

**Our Vision**

Building a consumer focused, farmer-owned agri-business with innovative people committed to excellence in a global marketplace.

**Our Mission**

To be a progressive, diversified agri-co-operative providing the benefits of ownership.

**Our Motto**

Proud to be farmer-owned.

04/07

## Manganese deficiency in winter wheat

Are you noticing pale green to yellowish patterns throughout your wheat fields this spring? Are they patchy or erratic in nature, not corresponding to any fertilizer application error but more running with soil types? Then you likely have a manganese deficiency.



Manganese deficiency usually shows up on the plant as yellowing of the upper leaves or faint yellow interveinal strips.

Manganese deficiency occurs in soils high in organic matter. Soils with high pH are also affected. Availability decreases as pH increases and becomes critically low when soil pH rises above 7.0.

Sandy soils have very low manganese content to begin with, so deficiencies may show up there as well.

The best way to combat or manage a manganese deficiency is with foliar micro-nutrients. Most products are compatible with herbicides and can be applied at the same time. Our product of choice for foliar Mn would be Superman 13-4-7 which has 5% Mn in its formulation.

*"The amount of manganese in the soil has almost nothing to do with whether there is a deficiency or not. It is the only nutrient where foliar application is the best method, and the only micronutrient that should be used more frequently than it is."*

Keith Reid, OMAFRA



## CRUISER SEED TREATMENT ON WHITE BEANS

Give your crop strength to protect itself.

- Cruiser moves systemically through roots, shoots, and young seedlings to protect your crops from inside and out
- Improved yield potential due to better plant stands, root systems, uniformity and plant vigour
- Convenient, seed applied insect protection
- Protects against target pests with reduced risk to beneficial insects

### INSECTS CONTROLLED

- Potato leafhopper – adult females live for a month and lay eggs on the veins and petioles of plant leaves. A new adult generation appears two to three weeks later. Both adults and nymphs feed on edible beans killing the leaves and creating "hopper burn".
- Seed corn maggot – maggots feed on organic residue and germinating seeds. They slow down the emergence of plants and reduce plant stands.
- Wireworm – using their network of burrows, wireworms tend to feed along crop rows taking out plants as they progress

### ECONOMICS

- Cost of Cruiser seed treatment at HDC is \$10.00/25 kg for Ontario White Bean Seed (\$10.90/ac based upon average seeding rate)
- Cost of Cygon application – \$9.56/ac plus application (\$8.50/ac) . . . approximately \$18.00/ac
- Cost of Matador application – \$5.25/ac plus application (\$8.50/ac) . . . approximately \$13.75/ac
- Reduce stress from the pressures of scouting during a busy time of year

### SUMMARY

- Cruiser seed treatment ensures that product is there from the beginning
- Immediate cost savings of \$2.85 - \$7.10+/ac over conventional sprays (based upon single spray)
- Improved yield potential

HDC will add Cruiser seed treatment, on order, to your 2007 white bean seed. Please contact your local HDC Field Marketer today. The deadline for Cruiser seed treat orders is April 27/07. No returns of Cruiser seed treatment seed will be accepted, so please order accordingly.

## STRATEGO, PROLINE & FOLICUR OFFER UNBEATABLE CEREAL DISEASE PROTECTION

Cereal diseases are an ever-present threat and can cause moderate to severe losses in unprotected crops. Modest disease pressures can cause over 20% yield losses. Losses to diseases have increased due mainly to changing farming practices, including denser plant populations, tighter rotations and higher targeted yields. Most disease-causing organisms are invisible to the naked eye – only after symptoms appear can you see their effects. Many growers apply fungicides sooner rather than later to minimize the effects of infection. They know from experience preventive action maximizes their returns.

### Stratego® – Leaf disease control in cereals

Stratego is the only post-emergent cereal leaf disease fungicide with two distinct modes of action. It combines two powerful chemistries with preventive and systemic disease control for built-in resistance management – propiconazole (Group 3) and trifloxystrobin (Group 11). This results in excellent performance on a broad spectrum of cereal leaf diseases including rusts, tan spot, *Septoria* and powdery mildew, as well as scald and net blotch in barley.

**PREVENTION** – Stratego prevents spore germination so plant tissue isn't damaged and the plant doesn't waste energy fighting infection.

**PERSISTENCE** – Stratego provides a long-lasting barrier against disease, even when applied during changing weather conditions.

**PROTECTION** – Stratego stays close to the plant surface providing limited curative activity. Stratego is ideal for tank-mixing with your cereal herbicide. It is registered in wheat with Buctril M for application from the 4-leaf stage to the flag-leaf stage. In seven Bayer CropScience research trials in 2003-2004, tan spot reduced yield by 9% vs. Stratego at the early 4-leaf stage timing.

### Proline® - Improved FHB and DON reduction in wheat and barley

Proline sets a new standard for total protection against stem base, leaf and head diseases, including *Fusarium* head blight (FHB) in both wheat and barley. Proline contains the active ingredient prothioconazole which is highly systemic, allowing Proline to deliver curative, protective and eradicated activity. In wheat, Proline offers complete protection of leaf diseases in addition to its market leading FHB protection and DON reduction. DON levels are dramatically reduced compared to an untreated check, and greatly reduced from crops treated with the current market leader. Canadian research has shown disease protection that consistently produces yield results of 10% over untreated checks. Under

extremely high FHB pressures, yields in research trials were as high as 70% greater than untreated checks. In barley it provides protection against FHB and significantly decreases levels of mycotoxins as well as protecting against all major barley leaf diseases including *Fusarium* head blight (suppression), net blotch, spot blotch, scald, *Septoria* glume blotch, *Septoria* leaf blotch, tan spot, and rust.

### Folicur® – Tried and true FHB and leaf disease protection in wheat

Folicur provides protection against serious wheat diseases, including *Fusarium* head blight (FHB), rusts, *Septoria*, tan spot and powdery mildew. Folicur works systemically, being absorbed by leaf tissue and moving throughout a plant to provide uniform protection. When applied at heading, Folicur provides protection against *Fusarium* head blight, and reduces both FDK (*Fusarium* damaged kernels) and the mycotoxin DON. Trials have documented Folicur's ability to protect wheat crops against leaf diseases.

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## SPRAYING WEEDS IN WHEAT

by Rob Warwick

When it is time to spray your wheat, weed identification is important to ensure proper chemical selection. Estaprop can be sprayed at the 3-5 leaf stage of broadleaf weeds, in a non-underseeded crop. If your wheat is underseeded to red clover you must use Buctril M or MCPA. Know your weed and crop stage. Ideally you want to spray before the flag leaf to get the greatest return. Earlier spraying gives the best yield response and the highest level of control.

Spraying when the wheat and weeds are actively growing will help with herbicide uptake by weeds. Avoid spraying in cool temperatures below 7°C, or in the rain or wind (15 km/h max). Select a nozzle tip with a medium droplet size. Too fine can cause drift and too coarse can lead to poor coverage. As a rule, the higher the nozzle pressure the finer the spray droplets and the higher the drift potential.

When applying herbicides, consider the additional benefits of adding a foliar fertilizer like Crop Booster. In a four-year trial, the addition of 1 L/ac of Crop Booster added 2.9 bu/ac average yield. If wheat is at \$4.50/bu and Crop Booster is \$4.90/ac, your return is \$13.05/ac. Add the Crop Booster to your tank-mix before the herbicide to prevent antagonism.

These guidelines will help ensure optimum yields and a profitable year.



**Hensall**  
262-3002  
1-800-265-5190

**Seaforth**  
522-1000

**Londesboro**  
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**Exeter**  
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**Ailsa Craig**  
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**Parkhill**  
294-6252

**Forest**  
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## **VOLUNTEER ADZUKI BEAN CONTROL**

If you don't want it in the field, it's a weed. That's the rule. The ability of adzuki beans to dry down at maturity allows them to overwinter and emerge in the following crop. Controlling those that emerge as volunteers takes some strategy and understanding of what is happening. Adzukis will tolerate some herbicides used in dry beans and some used in soybeans.

Experienced adzuki growers know how to manage these volunteer plants so that they do not have an adverse effect on the next crop. Planning for control is the key to successful elimination.

Eliminating volunteer adzukis in glyphosate tolerant crops is quite easy since the in-crop application will control them well. In conventional corn, the best control is obtained with post-emergent application of products containing dicamba while pre-emergent application of the same product will give inconsistent control. Contact with the seedling is critical. In conventional soybeans, reasonable control has been achieved with the application of Classic post-emergent. In processing peas, good control has been obtained using MCPA. In wheat following adzukis, the plants can be controlled after the wheat is harvested. The timing of application is critical. The best control will be achieved when seedlings are small – less than the third trifoliolate stage.

A three to four year rotation can be used to confine the volunteer plants to specific acreage. Seed growers, be aware that these beans could show up in your dry bean or soybean seed production. To avoid the issue completely, plant another market class of dry beans such as whites, blacks or even edible soybeans.

Shallow incorporation of the seed in the fall or spring induces germination so that glyphosate can be applied either pre-plant or early post-emergent. However, if not all the seeds germinate, any incorporation of the remaining seed during subsequent tillage operations will induce another flush of plants. Incorporating the beans deeply with more aggressive primary tillage may cause the seeds to remain dormant and emerge in later years.

With proper management the issue of volunteer adzuki beans is greatly diminished if not totally eliminated. Planting a following crop in which control can be achieved is a big part of the plan. Taking action with the right herbicides at the right time will give good results.