



## **Seed Treatments Well Worth the Investment**

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The importance of protecting seeds and seedlings from insect and disease damage can not be over-stated. One of the most effective ways to protect the investment made in your seed and your crop is through the use of seed treatments.

In the past, the trend was to treat corn seed with seed applied fungicides but do little to nothing on soybean seed. Today it is a different story. Controlling insect and seedling diseases is just as important in soybeans as in corn. When you look at the yield advantage from traits and the accompanying cost per bag of seed, you must protect this investment. And with commodity prices at an all time high, growers should strive to maximize their yield opportunity.

Seed treatments help to ensure that your seed will perform and provide a good return on investment even when under attack from unknown insects and diseases found early in the growing season.

### **Fungicide Seed Treatments**

Many seed treatment packages have a fungicide base. Insecticide seed treatments or additional fungicide active ingredients may be added to provide broader spectrum seed and seedling protection.

Systemic fungicides used in these combinations last longer and protect the young shoot and roots against seed borne fungi until the plant reaches the seedling stage. Each fungicide has strengths and weaknesses against specific fungi, and often a combination of active ingredients is used to provide broad spectrum disease protection. As new fungicide active ingredients are developed, these combinations will be refined to provide optimal protection using multiple modes of action.

### **Insecticide Seed Treatments**

Insecticide seed treatments are directed at controlling early season soil insects. Again, the specific insects that are controlled at label rates will vary according to the insecticide applied on the seed. Where insect species are known from field history, choose the best active ingredient for this pest where you have an option.

### **How Do You Decide if You Should Use a Seed Treatment?**

- Risk of disease development
  - Higher when planting seed into cold wet soils for extended periods of time
  - Where the previous crop provided sources of disease inoculums (especially for continuous crops)
  - When planting infected seed
  - In fields with a known history of early season disease problems

- Early season insect pressure:
  - Occurs in many cropping situations, soil types, previous crop, tillage practices (affecting soil moisture and temperature as well as crop residue)
  - Where applying manure or where cover crop used
  - Know the history of your fields by way of previous early-season insect scouting, and side-by-side treated vs. untreated plots in your fields for various years to help you assess the need for insecticide seed treatment.

### What Advantages Are There To Using a Seed Treatment?

- Disease and insect risk if early planting is reduced (with use of broad-spectrum fungicide and insecticide seed treatment) resulting in longer growing season and increased yield potential.
- **Poncho 250** is a systemic corn seed treatment that provides early season insect control of corn flea beetle, black cutworm, seedcorn maggot, wireworm, and white grubs. Sixty-eight side-by-side trials over three years with Pride Seeds have shown an average of 6.8 bu/ac yield advantage. The high rate (Poncho 1250) additionally controls northern and western corn rootworm. Use Poncho 1250 on refuge corn when planting triple stacked hybrids such as Pride G3 hybrids.
- **Maxim XL** corn seed treatment contains two active ingredients, fludioxonil and metalaxyl-M, that provides a contact and systemic combination for seed and soil-borne disease protection against *Aspergillus*, *Fusarium*, *Penicillium*, and *Pythium*.
- **Dynasty 100FS** corn seed treatment contains the active ingredient azoxystrobin, with activity against *Pythium* and *Rhizoctonia*.

### Under which situations do you recommend early insect control in corn?

Corn after soybeans (especially no-till)	Cutworms
Corn after wheat	White grubs, European chafer, Possible wireworms
Corn after alfalfa	Wireworms, cutworms, white grub and possible European chafer on sands
Corn on lighter soils	European chafer and cutworms
High grass or no-till where weed pressure the previous year	White grubs
Grassy weed pressure, little soil disturbance, expect delayed germination	Wireworm
Heavy manure applications	Wireworm and white grubs
Corn on corn or where rootworm pressure (use Poncho 1250 alone or use on refuge corn where planting PRIDE G3 hybrids)	Corn rootworm

### What is Pride's New FX Soybean Program?

**Pride's FX** soybean program combines leading Pride soybean varieties with the value added seed treatment technologies of Cruiser Maxx (Thiamethoxam, Fludioxonil, Metalaxyl-M) which provides an insecticide package for early season insect control against seed corn maggot, bean leaf beetle, wireworms, white grubs, European chafer, plus the fungicide seed treatment package to protect against damping-off and seed rots caused by *Pythium*, *Rhizoctonia* and *Fusarium* and seed rot and seedling blight caused by seed-borne *Phomopsis*.

### What are the Benefits of treating soybeans?

- Improved plant stand, vigour and crop uniformity
- Increased yields even under low insect pressure
- Reduction in insect vectored viruses (transferred between plants by bean leaf beetles, aphids)
- Rhizobia (inoculant) friendly

### What if seed is planted in dry conditions?

Cruiser Maxx water solubility allows it to work even in dry weather. Once off the seed, Cruiser Maxx binds to the soil to keep it in the root zone. As Cruiser Maxx is absorbed by the roots it moves systemically throughout the growing plant to provide continuous protection so pests do not get a chance to damage young plants.

### What gain do I get from using seed treatments in each crop?

<b>Advantage of Seed Treatments</b>					
Treatment	Crop	Treatment Cost/acre	Advantage Bu./ac.	\$ Bushel	Seed Treatment ROI Advantage/acre \$
<b><i>Poncho 250</i></b>	<b>Corn</b>	7.3	6	4.60	<b>20.30</b>
<b><i>Cruiser Maxx plus HiStick N/T</i></b>	<b>Soybeans</b>	18	4	12.30	<b>31.20</b>