

# A Look At Corn Pests

**URBANA, ILL.**

**T**his past year was probably the worst we have seen for corn earworm (CEW) in recent memory. We could find them throughout the year, even into September, in corn that was already black layer. Then again, one could also find European Corn Borer (ECB) in corn that was way past black layer this year. A person was almost tempted to call this the "Year of the Lepidoptera" (or caterpillar).

The past few years' populations of CEW have increased, but whether this is the start of a trend or just a glitch has yet to be determined. Any ear feeding insect (CEW or ECB) will provide entry points for molds. The past two years, ear molds were high, especially in continuous corn. Some ear molds were due to insect feeding; others were due to optimum environment for the disease organism, etc. Bt corn provides protection against ear feeding insects, but some are better than others for CEW. For instance, based upon observations, the SmartStax and Viptera traited corn had a better level of control against CEW than other traits.

Black cutworm was once a pest that caused widespread damage. However since the introduction of Insecticidal Seed Treatments (IST), such as Cruiser and Poncho, and the introduction of some of the Bt traits that provide protection, we have seen quite a decrease in the number of acres infested with this insect. There

is still the occasional problem field, but it is getting to be a rare occurrence.

Wireworm was another insect that caused widespread problems to producers in this area. The adult beetle laid eggs in grass (or wheat); and, depending upon the specie, the larvae could spend up to seven years under the soil before pupating and emerging. Before they emerged, they had several years' worth of feeding to accomplish, and many found the roots of corn very acceptable. We see very little damage caused by wireworm today, probably due to two reasons. ISTs do provide a good level of protection, and the number of wheat acres has declined considerably over the years. This has reduced potential egg laying habitat in cropped acres.

The ISTs have also reduced other potential insect pests, including grape colaspis and perhaps even white grubs. The concern we need to address sometime in the near future is resistance to these ISTs. I think it is safe to say that just about every corn acre is planted to a hybrid treated with an IST, and soybean seed is increasingly getting the same treatment. We have refuges for ECB and CRW to keep resistance from developing, but we do not have any formulated plans for resistance management for the ISTs. Yet the number of acres of seed treated with an IST is much higher than Bt acres. Δ