How do we get more out of corn yields with BT corn or conventional corn?

It all starts with the seed coming thru the soil. Will we have even corn emergence, will we be missing plant stands, is the soil compacted, do we spread manure, are we no till or conventional, do we really think seed treatments will give us seed protection? Will seed treatments protect us against all soil insect pests? What insects cause the most losses in BT corn in Western Kansas and Colorado? Is a larger root mass going to lead to higher yields?

Let's start with the seed and follow it like a bouncing ball to the end of production. Stand is everything. Can we get 1,000 more plants per acre and what will that do for our yield? The basics, don't plant wet, make sure the furrow is closed and the seed has good soil contact. Seed treatments are a part of in the bag technology, however to rely on a seed treatment to give you cutworm, wireworm or grub control is not a good practice for increasing corn yields. What growers have is an easy method of application that is better than nothing but not the total answer to insect control in the soil. In almost all cases where our Capture LFR at plant at rates of 3.4 oz per acre have increased plant stands to 1,000 plants per acre or 6 to 8 bushels. It's safe to use and it's long lasting in the soil. It controls cutworms, wireworms and grubs that will rob you of the plant stands you are trying to achieve. Root mass is important. Capture LFR controls grubs that are in every soil underneath feeding on root masses therefore reducing yields and stressing plants. Experiment by placing Capture LFR in your fertilizer and placing it in the furrow with the seed. After emergence count the plant stand in the LFR vs. the untreated area. More plants more dollars in your pocket. Has the plant stand increased and are the plants emerging at the same time? Remember there is no rescue treatment for wireworm, or grubs therefore the only option is to live with you stand or replant. After emergence of corn always scout for insects attacking the stand. In most cases this will be a wireworm or a cutworm. It's easy to scout and can save your stand from major losses. Cutworms can easily be controlled with an application of Hero or Mustang Max. Remember if you don't protect against wireworms there is no rescue treatments available for control.

Now that we have a stand we want to evaluate rootworm control. Rootworms hatch in late May to mid June. Rootworm larvae will feed on the roots and can destroy them if not caught in time. Rootworm corn should be watched as well and is a tool but can have its problems as well. If you have rootworm corn and still have rootworm beetles later in the year you will be subject the next year to root damage that may need to be rescued. In Western Kansas and Colorado the problem with trying to control rootworms in the soil is they are strung out in emergence from early June to sometimes in mid August. This puts a lot of pressure on a rootworm insecticides or rootworm corn. Rootworms can be rescued under irrigation with Furadan 4F Insecticide but is best done when the larvae are small or just emerged. Once the corn has canopy results can be mixed because the Furadan may not get into the soil. Also, quite a few pivots have drops and will not wash the product to the target.

After rootworm the most damaging insect pests that cause corn losses are rootworm beetles and mites. These both can be controlled and at the same time as well as ECB, aphids and other insect pests. Most results have been increased yields of 8 to 30 bushels per acre. The first 21 days after emergence of rootworm beetles spray with 5 oz per acre of Hero + 6 oz of Methyl Parathion of Pencapp and follow that up with the same tank mix after 10 to 14 days depending on rootworm beetle emergence. This will

give you a wide window of controlling beetles, mites, aphids, and other yield robbing insect pests. This will maximize your corn yields for the season.

Enclosed is some data showing Hero for ear feeding insects on conventional corn vs. BT corn. The results show that using Hero even on BT corn will maximize your yields. Plant health treatments are also one method. These treatments are applied with a fungicide at pre tassel. It is shown that only 25 aphids per plant with $6.00 corn are economical. Most growers are very satisfied with plant health treatments of either Brigade 2EC or Hero. This gets an early suppression of mites prior to population buildups.

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Conventional Corn with Hero vs. BT corn!