earworm, are not yet labeled on sorghum but should be labeled by next year.) The fact of the matter is that headworm control is, in one way, fairly easy. We get excellent coverage because the heads are directly exposed to the insecticide(s). The issues become sorting out the need to control fall armyworm in addition to corn earworm while simultaneously avoiding flaring mites if they are present in the field. So easy is not always so easy. RPP