Trilex AL

Powerful protection for pulses and soybeans

Newly registered Trilex® AL seed treatment provides pulse and soybean growers with a new option to protect their crops from seed and soil-borne diseases as well as a product that works well with inoculants.

New Trilex AL contains two unique fungicides that help protect the seeds and seedlings in the critical early days of growth and establishment. That protection pays later in the season as improved vigor delivers better yields and disease protection safeguards both yield and quality. The two active ingredients and modes of action in Trilex AL are trifloxystrobin, a Group 11 fungicide, and metalaxyl, a Group 4 fungicide.

Trilex AL protects pulse seed and seedlings from economically significant diseases such as seed rot and damping-off caused by *Rhizoctonia solani*, *Fusarium* spp., and *Pythium* spp., root rot caused by *Phomopsis*, as well as seed-borne diseases Botrytis in lentils and *Phomopsis* in soybeans.

**REGISTERED CROPS**
- Bean (succulent, snap and dry): includes field bean, kidney bean, lima bean, navy bean, pinto bean, runner bean, snap bean, tepary bean, wax bean, and other coloured beans
- Chickpea
- Pea (dry and field): includes dwarf pea, edible-pod pea, English pea, field pea, garden pea, green pea, snow pea, sugar snap pea
- Lentil
- Soybean

Trials show that Trilex AL, which is designed for commercial or on-farm treating with conventional seed treating equipment, is safer and works together better than other pulse seed treatments on the market when used with inoculants, whether peat, liquid or granular-based.

**TRIAL RESULTS**

In Bayer CropScience trials conducted in Western Canada from 2002 to 2006, Trilex AL outperformed the major pulse seed treatment competitors and was way ahead of untreated checks for control of *Rhizoctonia* or *Fusarium* in pulses, and *Botrytis* in lentils.

Specifically, in the lentil trials, plant stand was 136.7% greater than the check and yield 121% better. In field peas the stand topped the check by 133% and outyielded the check by 128%. While in chick peas plant stand was an impressive 406% of check and yield 742% of check. In all these crops, Trilex AL outperformed competitors.

In dry beans, which are very susceptible to disease, the plants treated with Trilex AL produced plant stands 1432% greater and yields 126% greater than checks – equal with competitors.

**DRYBEANS**

- **EMERGENCE INDEX – RHIZOCTONIA AND FUNSARIUM INOCULATED TRIALS**
  - **TRILEX AL**: 1432
  - **APRON MAXX**: 1434

**GRAIN YIELD – RHIZOCTONIA OR FUNSARIUM INOCULATED TRIALS**

- **TRILEX AL**: 39.4 bu/ac
- **APRON MAXX**: 39.8 bu/ac

In inoculated trials, dry beans infected with *Rhizoctonia* and *Fusarium* treated with Trilex AL produced a plant stand that was 1432% greater than the untreated inoculated check.

**Dry bean crops treated with Trilex AL yielded 126% greater than the untreated inoculated checks.**

continued on next page
Using inoculants for all pulse and soybean crops is standard practice to maximize plant performance and crop yield. Trilex AL has undergone extensive testing by inoculant companies and has proven to have one of the highest compatibilities between fungicidal seed treatments and rhizobium-based inoculants. Compatibility is measured by assessing the inoculant survival on untreated seed vs. treated seed and it varies with seed treatment brands. Seed treatment fungicide compatibility is influenced by specific formulations of both the fungicide and the inoculation material and application method.

For example, slurry application versus sequential and/or simultaneous applications. When using a combination of seed treatment fungicide and inoculant, always consult inoculant product labels and company compatibility fact sheets for the various methods fungicides can be applied in conjunction with inoculants to pulse crops.

The inoculant manufacturer’s recommendations should always be followed in regards to seed treatment fungicide compatibility and the recommended planting interval after application. Studies (Matus et al. 2004) show that when applied as recommended, seed treatments have no significant effect on rhizobium and the capacity to fix nitrogen. Granular inoculants provide the highest level of compatibility as they are separated from the seed, providing maximum protection to the rhizobium.

With Trilex AL, growers are making a sound investment that delivers returns in plant establishment and ultimately, yield. And because it is the treatment that works best with inoculants, there is greater potential for better stands of seedlings and healthier plants next spring.
BERTHA ARMY WORMS

Assess the problem. Control the damage.

Bertha armyworm (Mamestra configurata) is one of the most significant insect pests of canola in Canada. Severe infestations are usually limited to the parkland area of the Prairies and the Peace River region of British Columbia and Alberta. Infestations may be localized or spread over millions of acres. Widespread crop losses can be minimized with insecticides if the infestation is detected early. However, failure to detect infestations early may result in insufficient time to apply the chemicals before severe damage is done.

LIFE CYCLE
- Bertha armyworms develop through four distinct stages: adult, egg, larva and pupa with one complete generation per year.

HOST PLANTS AND DAMAGE
- Larvae are the only development stage of the bertha armyworm to cause crop damage. They feed on a variety of crops and weeds. Canola, rapeseed, mustard, alfalfa, lamb’s quarters and related plants are preferred host plants. Bertha will also feed on a range of secondary hosts including flax, peas and potato.
- Significant crop damage usually occurs within a three-week period between late July and late August, depending on the season and crop location.
- Twenty larvae per square metre in canola can reduce yields by 1.16 bushels per acre.
- Small larvae feed on the underside of the leaves, chewing irregularly-shaped holes in the leaves. They usually cause little damage at this stage, even when population levels are high. Crop damage occurs rapidly once the larvae moult to the second-last stage. These larvae are about 1.3 cm (1/2 inch) in length. Larvae in the last two larval stages eat about 80% to 90% of the plant material consumed during the life of the larvae.

FIELD MONITORING & SCOUTING

Adult Populations
- Bertha armyworm populations can be monitored using traps baited with sex pheromone, which attracts the male moths. The number of moths collected by these traps gives an indication of the bertha armyworm larval populations to follow. High numbers of moths usually translate into high numbers of larvae later in the season.

Larval Populations
- Early detection and regular monitoring of bertha armyworm larvae are critical to minimize crop losses. Larval monitoring should begin about two weeks after peak trap catches and continue until either the mean number of larvae per square metre exceed economic thresholds and the crop is sprayed, or until the crop is swathed.
- It is important to monitor larval numbers in each field. Adjacent fields may have very different larval densities, depending upon how attractive the crop was when the moths were laying their eggs. Adjacent crops may also have different-sized larvae, depending on when the eggs were laid.
- For accurate larval estimates in a crop, sample at least three locations a minimum of 50 metres apart. Do not sample headlands (20 metres wide) and areas within the crop that are not representative of the field.
- At each location, mark out an area of one quarter of a metre square (50 cm x 50 cm) and beat the plants growing within that area to dislodge any larvae remaining on the plants. Push the plants aside or remove them and count the number of larvae in the 1/4 square metre area. It is important to take your time while counting larvae. Carefully search the soil and leaf litter. The larvae are difficult to see and may be hidden underneath clumps of soil, in cracks in the soil, or within curled leaves. Multiply the number counted by 4 to get the number per square metre. Use the average number of larvae at the sites surveyed within each field to determine if the economic threshold has been exceeded and an insecticide is necessary.

TAKE CONTROL WITH DECIS®

Fast contact kill
- Recognized as one of the fastest acting insecticides, Decis® goes to work, killing the pests within a few hours of contact.

Wide temperature range
- Unlike many insecticides, Decis provides excellent control even at low temperatures.

Economical
- A low price per acre makes Decis® one of the best crop protection buys available today. Refer to the BayerValue program for additional savings.

Crop safety
- Tested in over 80 crops worldwide, Decis® is crop safe regardless of the plant’s development stage.

Low risk to animals and bees
- Application of Decis® can be made with low toxicity risk to mammals and birds. Decis® is one of the safest products to use where concerns exist regarding bee populations. In the case of bees, spray when they’re not foraging, usually in the evening.

Rates
- Active Ingredient: Deltamethrin (50 g/L)
- Rate (mL/ac): 60 mL/ac recommended for optimal control
- Rate (ac/jug): 40 ac/2.4 L jug or 160 ac/9.6 L jug
- Water Volume: 10 gal/ac (ground) or 1-2 gal/ac (aerial)

New 2.4 L jug means more product with the same optimal control at recommended rates.

Information Source: Manitoba Agriculture, Food and Rural Initiatives
New InVigor hybrid canola varieties continue to set the industry pace

Growers of InVigor hybrid canola will have two new varieties – InVigor® 5770 and InVigor® Health 1145 – to choose from in 2010. Both varieties, which are featured at the Bayer Summer Crop Tours, deliver surprising results in yield and potential profits.

**INVIGOR 5770**

Although it is not registered for use as of yet, InVigor 5770 is set to take the canola industry by storm as the highest yielding canola variety in Canada. In the 2007/2008 WCC/RRC public co-op trials, it yielded 135% of the check varieties (46A65, Q2).

InVigor 5770 is best suited for the mid- to long-growing zones of Western Canada. It matures two days later than the average of the checks and features superior lodging resistance.

**At a glance**

<table>
<thead>
<tr>
<th>Growing zones</th>
<th>Mid- to full-season Argentine-type canola growing zones of the Prairie provinces – InVigor 5770 is a late maturing hybrid</th>
</tr>
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<tbody>
<tr>
<td>Yield</td>
<td>135% of the checks (46A65 &amp; Q2) in 2007/2008 public co-op trials</td>
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<td>Height</td>
<td>Medium – 10 cm taller than average of checks (46A65 &amp; Q2)</td>
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<tr>
<td>Maturity</td>
<td>Mid maturity – one day later than checks (46A65 &amp; Q2)</td>
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<td>Blackleg rating</td>
<td>R (resistant)</td>
</tr>
<tr>
<td>Lodging resistance</td>
<td>Excellent – superior to checks</td>
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<tr>
<td>Oil content</td>
<td>Slightly higher than check varieties</td>
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<tr>
<td>Recommended seeding rate</td>
<td>5 lbs/ac – less than open pollinated varieties and other hybrids</td>
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</table>

**INVIGOR® HEALTH 1145**

The increased consumer demand for healthier cooking oils is driving opportunities for canola varieties with a high stability specialty oil profile. That’s where InVigor Health 1145 fits perfectly. High yield potential and eligibility for contract premiums give InVigor growers something more to look forward to in 2010.

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Professional stock car racing fans will have plenty to cheer about this summer when the green flag drops at the 2009 NASCAR Canadian Tire Series 250 in Saskatoon on Wednesday, July 29.

Officially titled Velocity™ M3 Prairie Thunder, the Bayer CropScience-sponsored event will see professional drivers from across Canada competing in the very first NASCAR-sanctioned event to be held at the Auto Clearing Motor Speedway.

Named after Velocity M3, one of Bayer’s leading cereal herbicides, the race is expected to draw fans from around the province.

“We’re pleased to be able to be involved in another Saskatchewan first,” says Lauren Davis, Cereal Herbicides Portfolio Manager with Bayer CropScience. “Velocity M3 will definitely make some positive noise not only for Saskatoon, but for the entire province.”

Along with being the main event sponsor, Bayer CropScience will give away six NASCAR vacation packages which included tickets to the race, two nights accommodation, rounds of golf, limo to and from the race, a meet-and-greet dinner with the drivers and a ride in the pace car.