Product Guide

WESTERN CANADA — 2025

Welcome to our digital product guide!

This interactive guide has:

- A navigation bar at the bottom of every page
- A table of contents with clickable links to every product page
- Clickable QR codes on every product page that take you to our website for more information

Reach out to your local rep if you have any questions.

syngenta®

ZERO HUNGER CHALLENGE

Thank you for helping us tackle food insecurity in rural Canada through support of our Zero Hunger Challenge.

Contact us

By phone:
Syngenta Customer Interaction Centre: 1-87-SYNGENTA (1-877-964-3682)
Our call centre has representatives available all year long to help you with any questions you may have regarding our products and services. Be assured that you will be speaking with a knowledgeable Syngenta employee who is located in Western Canada.

In person:
Contact your preferred Syngenta retailer or Syngenta Representative. With more than 60 Syngenta Canada Representatives located in Western Canada, our field force is dedicated to providing you with direct support.

Connect with us on Social Media:

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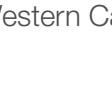

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We strive to ensure that this guide provides you with the most accurate and timely product information available at the time of printing.
To get the most up-to-date product and label information, please visit Syngenta.ca.

Welcome to the 2025 Western Canada Product Guide

Before you dive in to see what's new at Syngenta, I want to sincerely thank you for your hard work and dedication to Canadian agriculture. The contributions made by farmers, retailers, agronomists and others involved in crop production are an integral part of why Canada has a worldwide reputation for producing safe and high-quality food using sustainable practices.

'Sustainable agriculture' is a phrase we hear a lot these days. But what does it mean? At Syngenta Canada, we define it as the ability to farm generation after generation while protecting the environment, remaining economically viable, and meeting society's needs.

Canadian farmers have made significant contributions to advance sustainable agriculture. From reducing tillage to adopting precision agriculture technology, farmers work hard to ensure those following in their footsteps can prosper on the land and can continue the important work of helping feed the world.

Our commitment at Syngenta is to match your passion and to keep earning your trust. We do this through exceptional customer experiences backed by a portfolio of innovative products that support farmers in growing their best crop each season.

One example of this innovation has been the **Miravis® family** of fungicides powered by our breakthrough active ingredient ADEPIDYN®. I can hardly believe five years has passed since its introduction in Canada. Farmers from coast to coast have adopted Miravis brand fungicides to protect yields and maximize quality like never before.

For 2025 we will be launching **YieldON® liquid biostimulant** that can be applied at fungicide timing to further boost yield and profitability. I look forward to seeing how we can help boost cereal productivity by pairing YieldON with Miravis® Ace or Miravis® Era.

We have also introduced two pulse herbicides: **Canvista®** for control of common broadleaf weeds and grasses found in IMI-tolerant lentil crops, and **Nelatic®** to protect yield in field peas from grasses and broadleaf weeds.

Another addition to our pulse lineup in 2025 is the **Atuva® family of pulse inoculants**. Available as a granular and liquid formulation, Atuva helps maximize nodulation in pulse and soybean crops delivering effective Biological Nitrogen Fixation under a variety of agronomic conditions.

Finally, we are expanding our cereal herbicide portfolio with **Axial® Maxx** herbicide featuring four active ingredients to deliver best-in-class grass and broadleaf weed control.

I'm optimistic about what 2025 holds. And while it will have its own unique challenges, we remain focused on providing innovative solutions, valuable agronomic insights and dependable in-season support to our customers.

On behalf of the entire Syngenta Canada team, I'd like to sincerely thank you for your support. We look forward to continuing to partner with you in the season ahead.

Trevor Heck
President, Syngenta Canada Inc.

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Apron® Advance

Enhanced Ascochyta control for chickpeas and lentils.

Apron® Advance seed treatment combines three powerful fungicides with multiple modes of action to provide an enhanced broad disease package, including Ascochyta control. Apron Advance assists with healthier crop establishment in chickpeas and lentils, setting the ideal foundation for higher, more consistent yields. It is also rhizobium-compatible and the red, concentrated, water-based formulation aids in uniform application.

Active ingredients:

- Thiabendazole (Group 1 fungicide), metalaxyl-M (Group 4 fungicide), and fludioxonil (Group 12 fungicide)

For use on:

- Chickpeas
- Dry beans (including lupins and dry faba beans)
- Dry peas
- Lentils

For control of:

	Pythium spp.	*Fusarium* spp.	*Rhizoctonia* spp.	*Botrytis* spp.[1]	*Ascochyta* spp.	*Colletotrichum* spp.
Lentils						
Seed rot	●	●	●	●		
Pre- and post-emergent damping-off	●	●	●			
Seedling blight	●	●	●	●		
Seedling root rot		●				
Seed-borne Ascochyta blight[2]					●	
Chickpeas						
Seed rot	●	●	●	●		
Pre- and post-emergent damping-off	●	●	●			
Seedling blight	●	●		●		
Seed-borne Ascochyta blight[3]					●	
Dry peas						
Seed rot	●	●	●			
Pre- and post-emergent damping-off	●	●	●			
Seedling blight	●	●	●			
Seed-borne Ascochyta blight and foot rot[4]					●	
Dry beans						
Seed rot	●	●	●			
Pre- and post-emergent damping-off	●	●	●			
Seedling blight	●					
Seed-borne anthracnose						●

● Control

[1] Caused by seed-borne *Botrytis* spp. [2] Caused by *Ascochyta lentis.* [3] Caused by *Ascochyta rabiei.* [4] Caused by *Ascochyta pinodes.*

Application guidelines:

- Apron Advance is a seed treatment formulation for use in commercial seed treatment facilities, and for on-farm treatment using auger treating only; do not use in hopper box or seed drill.
- Equipment should be calibrated prior to treatment to ensure uniform coverage of Apron Advance. Uneven seed coverage may not give the desired level of disease control. Calibration of seeding equipment is also recommended before planting treated seed.

Use rates and packaging:

- 100 mL/100 kg seed (add water to make slurry volume of 325 mL/100 kg).
- Apply 100 mL of Apron Advance plus 225 mL of water (or rhizobia inoculant at rates recommended by the manufacturer plus water to achieve proper total slurry volumes) per 100 kg of seed.
- For chickpeas, a total slurry volume of 650 mL per 100 kg of seed is recommended for optimal coverage.

Packaging

- Case: 2 x 10 L (underfilled to 3.1 L)

Tank mixes:

- Apron Advance is compatible with Rhizobium-based inoculants. Please check with inoculant manufacturers for details prior to use.

Re-cropping and use restrictions:

- Do not plant any crop other than those listed on the label for 30 days.
- Do not use treated seed for food, feed, or oilseed purposes.
- Ideal storage is between 0°C and 30°C; avoid freezing.
- For dry peas, do not graze treated crops or cut for forage or hay within 65 days of planting.
- For all other labelled crops, do not graze treated crops or cut for forage or hay within 30 days of planting.

NOTE:

Seed infected with Ascochyta is an important vehicle for moving the disease into new areas due to the ability of the pathogen to readily transmit from the infected seed to seedlings. Apron Advance will minimize the growth of disease on the seed and prevent the movement of disease from field to field. Apron Advance is a valuable tool in an integrated approach to Ascochyta management in pulse crops.

For the most up-to-date product and label information, follow the QR code

Cruiser® 5FS

PULSES

Add protection from insects such as wireworm and pea leaf weevil to seed treatments.

Use Cruiser® 5FS with Syngenta Seedcare™ fungicide products to improve or increase insect protection from pests that impact stand establishment, plant vigour and even nodulation in pulses. Get the added benefit of Vigor Trigger™ for quick, even emergence even under early season stresses like cold and wet conditions.

Active ingredient:

- Thiamethoxam (Group 4A insecticide)

For use on[1]:

- Chickpeas
- Dry peas
- Faba beans
- Lentils

For control of:

- Wireworms[2]
- Pea leaf weevil

Application guidelines:

- Apply using a closed-system seed treater that provides even, thorough coverage.
- This product does not contain a colourant–it must be applied in a tank mix with a fungicide seed treatment that contains a colourant.

Use rates and packaging:

- Wireworm: For early suppression of low populations only, apply at 17 mL/100 kg of seed, which provides 10 g of active ingredient per 100 kg of seed. For situations where higher wireworm populations are present and greater levels of control are required, apply at 33 to 50 mL/100 kg, which provides 20 to 30 g of active ingredient per 100 kg of seed.
- Pea leaf weevil: To control pea leaf weevil adults and reduce nodule feeding by larvae, apply at 50 mL/100 kg of seed, which provides 30 g of active ingredient per 100 kg of seed.

Packaging

- Tote: 23.4 L
- Tote: 56.78 L

[1] See product label for complete list of crops.
[2] Suppression

Tank mixes[3]:

- Tank mix with other Syngenta fungicide-only pulse Seedcare products.
- When applied as a tank-mix combination, read and observe all label directions, including rates, restrictions, and grazing limitations for each product used in the tank mix. Follow the more stringent precautionary measures for mixing, loading, and applying stated on both product labels.

Re-cropping and use restrictions:

- May be applied on-farm through a closed-system application and transfer (including closed mixing, loading, calibrating, and closed treatment equipment) or through a commercial seed treatment facility. A commercial seed treatment facility must be utilized to apply Cruiser 5FS at a rate of more than 50 mL/100 kg of seed (which provides 30 g of active ingredient per 100 kg of seed).
- For on-farm seed treatment of pulses (dried, shelled peas, and beans) and small-grain cereals (except oats): Workers must wear cotton coveralls over a long-sleeved shirt and long pants, chemical-resistant gloves, and a NIOSH/MSHA-approved dust mask during mixing, loading, treating, clean up, and maintenance of seed treatment equipment.
- Store away from food and feed.
- Do not graze or feed livestock on seeded area for 45 days after planting.

[3] See product label for a complete list of tank-mix products.

For the most up-to-date product and label information, follow the QR code

Cruiser® 5FS

SOYBEAN

Effective insect protection that pairs well.

Cruiser® 5FS seed treatment controls key pests that impact stand establishment and helps enhance root health for more resilient plants. Cruiser 5FS can also be paired with Seedcare™ fungicide products for robust insect and disease protection.

Active ingredient:
- Thiamethoxam (Group 4A insecticide)

For use on[1]:
- Soybeans

For control of:
- Bean leaf beetle
- Seedcorn maggot
- Soybean aphids[2]

Application guidelines:
- Product must be commercially applied to the seed prior to planting.
- Apply using a closed-system seed treater that provides even, thorough coverage.
- This product does not contain a colourant–it must be applied in a tank mix with a fungicide seed treatment that contains a colourant.

Use rates and packaging:
- Apply Cruiser 5FS seed treatment at a rate of 50 mL/100 kg of seed (30 grams a.i/100 kg of seed).

Packaging
- Tote: 23.4 L
- Tote: 56.78 L

Tank mixes[3]:
- For additional control of certain seed- and soil-borne pathogens, tank mix with other Syngenta fungicide-only soybean Seedcare products. Consult each product label for registered use rates and follow all label use instructions.

Re-cropping and use restrictions:
- Treated seed must not be used for food, feed or oil processing.
- Store away from food and feed.
- Do not graze or feed livestock on treated areas for 45 days after planting.

[1] See product label for complete list of crops.
[2] Suppression.
[3] See product label for complete list of tank-mix products.

For the most up-to-date product and label information, follow the QR code

Cruiser® Vibrance® Quattro

Wireworms are full of tricks...but so are we.

Cruiser® Vibrance® Quattro is the trusted wireworm solution in cereals and provides excellent performance on a broad spectrum of seed- and soil-borne diseases. It also features the added benefits of Rooting Power® and Vigor Trigger™ to help get your crop off to a vigorous, strong-standing start.

Active ingredients:

- Thiamethoxam (Group 4A insecticide), difenoconazole (Group 3 fungicide), metalaxyl-M (Group 4 fungicide), sedaxane (Group 7 fungicide), and fludioxonil (Group 12 fungicide)

For use on:

- Barley
- Durum
- Oats
- Rye
- Spring wheat
- Triticale
- Winter wheat

For control of:

	Barley	Oats	Rye	Triticale	Winter wheat	Spring wheat	Durum
Insects							
Wireworm	●	●	●	●	●	●	●
European chafer[1]	●				●	●	●
Diseases							
Seed rots caused by *Fusarium*, *Pythium*, *Rhizoctonia*, *Penicillium,* and *Aspergillus* spp.	●	●	●	●	●	●	●
Seedling blight, root rot, and damping-off caused by seed- and soil-borne *Fusarium* spp. or *Rhizoctonia* spp. and soil-borne Pythium	●	●	●	●	●	●	●
Covered smut *(Ustilago hordei)*	●	●					
Loose smut *(Ustilago avenue)*		●					
Loose smut *(Ustilago tritici)*				●	●	●	●
False loose smut *(Ustilago nigra)*	●						
True loose smut *(Ustilago nuda)*	●						
Common bunt *(Tilletia tritici)*[2]			●		●	●	●
Dwarf bunt *(Tilletia controversa)*[2]			●		●		
Common root rot (*Cochliobolus* spp.)	/	/	/	/	/	/	/
Fusarium crown and foot rot	/		/	/	/	/	/
Take-all	/		/	/	/	/	/
Seed-borne Alternaria (*Alternaria* spp.)	●	●	●	●	●	●	●

● Control / Suppression[3]

[1] For control of European chafer activity on wheat and barley, mix Cruiser Vibrance Quattro with Cruiser 5FS seed treatment to achieve a total use rate of 30 g of thiamethoxam per 100 kg seed. Consult each product label for registered use rates and follow all label use instructions. Read the label directions for each product and follow the most restrictive label precautions and limitations.
[2] Controls both seed- and soil-borne common and dwarf bunts.
[3] Suppression means consistent control at a level that is not optimal but is still of commercial benefit.

Application guidelines:

- Cruiser Vibrance Quattro may be applied to seed commercially or on-farm without the requirement of a closed system.
- Equipment should be calibrated prior to treatment to ensure uniform coverage. Uneven seed coverage may not give the desired level of control. Calibration of seeding equipment is also recommended before planting treated seed.

Use rates and packaging:

- 325 mL/100 kg of seed

Packaging

- Case: 2 x 10 L
- Drum: 115 L
- Tote: 450 L

Crop	mL/100 kg	mL/bu	bu/L	Bushels treated per 10 L*	Bushels treated per 115 L	Bushels treated per 450 L
Wheat	325	88.4	11.3	113	1,300	5,088
Barley	325	70.8	14.1	141	1,625	6,360
Oats	325	50.1	20.0	200	2,294	8,978

*2 x 10 L jugs in a case

Tank mixes:

- Cruiser Vibrance Quattro contains thiamethoxam at a use rate of 20 g per 100 kg of seed. When wireworm populations are high, Cruiser Vibrance Quattro can be tank mixed with Cruiser 5FS seed treatment to achieve a total use rate of 30 g of thiamethoxam per 100 kg of seed. Consult each product label for registered use rates and follow all label use instructions. Read the label directions for each product and follow the most restrictive label precautions and limitations.

Re-cropping and use restrictions:

- Treated seed must not be used for food, feed, or oil processing.
- To prevent contamination, store away from food and feed.
- For seed treated with Cruiser Vibrance Quattro, do not graze or feed livestock on treated areas for 45 days after planting.
- Do not plant any crop other than cereals, corn, soybeans, members of Crop Subgroup 6C (dried, shelled peas and beans), members of Crop Subgroup 20A (canola/rapeseed subgroup) or potatoes within 60 days to fields in which seed treated with Cruiser Vibrance Quattro was planted.
- All seed treated with this product must be conspicuously coloured at the time of treatment.
- **No open transfer is permitted for commercial seed treatment (facilities and mobile treaters) of barley, wheat, oats, rye, and triticale.**

For the most up-to-date product and label information, follow the QR code

Fortenza®

CANOLA

Absence makes the crop grow stronger.

For canola growers who want to improve their insect control spectrum, Fortenza® seed treatment provides added control of cutworm. When Fortenza is paired with seed treatments that offer broad-spectrum disease management and flea beetle protection, canola is better able to reach its full potential.

Active ingredient:
- Cyantraniliprole (Group 28 insecticide)

For use on:
- Canola

For control of:
- Cutworms

Application guidelines:
- Fortenza is available only in commercial seed treatment facilities.
- On-farm seed treatment is not permitted for canola.
- Equipment should be calibrated prior to treatment to ensure uniform coverage. Uneven seed coverage may not give the desired level of insect control. Calibration of seeding equipment is also recommended before planting treated seed.

Use rates and packaging:
- Fortenza is available on pre-treated seed only.

Re-cropping and use restrictions:
- Closed mixing and treating of Fortenza is required.
- Do not make any subsequent application of a Group 28 insecticide (for example, soil or foliar) following use of Fortenza seed treatment.
- Treated seed must not be used for food, feed, or oil processing.
- Do not graze or feed livestock on treated areas.
- See label for re-cropping restrictions.

For the most up-to-date product and label information, follow the QR code

Fortenza®

SOYBEAN

Protect your soybean seeds and seedlings from below-ground insect feeding.

Fortenza® is a Group 28 insecticide seed treatment for control of key early-season insects including wireworms and cutworms, and early season reduction of soybean aphids. Even under heavy insect pressure, Fortenza helps growers build a strong soybean stand with faster, more uniform growth.

Group chemistry:
- Cyantraniliprole (Group 28 insecticide)

For use on:
- Soybeans

For management of:
- Bean leaf beetle[1]
- European chafer
- Seedcorn maggot
- Wireworms
- Cutworm
- June beetle
- Soybean aphid[2]

Application guidelines:
- For use in commercial seed treatment.
- This product contains no colourant. An appropriate colourant must be added when this product is applied.

Use rates and packaging:
- Fortenza has a registered use rate of 41.5–83 mL/100 kg of seed. The high rate should be used for higher insect pressure and wireworm control as well as early-season reduction of soybean aphid populations.

Packaging
- Case: 2 x 8 L

Mixing order:
1. Mix Fortenza with fungicide seed treatment in a tank with good mixing ability.
2. Apply slurry directly to dry seed.
3. Allow the seed to dry before bagging or using.

[1] Use for early-season feeding damage of bean leaf beetle.
[2] Early-season reduction of soybean aphid populations.

Tank mixes:

- Fortenza can be tank-mixed with Vayantis® IV RFC fungicide seed treatment for control of labelled early-season diseases.
- Please consult the label for additional tank mix options.

Re-cropping and use restrictions:

- Closed mixing and treating of Fortenza is required.
- Do not make any subsequent application of a Group 28 insecticide (for example, soil or foliar) following use of Fortenza seed treatment.
- Treated seed must not be used for food, feed, or oil processing.
- Do not graze or feed livestock on treated areas.
- See label for re-cropping restrictions.

For the most up-to-date product and label information, follow the QR code

Fortenza® Advanced

Flea beetle and cutworm control made simple.

When you want a simple option to protect your canola seed investment, Fortenza® Advanced is the seed treatment of choice. With two high-performing insecticides in one product, Fortenza Advanced provides effective striped and crucifer flea beetle control and quickly manages cutworms before plant populations are reduced due to insect feeding. Fortenza Advanced also helps improve stand establishment so you can fully realize your canola's genetic potential.

Active ingredients:

- Sulfoxaflor (Group 4C insecticide) and cyantraniliprole (Group 28 insecticide)

For use on:

- Canola

For control of:

- Cutworms
- Flea beetles, including striped flea beetle and crucifer flea beetle

Application guidelines:

- Fortenza Advanced is available only in commercial seed treatment facilities.
- On-farm seed treatment is not permitted for canola.
- Equipment should be calibrated prior to treatment to ensure uniform coverage. Uneven seed coverage may not give the desired level of insect control. Calibration of seeding equipment is also recommended before planting treated seed.

Use rates and packaging:

- Fortenza Advanced is available on pre-treated seed only.

Tank mixes:

- Helix® Saltro®
- Helix Vibrance®
- Prosper® EverGol®

Re-cropping and use restrictions:

- Treated seed must not be used for food, feed, or oil processing.
- Closed mixing and treating of Fortenza Advanced is required.
- Do not plant any crop other than barley, wheat or members of Crop Group 1 (root and tuber vegetables), Crop Group 5 (brassica leafy vegetables) or Crop Subgroup 20A (canola/rapeseed subgroup) within 30 days to fields in which treated seed was planted.
- Store away from feed and foodstuffs.

For the most up-to-date product and label information, follow the QR code

Helix® Saltro®

Canola protection–from the ground up.

Protecting your canola seed investment with Helix® Saltro® pays off, delivering the most comprehensive protection in a base seed treatment–including flea beetles and seed- and airborne blackleg–plus Rooting Power® and Vigor Trigger™ benefits that help your crop reach its maximum potential.

Active ingredients:

- Thiamethoxam (Group 4A insecticide), difenoconazole (Group 3 fungicide), metalaxyl-M (Group 4 fungicide), ADEPIDYN® (Group 7 fungicide), sedaxane (Group 7 fungicide), and fludioxonil (Group 12 fungicide)

For use on:

- Canola

For control of:

Insects:

- Flea beetles

Diseases:

- Seedling disease complex (seedling blight, damping-off, seed rot and root rot) caused by *Pythium* spp., *Fusarium* spp., and *Rhizoctonia* spp.
- Seed-borne Alternaria (*Alternaria* spp.)
- Seed-borne and airborne blackleg (*Leptosphaeria maculans*)

Application guidelines:

- Helix Saltro® is available only in commercial seed treatment facilities.
- On-farm seed treatment is not permitted for canola.
- Equipment should be calibrated prior to treatment to ensure uniform coverage. Uneven seed coverage may not give the desired level of control. Calibration of seeding equipment is also recommended before planting treated seed.

Use rates and packaging:

- Helix Saltro® is available on pre-treated seed only.

Re-cropping and use restrictions:

- Treated seed must not be used for food, feed, or oil processing.
- Closed mixing and treating of Helix Saltro® is required.
- Do not graze or feed livestock on treated areas.

For the most up-to-date product and label information, follow the QR code

Helix® Vibrance®

For canola that truly thrives.

Helix® Vibrance® foundation seed treatment combines four fungicides and one insecticide to deliver broad-spectrum pest control that includes Rhizoctonia and flea beetles. With quick-acting, long-lasting protection and proven seed safety, Helix Vibrance performs consistently under a wide range of growing conditions while the Rooting Power® of Vibrance delivers stronger roots.

Active ingredients:

- Thiamethoxam (Group 4A insecticide), difenoconazole (Group 3 fungicide), metalaxyl-M (Group 4 fungicide), sedaxane (Group 7 fungicide), and fludioxonil (Group 12 fungicide)

For use on:

- Canola
- Oilseed mustard
- Rapeseed
- Condiment mustard

For control of:

Insects:

- Flea beetles

Diseases:

- Seedling disease complex (seedling blight, damping-off, seed rot, and root rot) caused by *Pythium* spp., *Fusarium* spp., and *Rhizoctonia* spp.
- Seed-borne Alternaria *(Alternaria* spp.*)*
- Seed-borne blackleg (*Leptosphaeria maculans*)

Application guidelines:

- Helix Vibrance is available only in commercial seed treatment facilities.
- On-farm seed treatment is not permitted for canola.
- Equipment should be calibrated prior to treatment to ensure uniform coverage. Uneven seed coverage may not give the desired level of control. Calibration of seeding equipment is also recommended before planting treated seed.

Use rates and packaging:

- Helix Vibrance is available on pre-treated seed only.

Re-cropping and use restrictions:

- Treated seed must not be used for food, feed, or oil processing.
- Closed mixing and treating of Helix Vibrance is required.
- Do not graze or feed livestock on treated areas.

For the most up-to-date product and label information, follow the QR code

Pelta™

Make every canola seed count for more.

The natural variability in canola seed size can cause challenges, such as seeding misses and double- or triple-seeded canola, which impact emergence and stand establishment. Pelta™ seed pelleting technology helps reduce the uncertainty, guesswork–and frustration–around growing canola. How? By making canola seed more consistent in size.

Technology:

- Seed pelleting technology

For use on:

- Canola

Product benefits:

Pelta seed pelleting technology makes canola seed larger and more uniform. Uniform canola seed lets farmers take advantage of singulation planter technology for more accurate seed placement, leading to:

- Better seed survivability–by up to 40%.
- Stronger stand establishment.
- More even crop development–making it easier to time in-season herbicides, fungicides, and desiccation.
- Maximized canola hybrid performance and yield potential.

With Pelta, you get consistency in every bag:

- Pelta technology helps seed companies ensure every bag of seed contains the same number of seeds. So, you can purchase exactly what you need to meet your target seedlings per acre.
- While canola seed size can vary from year to year, Pelta-sized seed means there is no need to hunt down the right bag of seed.

Untreated canola seed | **Industry-standard treatment** | **Pelta and industry-standard treatment**

All samples taken from the same seed lot. Source: The Seedcare Institute, Plattsville, ON–August 2021

Application guidelines:

- Pelta is available only in commercial seed treatment facilities.

Tank mixes:

- Pelta comes with the best seed treatment package available–Helix® Saltro® plus Fortenza® Advanced–for protection from flea beetles and cutworms, plus a broad spectrum of seed- and soil-borne diseases, including blackleg.

Use restrictions:

- Pelta pelleted canola seed allows farmer to take advantage of singulation planter technology for more accurate seed placement.
- There are no use restrictions for Pelta pelleted canola seed. If the seed has also been treated with a seed treatment, ensure all appropriate use restrictions for the treatment are followed.

Pelta will be exclusively available on Canterra canola for the 2025 season.

For the most up-to-date product and label information, follow the QR code

Vayantis® IV RFC

Four ways to rock early-season disease.

Vayantis® IV RFC seed treatment is the next generation of soybean seed treatments from Syngenta. It delivers comprehensive, next-level performance against a wide range of early-season seed and seedling diseases–including the broadest Pythium and Phytophthora protection available–for a stronger standing, higher-performing crop.

Active ingredients:

- Metalaxyl-M (Group 4 fungicide), sedaxane (Group 7 fungicide), Fludioxonil (Group 12 fungicide), picarbutrazox (Group U17 fungicide)

For use on:

- Soybeans

For control of:

- *Phytophthora megasperma* var. *sojae* (early-season root rot)
- *Rhizoctonia* spp. (seed rot/pre-emergence damping-off, post-emergence damping-off, seedling blight)
- *Pythium* spp. (seed rot/pre-emergence damping-off, post-emergence damping-off, seedling blight)
- *Fusarium* spp. (seed rot/pre-emergence damping off, post-emergence seedling blight, and seedling root rot)
- Seed-borne *Phomopsis* spp. (seed rot and seedling blight)

Application guidelines:

- Vayantis IV RFC is available only in commercial seed treatment facilities.
- Equipment should be calibrated prior to treatment to ensure uniform coverage of Vayantis IV RFC. Uneven seed coverage may not give the desired level of disease control. Calibration of seeding equipment is also recommended before planting treated seed.

Use rates and packaging:

- 130 mL/100kg seed

Packaging

- Tote: 56 L

Water volumes:

- Add enough water to make a slurry of 325 mL per 100 kg of seed.

Mixing order:

1. For mixing Vayantis IV RFC with other products in the mix tank, start with half or a small amount of the water required to make the slurry.
2. Add Vayantis IV RFC and other insecticide and/or fungicide products.
3. Add the rest of the water.
4. Follow the manufacturer's application instructions for the seed treatment equipment being used. Maintain constant agitation of the slurry during the seed treatment process.
5. Allow the seed to dry before bagging.

Tank mixes:

- For protection from labelled insect pests, Vayantis IV RFC may be mixed with Cruiser® 5FS or Fortenza® insecticide seed treatments. Consult each product label for registered use rates and follow all label use instructions.
- Compatible with rhizobium-based inoculants. Please check with inoculant manufacturers for specific instructions.

Re-cropping and use restrictions:

- Treated seed must not be used for food, feed, or oil processing.
- Store away from food and feed.
- Do not sow any crop other than corn or soybeans within 30 days to fields in which seed treated with Vayantis IV RFC seed treatment was planted.
- Do not graze or feed livestock on treated area for 45 days after planting soybeans.
- Seed treated with Vayantis IV RFC must be labeled with the following statements:

"This seed has been treated with the fungicides metalaxyl-M and S-isomer, fludioxonil, sedaxane and picarbutrazox. When handling and planting treated seed, workers must wear cotton coveralls or long-sleeved shirt and long pants, chemical-resistant gloves, and work boots. For good hygiene practice, it is also recommended to wear a NIOSH-approved N95 filtering facepiece respirator (dust mask) that is properly fit tested during all job activities."

For the most up-to-date product and label information, follow the QR code

Vibrance® Maxx RFC

Best-in-class Rhizoctonia control in a pre-mix.

Vibrance® Maxx RFC fungicide seed treatment provides broad, early-season disease control, including best-in-class Rhizoctonia protection, packaged in an all-in-one pre-mixed concentrate so you can just add water and go.

Active ingredients:

- Metalaxyl-M (Group 4 fungicide), sedaxane (Group 7 fungicide), and fludioxonil (Group 12 fungicide)

For use on:

- Chickpeas
- Dry beans
- Dry peas
- Faba beans
- Lentils
- Lupins
- Soybeans

For control of:

Diseases	Soybeans	Dry beans	Chickpeas	Lentils	Dry peas	Lupins	Faba beans
Seed rot/pre- and post-emergence damping-off caused by *Fusarium* spp., *Pythium* spp., and *Rhizoctonia* spp.	●	●	●	●	●	●	●
Seedling blight caused by *Fusarium* spp.	●		●	●	●	●	●
Seedling blight caused by *Rhizoctonia solani*	●	●	●	●	●	●	●
Seedling blight caused by *Pythium* spp.	●	●	●	●	●	●	●
Seedling root rot caused by *Fusarium* spp.	●			●			
Seed rot and seedling blight caused by seed-borne *Phomopsis* spp.	●						
Early-season root rot caused by *Phytophthora megasperma* var. *sojae*	●						
Anthracnose caused by seed-borne *Colletotrichum* spp.		●					
Seed-borne Ascochyta blight caused by *Ascochyta rabiei*			●				
Seed rot and seedling blight caused by seed-borne *Botrytis* spp.			●	●			
Seed-borne Ascochyta blight caused by *Ascochyta lentis*				●			
Seed-borne Ascochyta blight and foot rot caused by *Ascochyta pinodes*					●		
Seed-borne Sclerotinia caused by *Sclerotinia sclerotiorum*	●		●	●	●		

● Control

Application guidelines:

- Vibrance Maxx RFC is a seed treatment formulation for use in commercial seed treatment facilities and for on-farm application.

Use rates and packaging:

- 100 mL/100 kg seed (add water to make slurry volume of 325 mL/100 kg).
- For control of various seed- and soil-borne diseases on soybeans, beans, lentils, lupins, fava beans, and peas, apply 100 mL of Vibrance Maxx RFC fungicide plus 225 mL of water (or rhizobia inoculant at rates recommended by the manufacturer plus water to achieve proper total slurry volumes) per 100 kg of seed.
- For chickpeas, a total slurry volume of 650 mL per 100 kg of seed is recommended for optimal coverage.

Packaging

- Drum: 56.78 L

Tank mixes:

- For protection from various insect pests, Vibrance Maxx RFC may be tank mixed with Cruiser® 5FS seed treatment insecticide. Consult each product label for registered use rates and follow all label use instructions. Read the label directions for each product and follow the most restrictive label precautions and limitations.
- Vibrance Maxx RFC is compatible with rhizobium-based inoculants. Please check with inoculant manufacturers for specific planting windows and methods of application prior to use. Consult the manufacturer of the application equipment planned to be used to confirm suitability for this application and for instructions on operation and calibration of the equipment.

Re-cropping and use restrictions:

- Do not use treated seed for food, feed, or oil purposes.
- Do not plant any crop other than cereals, corn, soybeans, members of Crop Subgroup 6C (dried shelled peas and beans, chickpeas, lentils, and fava beans), or members of Crop Subgroup 20A (canola/rapeseed subgroup), within 60 days to fields in which treated seed was planted.
- Do not graze or feed livestock on treated area for 45 days after planting soybeans.
- Do not graze or feed livestock on treated area for 60 days after planting members of Crop Subgroup 6C (dried shelled peas and beans, chickpeas, lentils, and fava beans).

For the most up-to-date product and label information, follow the QR code

Vibrance® Maxx with INTEGO®

Early-season Aphanomyces protection with best-in-class Rhizoctonia control.

Vibrance® Maxx with INTEGO® fungicide seed treatment is a convenient co-pack that offers broad-spectrum disease control, including early-season protection against Aphanomyces root rot.

Active ingredients:

- Metalaxyl-M (Group 4 fungicide), sedaxane (Group 7 fungicide), fludioxonil (Group 12 fungicide), and ethaboxam (Group 22 fungicide)

For use on:

- Chickpeas
- Dry beans
- Dry peas
- Fava beans
- Lentils
- Lupins
- Soybeans

For control of:

Diseases	Soybeans	Dry beans	Chickpeas	Lentils	Dry peas	Lupins	Faba beans
Seed rot/pre- and post-emergence damping-off caused by *Fusarium* spp., *Pythium* spp., and *Rhizoctonia* spp.	●	●	●	●	●	●	●
Seedling blight caused by *Fusarium* spp.	●		●	●	●	●	●
Seedling blight caused by *Rhizoctonia solani*	●	●	●	●	●	●	●
Seedling blight caused by *Pythium* spp.	●	●	●	●	●	●	●
Seedling root rot caused by *Fusarium* spp.	●			●			
Seed rot and seedling blight caused by seed-borne *Phomopsis* spp.	●						
Early-season root rot caused by *Phytophthora megasperma* var. *sojae*	●						
Anthracnose caused by seed-borne *Colletotrichum* spp.		●					
Seed-borne Ascochyta blight caused by *Ascochyta rabiei*			●				
Seed rot and seedling blight caused by seed-borne *Botrytis* spp.			●	●			
Seed-borne Ascochyta blight caused by *Ascochyta lentis*				●			
Seed-borne Ascochyta blight and foot rot caused by *Ascochyta pinodes*					●		
Early-season root rot caused by *Aphanomyces euteiches*			/	/	/	/	

● Control / Suppression[1]

Application guidelines:

- Vibrance Maxx with INTEGO® is a seed treatment formulation for use in commercial seed treatment facilities and for on-farm application using equipment that accurately meters, mixes and applies a flowable seed treatment. The equipment must provide uniform coverage of the seed. Uneven coverage may not give the desired level of disease control. Allow the seed to dry before bagging, storing, or seeding.

[1] Suppression means consistent control at a level that is not optimal but is still of commercial benefit.

Use rates and packaging:

- 100 mL/100 kg seed of Vibrance Maxx RFC plus 19.6 mL/100 kg seed of INTEGO® Solo. Add water to seed treatment to achieve slurry volume of 325 mL/100 kg seed.

Note INTEGO® Solo rate guidelines:

- Soybeans: To deliver 7.5 g a.i./100 kg seed, apply 4.4 mL per 140,000 seeds (equals 0.0121 mg a.i./seed) based on 6,167 seeds/kg (2,800 seeds/lb) count.
- Beans: To deliver 7.5 g a.i./100 kg seed, apply 5.5 mL per 100,000 seeds (equals 0.0212 mg a.i./seed) based on 3,524 seeds/kg (1,600 seeds/lb) count.
- Peas: To deliver 7.5 g a.i./100 kg seed, apply 2.8 mL per 100,000 seeds (equals 0.0106 mg a.i./seed) based on 7,007 seeds/kg (3,181 seeds/lb) count.

Packaging

- Case: 2 x 3.075 L Vibrance Maxx RFC + 2 x 0.605 L INTEGO® Solo
- Drum: 56.78 L Vibrance Maxx RFC + 3 x 3.78 L INTEGO® Solo

Water volumes:

- For control of various seed- and soil-borne diseases on soybeans, beans, lentils, lupins, fava beans, and peas, apply 100 mL of Vibrance Maxx RFC fungicide plus 19.6 mL of INTEGO® Solo plus 205 mL of water (or rhizobia inoculant at rates recommended by the manufacturer) to achieve proper total slurry volumes of 325 mL/100 kg of seed.
- For chickpeas, a total slurry volume of 650 mL/100 kg of seed is recommended for optimal coverage.

Re-cropping and use restrictions:

- Do not use treated seed for food, feed, or oil purposes.
- Do not plant any crop other than cereals, corn, soybeans, members of Crop Subgroup 6C (dried shelled peas and beans, chickpeas, lentils, and fava beans), or members of Crop Subgroup 20A (canola/rapeseed subgroup) within 60 days to fields in which treated seed was planted.
- Do not graze or feed livestock on treated area for 60 days after planting members of Crop Subgroup 6C (dried shelled peas and beans, chickpeas, lentils, and fava beans). Do not graze field pea fields grown from treated seed or feed field pea forage or hay from such fields to livestock.

For the most up-to-date product and label information, follow the QR code

Vibrance® Quattro

Broad-spectrum disease control, healthy roots, consistent stands and higher yields.

Vibrance® Quattro fungicide seed treatment gives you consistently excellent protection from key early-season diseases like Fusarium and Rhizoctonia in a simple, easy-to-use formulation. Plus, with Rooting Power®, your cereals get established and standing strong — faster.

Active ingredients:

- Difenoconazole (Group 3 fungicide), metalaxyl-M (Group 4 fungicide), sedaxane (Group 7 fungicide), and fludioxonil (Group 12 fungicide)

For use on:

- Barley
- Durum
- Oats
- Rye
- Spring wheat
- Triticale
- Winter wheat

For control of:

Diseases	Barley	Oats	Rye	Triticale	Winter wheat	Spring wheat	Durum
Seed rots caused by *Fusarium*, *Pythium*, *Rhizoctonia*, *Penicillium,* and *Aspergillus* spp.	●	●	●	●	●	●	●
Seedling blight, root rot, and damping-off caused by seed- and soil-borne *Fusarium* spp. or *Rhizoctonia* spp. and soil-borne Pythium	●	●	●	●	●	●	●
Covered smut *(Ustilago hordei)*	●	●					
Loose smut *(Ustilago avenue)*		●					
Loose smut *(Ustilago tritici)*				●	●	●	●
False loose smut *(Ustilago nigra)*	●						
True loose smut *(Ustilago nuda)*	●						
Common bunt *(Tilletia tritici)*[1]			●		●	●	●
Dwarf bunt *(Tilletia controversa)*[1]			●		●		
Common root rot (*Cochliobolus* spp.)	/	/	/	/	/	/	/
Fusarium crown and foot rot	/		/	/	/	/	/
Take-all	/		/	/	/	/	/
Seed-borne Alternaria	●	●	●	●	●	●	●
Seed-borne *Cochliobolus sativus*	/	/	/	/	/	/	/

● Control / Suppression[2]

[1] Controls both seed- and soil-borne common and dwarf bunts.
[2] Suppression means consistent control at a level that is not optimal but is still of commercial benefit.

Application guidelines:

- Equipment should be calibrated prior to treatment to ensure uniform coverage. Uneven seed coverage may not give the desired level of disease control. Calibration of seeding equipment is also recommended before planting treated seed.

Use rates and packaging:

- 325 mL/100 kg of seed

Packaging

- Case: 2 x 10 L
- Drum: 115 L
- Tote: 450 L

Tank mixes:

- For protection from various insects on registered crops, Vibrance Quattro seed treatment fungicide may be tank mixed with Cruiser® 5FS seed treatment insecticide. This tank-mix option is only valid for those crops common to the registered labels of Vibrance Quattro and Cruiser 5FS seed treatments. Consult each product label for registered use rates and follow all label use instructions. Read the label directions for each product and follow the most restrictive label precautions and limitations.

Re-cropping and use restrictions:

- Treated seed must not be used for food, feed, or oil processing.
- To prevent contamination, store away from food and feed.
- Do not graze or feed livestock on treated areas for 45 days after planting.
- Do not plant any crop other than cereals within 60 days to fields in which treated seed was planted.
- **No open transfer is permitted for commercial seed treatment (facilities and mobile treaters) of barley, wheat, durum, oats, rye, and triticale.**

For the most up-to-date product and label information, follow the QR code

Vibrance® Total

Raise the bar on pulse protection.

With five modes of action, including a new unique molecule for Pythium control, Vibrance® Total provides pulse growers with the most comprehensive, advanced level of protection in a fungicide seed treatment.

Active ingredients:

- Thiabendazole (Group 1 fungicide), sedaxane (Group 7 fungicide), metalaxyl-M and S-isomer (Group 4 fungicide), fludioxonil (Group 12 fungicide), picarbutrazox (Group U17 fungicide)

For use on:

- Dried shelled beans
- Dried shelled peas
- Chickpeas
- Lentils
- Lupins and faba beans

For control of:

- Seed-borne Ascochyta blight
- Seed rot/pre-emergence damping-off, post-emergence damping off and seedling blight caused by *Fusarium* spp., *Pythium* spp., and *Rhizoctonia* spp.
- Seedling root rot caused by *Fusarium* spp.
- Seed-borne *Sclerotinia sclerotiorum*
- Seed rot and seedling blight caused by seed-borne *Botrytis* spp.

Application guidelines:

- Vibrance Total is a seed treatment formulation for use in commercial seed treatment facilities and for on-farm application.

Use rates and packaging:

- 325 mL/100 kg of seed

Packaging

- Case: 2x10 L
- Drum: 115 L
- Tote: 450 L

Tank mixes:

- For protection from various insect pests, Vibrance Total may be mixed with Cruiser® 5FS seed treatment.
- For *Aphanomyces* spp. suppression, Vibrance Total may be mixed with INTEGO® Solo Fungicide.

Consult each product label for registered use rates and follow all label use instructions. Read the label directions for each product and follow the most restrictive label precautions and limitations.

Vibrance Total is compatible with Rhizobium-based inoculants. Check with inoculant manufacturers for specific planting windows and methods of application prior to use.

Use restrictions:

Where possible, rotate the use of Vibrance Total or other Group 1, 4, 7, 12 and U17 fungicides with different groups that control the same pathogens.

- Do not use treated seed for food, feed or oil purposes.
- Store away from food and feed.
- Do not plant any crop other than cereals, soybeans, members of Crop Subgroup 6C (Dried shelled peas and beans, chickpeas, lentils and faba beans) or members of Crop Subgroup 20A (Canola/rapeseed subgroup), within 60 days to fields in which treated seeds were planted.
- Do not graze or feed livestock on treated area for 60 days after planting dried shelled pea and bean crops, chickpeas, lentils and faba beans

For the most up-to-date product and label information, follow the QR code

Inoculants

Contents

Atuva™ S

Liquid inoculant for soybeans

Atuva™ S is an all-in-one liquid soybean inoculant formulated with **Osmo Protection Technology** for longer on-seed survival leading to a wider window of time for planting after liquid treatment.

Contains:
- *Bradyrhizobium japonicum*

For use on:
- Soybeans

Use rates and packaging:
- 98 mL/100 kg of seed (22 mL/unit)

Packaging
- 9.08 L jug (treats 317 acres with 1.3 units (65 lbs) / acre seeding rate)
- 4 x 2 L bladders (treats 280 acres with 1.3 units (65 lbs) / acre seeding rate)

For:
- Biological Nitrogen Fixation

Features:
- **Osmo Protection Technology** (OPT) strengthens the cell membranes of rhizobia bacteria enhancing performance in the field under adverse growing conditions including high temperature, low/high moisture levels, and chemical stress such as seed treatment. OPT also protects active bacteria for longer on seed survival giving growers greater flexibility in their planting window compared to other seed-applied liquid and peat inoculants.

Application method:
Sequential application: Two separate passes through seed treatment equipment is used to apply first the chemical seed treatment, then inoculant from separate tanks with time to dry between treatments.

Simultaneous application: Chemical seed treatment and inoculant are applied simultaneously from separate tanks in one pass through seed treatment equipment.

Atuva S compatibility with seed treatments

Seed treatment	On-seed survival Simultaneous or sequential application
Vayantis® IV RFC	120 days
Vayantis IV RFC + Saltro®	120 days
Vayantis IV RFC + Fortenza®	120 days

Bare seed planting window for soybeans: 120 days on-seed survival

Compatibility testing with additional products is on-going.

For the most up-to-date product and label information, as well as the most up-to-date compatibility information, follow the QR code

Compatibility tested is conducted by the manufacturer Rizobacter, with additional testing at the Syngenta Seed Care Institute (Stanton, MN), and third-party testing.

Atuva™ Bold

Liquid inoculant for soybeans

Atuva™ Bold is an all-in-one liquid formulation that includes **Osmo Protection Technology and Bio-Induction Technology** in an effective and convenient on-seed inoculant. Atuva Bold has a wide window for planting after treatment, and triggers early nodulation to maximize Biological Nitrogen Fixation helping protect yield even when faced with stressful growing conditions.

Contains:
- *Bradyrhizobium japonicum*

For use on:
- Soybeans

For:
- Biological Nitrogen Fixation

Use rates and packaging:
- 130 mL/100 kg of seed (29 mL/unit)

Packaging
- 1 x 11.83 L jug
- 10 x 1.18 L bladders

1 case (11.83 L) treats 308 acres at 1.3 units (65 lbs) / acre seeding rate

Features:
- **Osmo Protection Technology** (OPT) strengthens the cell membranes of rhizobia bacteria enhancing performance in the field under adverse growing conditions including high temperature, low/high moisture levels, and chemical stress such as seed treatment. OPT also protects active bacteria for longer on seed survival giving growers greater flexibility in their planting window compared to other seed-applied liquid and peat inoculants.
- **Bio-Induction Technology** (BIT) helps trigger early nodulation to maximize Biological Nitrogen Fixation by accelerating the communication between the plant and rhizobia bacteria. Earlier nodulation is important for increased earlier nitrogen availability to the crop.

Application method:
Sequential application: Two separate passes through seed treatment equipment is used to apply first the chemical seed treatment, then inoculant from separate tanks with time to dry between treatments.

Simultaneous application: Chemical seed treatment and inoculant are applied simultaneously from separate tanks in one pass through seed treatment equipment.

Atuva Bold compatibility with seed treatments

Seed treatment	On-seed survival Simultaneous or sequential application
Apron Maxx® RTA®	90 days
EverGol® Energy	120 days
EverGol® Energy with Stress Shield® 600	120 days
Insure® Pulse	120 days
Rancona® Trio	Not recommended
Vayantis® IV RFC	120 days
Vayantis IV RFC + Cruiser® 5FS	120 days
Vayantis IV RFC + Draco™	120 days
Vayantis IV RFC + Fortenza® + Draco	120 days
Vayantis IV RFC + Fortenza	120 days
Vayantis IV RFC + Fortenza + Saltro®	120 days
Vayantis IV RFC + Saltro®	120 days
Vibrance® Maxx	120 days
Vibrance Maxx with INTEGO® Solo	120 days

Bare seed planting window for soybeans: 120 days on-seed survival

For the most up-to-date product and label information, follow the QR code

Compatibility tested is conducted by the manufacturer Rizobacter, with additional testing at the Syngenta Seed Care Institute (Stanton, MN), and third-party testing.

Atuva™ S GR

Granular inoculant for soybeans

Atuva™ S GR is a peat-based granular inoculant for soybeans featuring a large particle size for low dust and excellent flowability during seeding with a low risk of compaction during storage.[1]

Contains:
- *Bradyrhizobium japonicum*

For:
- Biological Nitrogen Fixation

For use on:
- Soybeans

Storage and handling:
- One-year shelf life, use before expiration date
- Use entire bag within 24 hours of opening
- Do not allow the product to get wet or dry out

Packaging:
- Bag (40 lbs/18.1 kg)

Application method:
- In-furrow at time of seeding
- Ensure the delivery system is free of debris and moisture
- Calibrate in field at time of use
- Contact your Syngenta representative for specific recommendations

Use rates:

Row spacing (cm)	Row spacing (in)	Application rate (kg/ha)	Application rate (lb/ac)	Acres/bag
15.2	6	8.8	7.7	5.2
17.7	7	7.5	6.6	6.1
20.3	8	6.6	5.8	6.9
22.9	9	5.8	5.1	7.8
25.4	10	5.2	4.6	8.7
30.5	12	4.4	3.8	10.5
38.1	15	3.5	3.1	12.9
61	24	2.2	1.9	21.1
76.2	30	1.7	1.5	26.7

For the most up-to-date product and label information, follow the QR code

[1] Attributes observed in Syngenta field-scale trial in Herbert, SK, in 2023. n = 1

Atuva™ PL

Liquid inoculant for peas and lentils

Atuva™ PL is an all-in-one liquid inoculant for peas and lentils, formulated with **Osmo Protection Technology** for longer on-seed survival leading to a wider window of time for planting after liquid treatment.

Contains:
- *Rhizobium leguminosarum biovar viciae*

For use on:
- Peas
- Lentils

For:
- Biological Nitrogen Fixation

Use rates and packaging:
- 200 mL/100 kg of seed (89 mL per 100 lbs)

Packaging:
- 2 x 5.45 L bladders (1 case treats 200 bu or 12,000 lbs)

Features:
- **Osmo Protection Technology (OPT)** strengthens the cell membranes of rhizobia bacteria enhancing performance in the field under adverse growing conditions including high temperature, low/high moisture levels, and chemical stress such as seed treatment. OPT also protects active bacteria for longer on seed survival giving growers greater flexibility in their planting window compared to other seed-applied liquid and peat inoculants.

Seeding rate	Acres treated per 5.45 L bladder	Acres treated per 10.9 L case
1 bu (60 lbs) /acre	100 acres	200 acres
1.5 bu (90 lbs) /acre	66.5 acres	133 acres
3 bu (180 lbs) /acre	33.5 acres	67 acres

Application method:
Sequential application: Two separate passes through seed treatment equipment is used to apply first the chemical seed treatment, then inoculant from separate tanks with time to dry between treatments.

Simultaneous application: Chemical seed treatment and inoculant are applied simultaneously from separate tanks in one pass through seed treatment equipment.

Tank mix application: Chemical seed treatment and inoculant are tank mixed and applied to seed in a single pass through seed treatment equipment. The seed treatment and inoculant can be in the tank together for a maximum of three hours.

Atuva PL compatibility with seed treatments

Seed treatment	Simultaneous and sequential application	Tank mix application
Apron® Advance	10 days	3 days
EverGol® Energy	10 days	3 days
EverGol® Energy with Stress Shield® 600	10 days	3 days
Insure® Pulse	Not recommended	Not recommended
Rancona® Trio	Not recommended	Not recommended
Trilex® EverGol®	5 days	Not recommended
Trilex® EverGol® with Stress Shield® 600	5 days	Not recommended
Vibrance® Maxx	5 days	3 days
Vibrance Maxx with INTEGO® Solo	5 days	3 days
Vibrance Maxx RFC	7 days	Not recommended
Vibrance Total	7 days	Not recommended
VITAFLO-280®	Not recommended	Not recommended

Bare seed planting window for peas and lentils: 15 days on-seed survival

For the most up-to-date product and label information, follow the QR code

Compatibility tested is conducted by the manufacturer Rizobacter, with additional testing at the Syngenta Seed Care Institute (Stanton, MN), and third-party testing.

Atuva™ PL GR

Granular inoculant for peas and lentils

Atuva™ PL GR is a peat-based granular inoculant for peas and lentils, featuring a large particle size for low dust and excellent flowability during seeding with a low risk of compaction during storage.[1]

Contains:
- *Rhizobium leguminosarum biovar viciae*

For:
- Biological Nitrogen Fixation

For use on:
- Peas
- Lentils

Storage and handling:
- One year shelf life, use before expiration date
- Use entire bag within 24 hours of opening
- Do not allow the product to get wet or dry out

Packaging:
- Bag (40 lbs/18.1 kg)

Application method:
- In-furrow at time of seeding
- Ensure the delivery system is free of debris and moisture
- Calibrate in field at time of use
- Contact your Syngenta representative for specific recommendations

Use rates:

Row spacing (cm)	Row spacing (in)	Application rate (kg/ha)	Application rate (lb/ac)	Acres/bag
15.2	6	8.8	7.7	5.2
17.7	7	7.5	6.6	6.1
20.3	8	6.6	5.8	6.9
22.9	9	5.8	5.1	7.8
25.4	10	5.2	4.6	8.7
30.5	12	4.4	3.8	10.5
38.1	15	3.5	3.1	12.9
61	24	2.2	1.9	21.1
76.2	30	1.7	1.5	26.7

For the most up-to-date product and label information, follow the QR code

[1] Attributes observed in Syngenta field-scale trial in Herbert, SK, in 2023. n = 1

Biologicals

Contents

BIOCONTROL. BIOSTIMULANT. NUTRIENT USE EFFICIENCY. WHAT'S THE DIFFERENCE?

BIOCONTROLS...

help growers protect crops from fungal and bacterial diseases, insects, nematodes, and weeds. When paired with synthetic crop protection products as part of an integrated pest management program, biocontrols can help delay resistance and extend the longevity of those synthetic products.

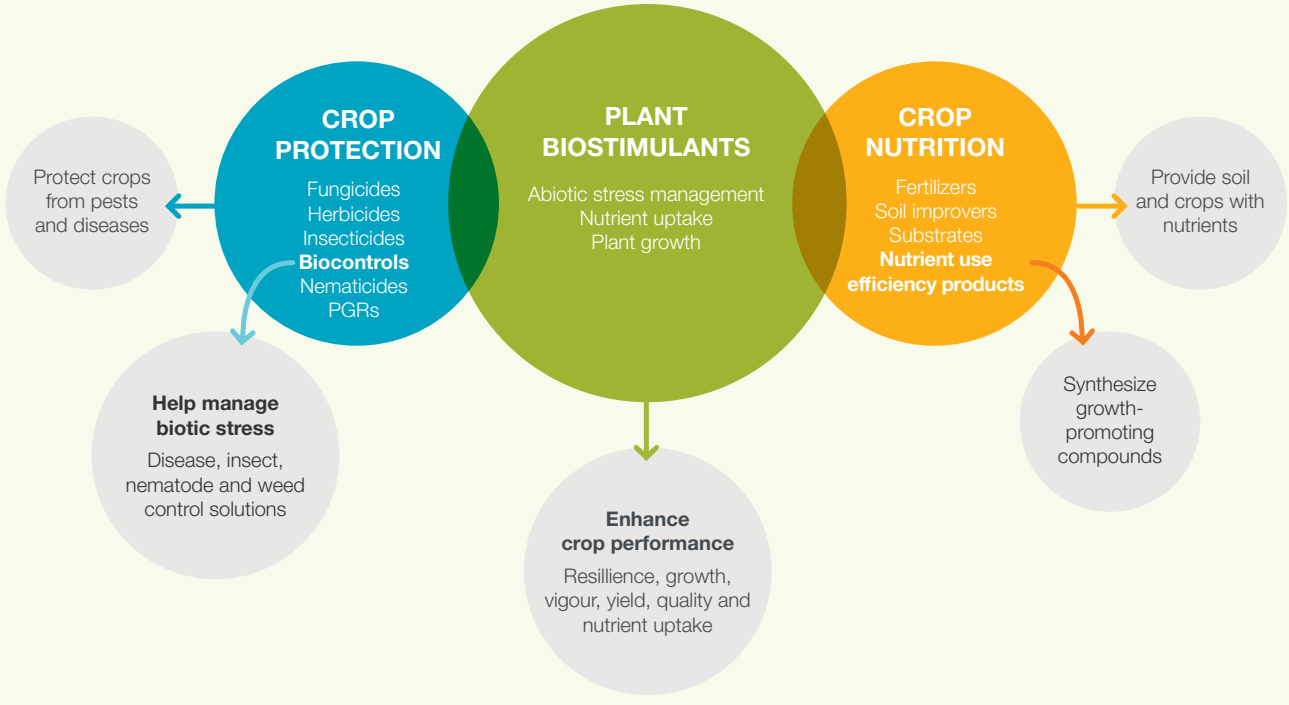
BIOSTIMULANTS...

are applied to seeds, leaves or root environments to stimulate a plant's natural response processes and help improve nutrient use efficiency, yield, crop quality, or tolerance to abiotic stresses, such as drought, heat or cold events.

NUTRIENT USE EFFICIENCY PRODUCTS...

address nutrient needs. They colonize the rhizosphere and/or the plant itself and encourage growth by synthesizing growth-promoting compounds. Examples of biofertilizers include beneficial microorganisms that can fix nitrogen from the air or solubilize phosphorus from the soil to supplement the nutrients available to a crop and help increase yield.

These products work in tandem with other inputs to help growers care for their crops and the environment.



AMATIS™

Improves rhizosphere efficiency.

Amatis™ 3-0-8 is a liquid biostimulant to improve the rhizosphere and soil structure around plant roots. With a unique combination of select humic acids, amino acids, polysaccharides and vitamins, Amatis helps plants use nutrients more efficiently, allowing for improved yield and uniformity.

Contains:
- Select humic acids, amino acids, polysaccharides and vitamins
- 3-0-8 liquid N-P-K

For:
- Root health and plant stand establishment
- Improving root environment
- Improving nutrient use efficiency

For use on:
- Corn
- Cereals
- Canola
- Pulses
- Soybeans
- Potatoes
- Fruits and vegetable crops

Packaging:
- 2 x 10 L jugs per case

Use rates:

Crop	Application timing	Rate
Corn	In furrow or 2x2 band Mixes with commercially available fertilizer	0.93 L/ac (2.3 L/ha)
Other field row crops, including cereals	In furrow or 2x2 band	0.8-1.6 L/ac (2-4 L/ha)
Potato	In furrow or through irrigation	1.25 L/ac (3 L/ha)
Fruit crops	4-6 applications per year, at 10-day intervals starting at green up	2 L/ac (5 L/ha)
Vegetable crops	4-6 applications per year starting 14-21 days after transplant	1.4 L/ac (3.5 L/ha)

Speak to your Syngenta representative for your rate recommendations

Water volumes:

- When applying via fertigation, use standard fertigation volumes (8,000- 10,000 L per hectare)
- When applying with liquid fertilizer, use the water volume recommended for the liquid fertilizer product

Mixing order:

1. Flush all parts of the sprayer, including the pump, hoses and nozzles several times with clean water prior to mixing.
2. Amatis will disperse in water with little agitation. Any residue in jugs is water-soluble.
3. Triple rinse and add contents to the spray tank.

WALES Symbol: L

Effects of weather and use restrictions:

- Mix with a liquid fertilizer by agitating thoroughly to disperse the elements.
- Do not mix with other products without a compatibility test.
- In severe stress situations, up to double the high rates can be applied. Speak with your Syngenta representative for your rate recommendations.
- When planting in sandy soils, use Amatis with each fertigation.

For the most up-to-date product and label information, follow the QR code

Envita®

Nitrogen where and when plants need it.

Envita® is a liquid nitrogen-fixing biological product featuring a naturally occurring food-grade bacteria that enables a unique mode of nitrogen fixation in a wide variety of crops. Applied in-season, the bacteria in Envita begin fixing nitrogen from the air, providing plants with an alternate source of this essential nutrient from application through harvest.

Active ingredients:

- *Gluconacetobacter diazotrophicus*

For use on:

- Canola
- Cereals
- Corn
- Soybeans
- Potatoes
- Pulses
- Other crops

Product benefits:

When applied as a foliar treatment, the bacteria colonize the plant and ultimately grow with it over time. Envita provides plants with an additional source of nitrogen, supplementing the supply of nitrogen available from fertilizers.

Application timing:

Foliar timing:

- Canola: 2 leaf to end of flowering
- Cereals: 3 leaf to flowering
- Corn: V2 to VT
- Potato: 2 leaf to end of flowering
- Pulses: 3 node to flowering
- Soybeans: 2 leaf to R1 (flowering)
- Other crops: Herbicide timing or early fungicide timing

Use rate:

- 95 mL per acre

Packaging:

- Case: 4 x 3.78 L bags (treats 160 acres)

Tank mixes:

New information was shared from Azotic Technologies Limited (manufacturer of Envita) to Syngenta which change the recommendations Syngenta is able to make for Envita:

- Envita is best applied solo, with a non-ionic surfactant at 0.1% v/v.
- Should you take a decision to tank mix Envita, be aware of the following:
    - Until a tank mix partner is formally tested in Canada by the manufacturer (Azotic), growers should assume that any tank mix partner may have an adverse effect on *Gluconacetobacter diazotrophicus* ("Gd", the active ingredient in Envita). Testing to date has shown that some formulations, including some formulations of glyphosate, are harmful to Gd in the mix after one hour.
- The manufacturer of Envita has provided Syngenta with a list of the Canadian formulations which have been tested to date, and will be routinely updated as the manufacturer provides additional test results. It can be found on the Envita product page at: www.syngenta.ca/productsdetail/envita#tank-mix.
- If you do take a decision to tank-mix Envita, follow the best management practices recommended by Azotic:

    a. Store Envita in a cool, dry place.

    b. Envita is best applied alone, with a non-ionic surfactant.

    c. If putting in a tank mix, please follow the Tank Mix Partner Guidelines from Azotic (the manufacturer), and be sure to put Envita last in the tank;

        i. Use high volumes of water. Minimum water volume of 10-15 gal/ac.

        ii. Optimal application temperatures:

        Above 80% relative humidity: 10-30ºC

        Below 80% relative humidity: 10-25ºC

Water volumes:

- At least 10–15 gal/ac foliar
- 2.5 gal/ac in-furrow

Mixing order:

L - put Envita in the tank last

Effects of weather and use restrictions:

Foliar guidelines:

- Apply Envita in the morning, when stomata are open but before drying time is accelerated, or in late afternoon, after the heat of the day has decreased.
- Avoid spraying in the evening after stomata have closed.
- Do not apply Envita if a rain event is likely within two hours of spraying.
- Standard spray settings are recommended for application.

Storage and handling:

- Envita contains live organisms. Store and keep Envita in cooler conditions, out of extreme hot or cold temperatures. Large temperature fluctuations should be avoided.
- Do not freeze.
- Keep out of direct sunlight.
- Shake each Envita bag thoroughly for 30 seconds before mixing.
- Do not open a bag of Envita before you intend to apply it. All product must be applied on the day the bag is opened.
- Product shelf-life is the current application season.

For the most up-to-date product and label information, follow the QR code

MEGAFOL

Anti-stress and growth activator.

Megafol® is a liquid foliar biostimulant specially formulated to help reduce abiotic stresses including drought, heat, low temperature, and physical damage. Megafol is intended to supplement standard fertility programs and is a readily available source of nitrogen and potassium.

Group chemistry:

- Megafol® is a 3-0-8 (N-P-K) liquid foliar biostimulant that contains vitamins, amino acids, proteins, betaines and other biomolecules

For use on:

- Assorted fruits and vegetables
- Other row crop
- Soybeans
- Canola
- Potato
- Wheat
- Corn
- Pulses

For management of:

- Environmental stresses
- Balanced vegetative development and productivity

Application guidelines:

- Foliar timing stretching from herbicide timing to early flowering in row crops.
- Stress can occur throughout the season. Multiple applications at the low rate, e.g. tank mixed with typical crop protection, has shown to be beneficial.

Use rates and packaging:

- 1.0 L/ac (2.5 L/ha) every 10—14 days.

Row crop:

- 0.5 L/ac (1.2 L/ha) applied twice, or 1 L/ac (2.5 L/ha) applied once.

Horticulture:

- 1 L / acre (1.2-2.5 L/ha) every 10-14 days

In the events of severe physical damage (e.g. hail), apply 1.0 L / acre

Packaging

- Case: 2 x 10 L

Water volumes:

- 10 — 20 gal/ac (100 — 200 L/ha)

Mixing order:

1. Add Megafol to the tank last or just before adjuvant if applicable.
2. Flush all parts of the sprayer, including the pump, hoses, and nozzles several times with clean water prior to mixing.
3. Megafol will disperse in water with little agitation. Any residue in jugs is water-soluble and easily rinses out.
4. Triple rinse and add contents to the spray tank.

Tank mixes[1]:

- Megafol can be tank mixed with other products. It is advised to conduct a jar compatibility test first.

For the most up-to-date product and label information, follow the QR code

[1] See product label for complete list of tank-mix products.

YIELDON

Switch on row crop productivity.

YieldON® is a liquid foliar biostimulant, easily added to a planned fungicide application, that uses a unique combination of ingredients to improve the flow of nutrients in the plant's tissues to help boost yield.

Contains:

- Unique combination of extracts from plants and seaweeds
- Enriched with trace elements of Mn, Zn, and Mo.
- 3-0-3 liquid N-P-K

For use on:

- Canola
- Cereals
- Corn
- Pulses
- Soybeans

For:

- Uptake and transport of nutrients and sugars throughout the plant
- Plant productivity and yield enhancement

Application guidelines:

- Apply with a planned fungicide application at reproductive fungicide timing
- In wheat, apply at full heading with your planned fusarium fungicide

Use rates and packaging:

Application rate:

- 0.75 L/ac (1.85 L/ ha)

Packaging:

- 1 case of 2 x 10 L jugs treats 26.7 acres

Mixing order:

1. Flush all parts of the sprayer, including the pump, hoses and nozzles several times with clean water prior to mixing.
2. YieldON will disperse in water with little agitation. Any residue in jugs is water-soluble.
3. Triple rinse and add contents to the spray tank.

WALES Symbol: L

Tank mixes[1]:

- YieldON can be tank mixed with other products. It is advised to conduct a jar compatibility test.

Effects of weather and use restrictions:

- Rainfast in 4 hours

For the most up-to-date product and label information, follow the QR code

Herbicides

TANK MIXING HERBICIDES? See mixing order notes on page 128

Contents

Axial®

Heavy is the head that wears the crown, but cleaner is your field.

For growers seeking the ultimate grass weed control in their cereal crops, Axial® herbicide provides market-leading grass control with its single use rate for broad-spectrum control. With a wide window of application and excellent crop safety and application flexibility, it is the premium standard in the market.

Active ingredient:
- Pinoxaden (Group 1 herbicide)

For use on:
- Barley
- Spring wheat (excluding durum)
- Winter wheat

For control of:
Grass weeds
- Barnyard grass
- Green foxtail
- Proso millet
- Volunteer canary seed
- Volunteer oats
- Wild oats
- Yellow foxtail

Tank mixes[1]:
- Buctril® M
- Curtail® M
- Frontline® XL
- Infinity®
- MCPA Ester
- Mextrol® 450
- Pixxarro™
- Prestige® XC
- Refine® SG Herbicide + MCPA Ester
- Refine® SG Herbicide
- SPECTRUM™
- Stellar® XL
- Trophy®

Application timing:
- Crop: One leaf to flag leaf.
- Grass weeds: One- to six-leaf stage, prior to emergence of fourth tiller.

Use rates and packaging:
- 0.5 L/ac (1.2 L/ha)

Packaging
- Case: 2 x 10 L (treats 40 ac)
- Drum: 80 L (treats 160 ac)
- Tote: 400 L (treats 800 ac)

[1] Refer to the product label and the most current Syngenta supported tank mixes (as per the PMRA tank-mix policy) for Western Canada on Syngenta.ca.

Water volumes:

- Ground: 5–10 gal/ac (50–100 L/ha)
- Aerial: 3 gal/ac (30 L/ha)

Mixing order:

1. Ensure the sprayer interior is clean, then fill the spray tank with half of the required amount of water and engage gentle agitation. Good agitation is indicated by a rippling or rolling action on the surface of the water.
2. Add any WG or DF formulation mix partners and agitate to ensure complete mixing.
3. Add any SC formulation mix partners and agitate to ensure complete mixing.
4. Add Axial herbicide (EC) and agitate to ensure complete mixing.
5. Add any additional EC formulation mix partners and agitate to ensure complete mixing.
6. Fill the tank to three-quarters of the required amount of water.
7. Add any solution (SN) formulation mix partners and agitate to ensure complete mixing.
8. Finish filling the sprayer with water, maintaining good agitation.
9. After any break in spraying operations, agitate thoroughly before spraying again.
10. Spray the herbicide suspension the same day as mixing.
11. Do not mix, load or clean spray equipment where there is the potential to contaminate wells or aquatic systems.

Effects of weather and use restrictions:

Weather

- Rainfast in one hour.

Application

- Do not apply past flag leaf stage.

Re-cropping

- No restrictions.

Pre-harvest interval

- 60 days for grain and straw.
- 30 days for hay.

Storage

- If frozen, allow to thaw and agitate thoroughly prior to use.

Grazing

- Seven-day grazing interval.

For the most up-to-date product and label information, follow the QR code

Axial® Maxx

Get the job done right – the first time.

For cereal growers driven to maximize yield while managing resistance, Axial® Maxx herbicide leverages the power of four active ingredients to deliver best-in-class grass and broadleaf weed control, creating clean fields after just one pass. Axial Maxx brings simplicity to your crop protection strategy with the convenience of an optimized formulation, wide application window, and cross-spectrum control.

Active ingredient:

- Bicyclopyrone (Group 27 herbicide)
- Bromoxynil (Group 6 herbicide)
- Fluroxypyr (Group 4 herbicide)
- Pinoxaden (Group 1 herbicide)

For use on:

- Spring wheat
- Barley

For control of:

Grasses:

- Wild oats
- Green foxtail
- Yellow foxtail
- Barnyard grass
- Volunteer oats
- Volunteer canary seed
- Proso millet

Broadleaf weeds:

- Annual sowthistle
- Cleavers
- Chickweed
- Flixweed
- Hempnettle
- Kochia
- Lamb's-quarters
- Narrow-leaved hawk's-beard
- Redroot pigweed
- Scentless chamomile
- Shepherd's purse
- Stinkweed
- Wild buckwheat
- Volunteer canola
- Wild mustard

For suppresion of:

- Canada thistle
- Dandelion
- Horsetail
- Stork's bill
- Round-leaved mallow
- Russian thistle
- White cockle

Application timing:

- From the two-leaf growth stage through to six-leaf three-tiller

Use rates and packaging:

- 405 mL/acre Axial Maxx A
- 500 mL/acre Axial Maxx B

Packaging

- Case containing 8.1 L jug of Axial Maxx A and 10 L jug of Axial Maxx B (treats 20 acres)
- Co-pack: 80 L drum Axial Maxx A and 64.8 L of drum Axial Maxx B (treats 160 acres)

Tank mix restrictions:

- Do not mix with fertilizers, including AMS and UAN, additional adjuvants or strobilurin fungicides

Water volumes:

- 50–100 L/ha

Effects of weather and use restrictions:

Re-cropping restrictions:

- Canola, Field peas*, Flax, Mustard, Barley, Oats, Spring and Durum Wheat can be planted 10 months after Axial Maxx application.
- Lentils can be planted 22 months after Axial Maxx application.

For the most up-to-date product and label information, follow the QR code

*Field peas may be grown the year following Axial Maxx application providing the following are met:

1. Precipitation must be equal to or above 10-year average (min. 100 mm within 60 days of application in the year of application.
2. Organic matter must be above 2.5%.
3. Soil pH must be above 6.0

Axial® Xtreme

The foundation for an effective cross-spectrum weed control program.

Axial® Xtreme herbicide is the value-added foundation for best-in-class control of wild oats, kochia and cleavers. With a wide range of tank-mix partners, you have the flexibility to tailor the best broadleaf weed control solution in your spring wheat and barley.

Active ingredients:

- Pinoxaden (Group 1 herbicide) and fluroxypyr (Group 4 herbicide)

For use on:

- Barley
- Spring wheat (excluding durum)

For control of:

Grass weeds

- Barnyard grass
- Green foxtail
- Proso millet
- Volunteer canary seed
- Volunteer oats
- Wild oats
- Yellow foxtail

Broadleaf weeds

- Cleavers
- Kochia
- Stork's bill[1]
- Wild buckwheat[1]

Application timing:

- Crop: Two leaf to stem elongation.
- Grass weeds: One- to six-leaf stage, prior to the fourth tiller.
- Broadleaf weeds: Refer to label for staging specific to target weed.

Use rates and packaging:

- 0.5 L/ac (1.2 L/ha)

Packaging

- Case: 2 x 10 L (treats 40 ac)
- Drum: 80 L (treats 160 ac)
- Tote: 400 L (treats 800 ac)

Tank mixes[2]:

- Buctril® M
- Curtail® M
- Frontline® XL
- Infinity®
- MCPA Ester
- Mextrol® 450
- Refine® SG Herbicide + MCPA Ester
- Refine SG

[1] Suppression
[2] Refer to the product label and the most current Syngenta supported tank mixes (as per the PMRA tank-mix policy) for Western Canada on Syngenta.ca.

Water volumes:

- 5–10 gal/ac (50–100 L/ha)

Mixing order:

1. Clean spray tank and half fill with clean water. Start agitation or bypass system.
2. If a broadleaf herbicide or a fungicide is to be used, add that product first and agitate for two to three minutes.
3. Add correct amount of Axial Xtreme herbicide.
4. Agitate for two to three minutes before adding remainder of water, then maintain constant agitation.
5. After any break in spraying operations, agitate thoroughly before spraying again.
6. Use the spray suspension as soon as it is prepared.
7. Follow sprayer clean-up directions.

Effects of weather and use restrictions:

Weather

- Rainfast in one hour.

Application

- One application per year is permitted.
- Ground application only; not for aerial application.

Re-cropping

- Barley, canola, flax, forage grasses, lentils, mustard, oats, peas, rye, wheat, or summerfallow the year following treatment.

Pre-harvest interval

- 60 days for grain and straw.
- 30 days for hay.

Storage

- If frozen, allow to thaw and agitate thoroughly prior to use.

Grazing

- Observe a minimum of seven days before grazing livestock on crops.

For the most up-to-date product and label information, follow the QR code

Axial® Xtreme iPak™

Works fast.

Axial® Xtreme iPak™ herbicide controls a wide range of hard-to-manage grass and broadleaf weeds with multiple modes of action and four active ingredients — all available in two convenient co-pack sizes. Axial Xtreme iPak™ is fast acting and can be applied in both spring wheat and barley without needing a break to clean the tank.

Active ingredients:

- Pinoxaden (Group 1 herbicide), fluroxypyr (Group 4 herbicide), bromoxynil (Group 6 herbicide), and pyrasulfotole (Group 27 herbicide)

For use on:

- Barley
- Spring wheat (excluding durum)

For control of:

Grass weeds

- Barnyard grass
- Green foxtail
- Proso millet
- Volunteer canary seed
- Volunteer oats
- Wild oats
- Yellow foxtail

Broadleaf weeds

- Canada fleabane
- Chickweed
- Cleavers
- Common ragweed
- Flixweed
- Hempnettle
- Kochia
- Lamb's-quarters
- Narrow-leaved hawk's beard
- Pale smartweed
- Redroot pigweed
- Round-leaved mallow
- Russian thistle
- Shepherd's purse
- Sowthistle (annual)
- Stinkweed
- Volunteer canola (conventional and herbicide tolerant)
- Wild buckwheat
- Wild mustard

For suppression of:

Broadleaf weeds

- Canada thistle
- Sowthistle (perennial)
- Dandelion
- Spreading atriplex
- Giant ragweed
- Stork's bill[1]

Application timing:

- Crop: Two-leaf stage to stem elongation.
- Grass weeds: One- to six-leaf stage, prior to fourth tiller.
- Broadleaf weeds: Refer to label for staging specific to target weed.

[1] Only in a tank mix with 2,4-D Ester.

Use rates and packaging:

Axial Xtreme iPak™ is a co-pack of Axial Xtreme and Infinity® herbicides.

- 0.5 L/acre Axial Xtreme + 0.335 L/acre Infinity®

Packaging

- Case: 10 L jug of Axial Xtreme + 6.7 L jug of Infinity® (treats 20 ac)
- Bulk: 80 L drum of Axial Xtreme + 53.6 L drum of Infinity® (treats 160 ac)

Water volumes:

- 5-10 gal/acre (50-100 L/ha)

Mixing order:

1. Clean spray tank and half fill with clean water. Start agitation or bypass system.
2. Add Infinity® herbicide directly to the spray tank. Agitate for two to three minutes.
3. Add Axial Xtreme herbicide.
4. Agitate for two to three minutes before adding the remainder of water, then maintain constant agitation.
5. After any break in spraying operations, agitate thoroughly before spraying again.
6. Use the spray suspension as soon as it is prepared.
7. Follow sprayer clean-up directions.

Effects of weather and use restrictions:

Weather

- Rainfast in one hour.

Application

- Ground application only; not for aerial application.

Re-cropping

- Ten months for canola, flax (including low linolenic acid varieties), field peas[1], soybeans (Manitoba only), tame oats, spring wheat, barley, and durum[2].
- Twenty-two months for lentils[2].
- For other crops, including potatoes, please contact your Syngenta Representative.

Pre-harvest interval

- 60 days for grain and straw.
- 30 days for hay.

Storage

- Do not store at temperatures below -20°C.

Grazing

- Do not graze or cut for hay within 25 days of application.

For the most up-to-date product and label information, follow the QR code

[1] Field peas may be grown the year following Infinity® herbicide application in all Black, Grey-Wooded and Dark Brown soil zones. Do not plant field peas the year following an Infinity® herbicide application in the Brown soil zone where organic matter content is below 2.5 percent and where soil pH is above 7.5.

[2] Refer to individual product labels for crop specific re-cropping restrictions before making an application of Axial Xtreme iPak™.

Callisto®

Performance, crop safety and flexibility.

Callisto® 480SC offers application flexibility and crop safety, with excellent residual control of volunteer canola. Now for use in Western Canada.

Active ingredients:
- Mesotrione (Group 27 herbicide)

For use on:
- Field Corn[1]
- Sweet Corn (British Columbia only. See label for rates and use restrictions.)

For control of:
- Volunteer canola[2] (cotyledon to four-leaf)
- Additional weeds controlled by tank-mix partner(s).

Application timing:
- Crop: Post-emergence (two-leaf up to and including six-leaf corn)

Use rates and packaging:
- 63 mL/ac (0.156 L/ha)

Packaging
- One case contains 4 x 2.4 L jugs (treats 152 ac)

Tank mixes:
- Tank mix with AAtrex® Liquid 480 herbicide at 250 mL/ac (0.618 L/ha).
- Callisto 480SC herbicide may be tank mixed with a range of herbicides as a part of a one-pass broad-spectrum weed control program in corn.
- Surfactant: Post-emergent applications of Callisto 480SC must be applied with a non-ionic surfactant at 0.2% v/v.

Water volumes:
- Ground: 10-20 gal/ac (minimum 100-200 L/ha)

[1] Manitoba (all) and Southern Alberta (irrigated acres only)
[2] Control when tank mixed with AATREX Liquid 480 herbicide. Minimum rate for AATREX Liquid 480 is 250 mL/ac (0.618 L/ha).

123 Mixing order:

WALES Symbol: L (suspension)

1. Ensure the sprayer is totally clean.
2. Fill the sprayer half full with water. Engage gentle agitation.
3. Ensure the agitation system is working properly and that it creates a rippling or rolling action on the water surface.
4. Add Callisto and AAtrex® Liquid 480 herbicide slowly and agitate until completely dispersed. To ensure complete dispersion, wait two or three minutes after the last of the herbicide has been added to the tank.
5. Fill the tank to three-quarters full with water.
6. Add the non-ionic surfactant if applicable (e.g., Agral® 90) at 0.2% v/v.
7. Add glyphosate-containing product if required. Refer to the label of the tank-mix partner and the surfactant for the specific mixing instructions.
8. Continue agitation while completing the filling of the sprayer with water.
9. Always ensure that agitation is maintained until spraying is completed, even if stopped for brief periods of time.
10. If agitation is stopped for more than five minutes, re-suspend the spray solution by running on full agitation prior to spraying. Callisto must be sprayed the same day as mixing.
11. Do not mix, load or clean spray equipment where there is a potential to contaminate wells or aquatic systems.

Effects of weather and use restrictions:

Weather

- Typically, 4/10th to ½ inch of rain in one or two rain events soon after application is sufficient for weed control with Callisto. Tank mix partners may require additional rainfall.
- Weed control can be reduced or delayed under stress conditions such as drought, heat, insufficient fertility, flooding or prolonged cool temperatures. Optimum weed control will be obtained when weeds are actively growing.
- Rainfast in 3 hours.

Application

- Do not apply by air. Only apply by ground.
- Make only one application per year.
- Do not apply to soils that contain less than 1% or more than 10% organic matter.

Re-cropping

- Although Callisto has a flexible recropping profile, certain crops may be sensitive to low concentrations in the soil. Ensure recropping guidelines are followed.
- Manitoba: Barley, canola, field corn (grain or silage), oats, soybeans, and spring wheat: 11 months and precipitation during the year (April to October) of application equal to or greater than the 30 year average for the location.
- Southern Alberta irrigated acres: Barley, canola, field corn (grain or silage), field peas, oats, potato, soybeans, spring wheat, and sugar beets: 11 months and total precipitation during the year (April to September) of application equal to or greater than 275 mm.
- All other crops: Perform a bioassay to ensure safety of crops re-cropped to fields treated with Callisto.
- Observe the re-cropping guidelines of any tank mix product(s).

Pre-harvest interval

- Field corn grain/stover: 100 days
- Field corn forage: 45 days
- Check label for PHI for all other labeled crops.

Storage

- Keep in original container, tightly closed, during storage.
- Store in a cool, dry, well ventilated area way from feed and foodstuffs, and out of the reach of children and animals.
- If frozen, allow to thaw and agitate thoroughly prior to use.
- To prevent contamination, store this product away from food or feed.

For the most up-to-date product and label information, follow the QR code

Canvista®

Broad-spectrum weed control in Imidazolinone (IMI) tolerant lentils

For trusted control of common broadleaf weeds and grasses found in Western Canada lentil crops, harness the power of Canvista®. With the active ingredient imazamox, your IMI tolerant lentils get proven protection from pests in a convenient ready to apply formula, and your fields have rotational flexibility for future crops.

Active ingredients:

- Imazamox present as ammonium salt (Group 2 herbicide)

For use on:

- IMI tolerant lentils[1]

For control of:

Broadleaf weeds (cotelydon to 4 leaf):

- Cleavers[2]
- Cow cockle
- Flixweed
- Green smartweed
- Lamb's quarters
- Redroot pigweed
- Shepherd's purse
- Stinkweed
- Stork's bill
- Volunteer canola (non-Clearfield® varieties)
- Wild buckwheat[2]
- Wild mustard

Grasses (1 to 4 true leaf):

- Barnyard grass
- Green foxtail
- Japanese brome grass[2]
- Persian darnel
- Volunteer barley
- Volunteer canary seed
- Volunteer tame oats
- Volunteer wheat
- Wild oats
- Yellow foxtail

Application timing:

- IMI tolerant lentils: 1 – 9 node[3]

[2] Suppression

Use rates and packaging:

Recommended application rate: 100 mL/ac (250 mL/ha) + a non-ionic surfactant at 0.25% v/v, or a methylated seed oil adjuvant at 0.5% v/v (Merge® or Hasten® NT Ultra)

Packaging

- 1 case = 2 x 8 L jug
- Acres Treated: 80 ac/jug (160 ac/case)

Water volumes:

- 100 L/ha (10 US gal/ac)

Effects of weather and use restrictions:

Crop rotations

- Barley
- Canary seed
- Canola
- Chickpeas
- Corn
- Field peas
- Flax
- Lentils
- Oats
- Soybeans
- IMI tolerant sunflowers
- Wheat (spring, durum)

Re-cropping restrictions:

There are several factors that affect re-cropping following an IMI tolerant application. These include (in order of importance):

1. Soil moisture:
   - Need > 125 mm (5") of rain between herbicide application and August 31 in the year of application when growing canola, durum wheat and canary seed the following season.
   - If there is less than 125 mm of rainfall between time of application and August 31, it is strongly recommended to refrain from growing canola, durum, or canary seed the following year.
   - If there is less than 15mm in any month, do not plant canola, durum, canary seed the following year.
2. Organic matter: Brown soil zone (< 3% organic matter) is more susceptible to carry over crop injury the year after application.
3. Rate: Depending on the crop and rates, soil residues can exist.
4. Soil pH: Exercise caution re-cropping in soil with pH < 5.5 – 6.

Depending on the following crop, the level of sensitivity will vary. Please contact your local Syngenta Territory Sales Rep for more details.

For the most up-to-date product and label information, follow the QR code

[1] Check label for other crops registered
[3] Check label for the application timing of other crops registered

Erebus™ Xtreme

Tackle the toughest grass weeds in your wheat and durum.

Erebus™ Xtreme herbicide lets you put two powerful active ingredients to work against wild oats, Japanese brome and other grass weeds without compromising resistance management or crop rotation.

Active ingredients:

- Pyroxsulam (Group 2 herbicide) and fluroxypyr (Group 4 herbicide)

For use on:

- Wheat (spring, durum and winter)

For control of:

- Erebus Xtreme is labeled for control of weeds at the following stages when applied at the recommended rate (0.47 L/ac):

	One leaf	Two leaf	Three leaf	Four leaf	Five leaf	Six leaf	Seven leaf	Eight leaf	Up to
Grass weeds									
Barnyard grass	●	●	●	●	●				
Downy brome[1]		●	●	●	●	●			4 tillers
Japanese brome	●	●	●	●	●	●			
Green foxtail[1]	●	●	●	●	●				
Yellow foxtail	●	●	●	●	●				
Wild oats	●	●	●	●					4 leaf, 2 tillers
Broadleaf weeds									
Canada thistle[1]	Up to 30 cm, pre-bud								
Chickweed	Up to 10 cm								
Cleavers	●	●	●	●	●	●	●	●	1-8 whorls
Corn spurry	●	●							2 whorls <10cm
Cow cockle	●	●	●	●	●	●	●	●	
Dandelion[1]	Seedlings and rosettes less than or equal to 20 cm								
Flixweed	Up to 10 cm								
Hempnettle	●	●	●	●	●	●	●	●	
Kochia[2]		●	●	●	●	●	●	●	
Lady's-thumb	●	●	●	●	●				
Redroot pigweed	●	●	●	●	●	●	●	●	
Round-leaved mallow	●	●	●	●	●	●			<10 cm
Russian thistle[1]	Up to 10 cm tall								
Shepherd's purse	Up to 30 cm tall								
Stinkweed	Up to 30 cm tall								
Volunteer canola[3]	●	●	●	●	●	●			
Wild buckwheat	●	●	●	●					

[1] Suppression
[2] Includes biotypes resistant to Group 9 and Group 2 herbicides
[3] Includes varieties resistant to Group 9 and Group 10 herbicides

See the label for the complete list of weeds controlled/suppressed.

Application timing:

Crop

- Spring wheat and durum: three-leaf stage (four-leaf stage if mixed with 2,4-D) to initiation of stem elongation.
- Winter wheat: three tiller stage to just before the flag leaf stage.

Weeds

- Apply post-emergence when weeds are in the seedling stage (two to four leaf, unless otherwise noted on the label), and actively growing.

Use rates and packaging:

- Recommended rate 0.47 L/ac of Erebus Xtreme + 97 mL/ac of Erebus Xtreme B utility modifier (at this rate, a case treats 40 ac).

Packaging

- Case: 2 x 9.46 L Erebus Xtreme + 3.88 L Erebus Xtreme B utility modifier.

Tank mixes[2]:

- 2,4-D Ester
- MCPA

Water volumes:

- Ground: 5-10 gal/ac (50-100 L/ha)
- Aerial: At least 3-5 gal/ac (30-50 L/ha)

Mixing order:

1. Spray equipment should be thoroughly flushed with clean water before mixing Erebus Xtreme.
2. Fill spray tank half full with carrier. Engage gentle agitation.
3. Pour in the required amount of wettable powder or wettable granule, if applicable.
4. Fill tank three-quarters full and add the Erebus Xtreme and other liquid products, if applicable.
5. Fill tank nine-tenths full and add emulsifiable concentrate or liquid solutions, including Erebus Xtreme B utility modifier.
6. Finish filling tank. Maintain gentle agitation during mixing and spraying operations.
7. Do not let stand without agitation.

Effects of weather and use restrictions:

Weather

- Avoid application when heavy rain is in the forecast.

Application

- Do not apply through any type of irrigation system.
- Re-entry interval: 12 hours.

Re-cropping

- Field can be seeded the following year to barley, canola, corn, dry beans, flax, lentils, yellow & brown mustard, oats, peas, potatoes, soybeans, sunflower, or spring wheat.

[2] Refer to the product label and the most current Syngenta supported tank mixes (as per the PMRA tank-mix policy) for Western Canada on Syngenta.ca.

Pre-harvest interval

- 60 days

Storage

- Store in original containers in a secure, dry heated storage.
- If product is frozen, bring to room temperature and agitate before use.
- Do not allow contamination of seeds, plants, fertilizers, or other pesticides. Store this product away from food or feed.

Grazing

- Seven-day grazing interval.

For the most up-to-date product and label information, follow the QR code

Flexstar® GT

Combat weed resistance in soybeans.

Flexstar® GT herbicide is specially designed for use on glyphosate-tolerant soybeans and is a great option to manage volunteer glyphosate-tolerant canola in the Red River Valley of Manitoba. Flexstar GT allows users to move beyond a glyphosate-only product, combining the contact and residual power that improves control in Group 2-resistant weeds and reduces the probability of weed shifts and glyphosate resistance.

Active ingredients:

- Glyphosate (Group 9 herbicide) and fomesafen (Group 14 herbicide)

For use on:

- Glyphosate-tolerant soybeans

For control of[1]:

Annual broadleaf weeds including:

- Kochia
- Lady's-thumb
- Lamb's-quarters
- Volunteer canola (all types)
- Wild buckwheat

Application timing:

- Glyphosate-tolerant soybeans are tolerant to a Flexstar GT application made to plants in the one to two trifoliate leaf stage.
- Apply Flexstar GT when weeds are small and actively growing.
- Application should be made when the main flush of weeds is complete and the majority of the weeds are at the cotyledon to three or four true leaf stage.

Use rates and packaging:

- 0.85 L/ac (2.1 L/ha)

Packaging

- Case: 2 x 10 L (treats 23.5 ac)

Tank mixes:

- 0.28–1.0 L/ac of glyphosate

Water volumes:

- 15–20 gal/ac (150–200 L/ha)

[1] Refer to the label for complete information about weeds controlled.

Mixing order:

1. Fill the spray tank with half the required amount of water.
2. Add a non-ionic surfactant at 0.25% v/v, if required, and agitate to ensure complete mixing.
3. Fill the spray tank to three-quarters the required amount of water.
4. Add Flexstar GT herbicide and agitate to ensure complete mixing.
5. Add glyphosate, if required.
6. Finish filling the spray tank with water, maintaining gentle agitation.

Effects of weather and use restrictions:

Weather

- Moisture is necessary to activate Flexstar GT for residual weed control. Dry weather following application of Flexstar GT may reduce effectiveness.
- Flexstar GT activity is unaffected by rain falling four hours after application.

Application

- Under stress conditions and for larger weeds, addition of Turbocharge® is required at 0.25% v/v of spray solution.
- Ground application only; not for aerial application.

Re-cropping

- Winter wheat: Four months
- Spring wheat, non-GT soybeans, dry edible beans, or field corn: 10 months
- All other crops: Perform a bioassay to ensure safety of crops re-cropped to fields treated with Flexstar GT.

Pre-harvest interval

- Do not harvest glyphosate-tolerant soybeans within 90 days of application of Flexstar GT herbicide.

Storage

- Keep in original container, tightly closed, during storage.
- Store in a cool, dry, well ventilated area away from feed and foodstuffs, and out of the reach of children and animals.
- Keep away from fire or open flame, or other sources of heat.
- Store above -10°C in the original container. If frozen, allow to thaw and agitate before use.

Grazing

- Do not graze the treated crop or cut for hay.

Use restrictions

- Do not apply Flexstar GT to any field more often than once every two years.

For the most up-to-date product and label information, follow the QR code

Horizon® NG

Ready to go when you are.

Horizon® NG herbicide is the trusted brand for spring wheat and durum growers with a strong reputation of controlling a wide range of grass weeds.

Active ingredient:

- Clodinafop-propargyl (Group 1 herbicide)

For use on:

- Durum
- Spring wheat

For control of:

Grass weeds

- Barnyard grass
- Green foxtail
- Persian darnel
- Volunteer canary seed
- Volunteer oats
- Wild oats
- Yellow foxtail

Application timing:

	One leaf	Two leaf	Three leaf	Four leaf	Five leaf	Six leaf	Tillers
Crops							
Crops	•	•	•	•	•	•	4
Weeds							
Barnyard grass	•	•	•	•	•		
Green foxtail	•	•	•	•	•		2
Persian darnel	•	•	•	•	•		
Volunteer canary seed	•	•	•	•	•	•	3
Volunteer oats			•	•	•	•	3
Wild oats	•	•	•	•	•	•	3
Yellow foxtail	•	•	•	•	•		2

Use rates and packaging:

- Standard rate: 378 mL/ac
- High rate: 474 mL/ac for Persian darnel control

Packaging

- Case: 2 x 7.57 L (treats 40 ac at the standard rate or 32 ac at the high rate)
- Drum: 121.1 L (treats 320 ac at the standard rate or 255 ac at the high rate)

Please refer to the current label for full product-use details.

Tank mixes[1,2]:

Ground

- 2,4-D Amine (500 series)
- 2,4-D Amine (600 series)
- Buctril® M
- Curtail® M
- Decis® Flowable Insecticide
- Dyvel®
- Lontrel® 360
- Lontrel® + MCPA Ester (500 series)
- MCPA Amine (500 series)
- MCPA Amine (600 series)
- MCPA Ester (500 series)
- MCPA Ester (600 series)
- MCPA Sodium Salt 300
- Mecoprop-P
- Mextrol® 450
- Pardner®
- Prestige® XC
- Refine® SG Herbicide
- Thumper® EC

Aerial

- Buctril® M
- Target®

Water volumes:

- Ground: 5–10 gal/ac (50–100 L/ha)
- Aerial: 3.0 gal/ac (28 L/ha)

[1] Use of tank mixes will vary for application timing by weed stage.
[2] Refer to the product label and the most current Syngenta supported tank mixes (as per the PMRA tank-mix policy) for Western Canada on Syngenta.ca.

Mixing order:

1. Clean spray tank and half fill with clean water. Start agitation or bypass system.
2. If a broadleaf herbicide, insecticide or fungicide is to be used, add that product first, prior to adding Horizon NG, and agitate for two to three minutes.
3. Add correct amount of Horizon NG.
4. Agitate for three to five minutes before adding remainder of water and then maintain constant agitation.
5. Fill spray tank and maintain gentle agitation while spraying.
6. After any break in spraying operations, agitate thoroughly before spraying again. Do not let contents stand without agitation.
7. Use the spray suspension as soon as it is prepared.
8. If an oil film starts to build up in the tank, drain tank and then clean with a detergent.

Effects of weather and use restrictions:

Weather

- Rainfast in 30 minutes.
- Stress conditions may reduce effectiveness.
- Avoid use during cold weather.

Application

- Do not treat wheat under-seeded to forages.

Re-cropping

- No re-cropping restrictions.

Pre-harvest interval

- 60 days

Storage

- Product may be frozen.

Grazing

- 7-day grazing interval.

For the most up-to-date product and label information, follow the QR code

Nelatic®

Broad-spectrum weed control in field peas

Protect your yield outcomes with Nelatic®. The Nelatic pre-mix formula combines imazamox and bentazon to provide excellent systemic and contact control of grasses and broadleaf weeds found in Western Canada field peas.

Active ingredients:

- Imazamox (Group 2 herbicide), Bentazon (Group 6 herbicide)

For use on:

- Field peas
- Faba beans
- Soybeans

For control of:

Broadleaf weeds (cotelydon to 4 leaf):

- Cleavers[2]
- Cow cockle
- Flixweed
- Green smartweed
- Lamb's quarters
- Redroot pigweed
- Shepherd's purse
- Stinkweed
- Stork's bill
- Volunteer canola (non-Clearfield® varieties)
- Wild buckwheat[2]
- Wild mustard

Grasses (1 to 4 true leaf):

- Barnyard grass
- Green foxtail
- Japanese brome grass[2]
- Persian darnel
- Volunteer barley
- Volunteer canary seed
- Volunteer tame oats
- Volunteer wheat
- Wild oats
- Yellow foxtail

Application timing:

- Peas/fababeans: 3 to 6 node
- Soybeans: Cotyledon to 4 leaf[4]

[1]Suppression

Use rates and packaging:

Recommended application rate:

- 395 mL/ac (975 mL/ha) of Nelatic herbicide + UAN 28% at 2L/ha (810 mL/ac)
  Refer to product label for lower rate information.
- Nitrogen source: A reduction in grass control can be observed without the addition of a nitrogen source (UAN 28%). No adjuvant required.

Packaging:

- 1 case = 2 x 7.9 L jug (treats 40 ac/case at recommended rate)
- 126.24 L drum (treats 320 ac at recommended rate)

Water volumes:

- 100 L/ha (10 US gal/ac)

Effects of weather and use restrictions:

Re-cropping restrictions

- **Black/grey/dark brown soil zone:** If there is less than 125 mm of rainfall between June 1 and Sept 1, do not plant canola, durum, canary seed.
- **Brown soil zone:** If there is less than 125 mm rainfall between June 1 and Sept 1 OR less than 15 mm in any month, do not plant canola, durum, canary seed.

For the most up-to-date product and label information, follow the QR code

[1] Check label for other crops registered
[2] Topgrowth suppression
[4] Check label for the application timing of other crops registered

Sierra® 3.0AG

Take the complexity and worry out of weed control.

Sierra® 3.0 AG herbicide delivers a powerful Group 2 mode of action in liquid formulation for your spring, durum and winter wheat. It balances power, simplicity and crop safety, and it also provides 10 to 14 days of extended control of wild oats and green foxtail.

Active ingredient:

- Flucarbazone (Group 2 herbicide)

For use on:

- Durum
- Spring wheat
- Winter wheat

For control of:

Grass weeds

- Barnyard grass[1]
- Green foxtail (including Group 1- and Group 3-resistant biotypes)
- Japanese bromegrass
- Volunteer tame oats
- Wild oats (including Group 1- and Group 8-resistant biotypes)
- Yellow foxtail[1]

Broadleaf weeds

- Green smartweed
- Redroot pigweed
- Shepherd's purse
- Stinkweed
- Volunteer canola
- Wild buckwheat[1]
- Wild mustard

Application timing:

- Crop: One leaf to six total leaves (one to four leaves on main stem, plus two tillers).

Use rates and packaging:

Rate (mL/ac)	Rate (ac/jug)	For control of	
		Grass weeds	**Broadleaf weeds**
29.1	133	• Green foxtail	
38.5	101	• Wild oats (<100 plants/m²) • Japanese bromegrass • Green foxtail • Volunteer tame oats • Barnyard grass[1, 2] • Yellow foxtail[1, 2]	• Green smartweed • Redroot pigweed • Shepherd's purse • Stinkweed • Volunteer canola • Wild mustard • Wild buckwheat[3]
48.2	80	• Wild oats (>100 plants/m² in good environmental conditions) • Japanese bromegrass • Green foxtail • Volunteer tame oats • Barnyard grass[1, 2] • Yellow foxtail[1, 2]	
58.3	67	• Wild oats (>100 plants/m² in poor environmental conditions) • Japanese bromegrass • Green foxtail • Volunteer tame oats • Barnyard grass[1, 2] • Yellow foxtail[1, 2]	

[1]Suppression

Packaging

- Case: 4 x 3.88 L (each jug treats 67–133 ac, each case treats 268–532 ac)

Tank mixes:

Refer to the product label and the most current Syngenta supported tank mixes (as per the PMRA tank-mix policy) for Western Canada on Syngenta.ca.

Water volumes:

- Ground: 5–10 gal/ac (50–100 L/ha)
- Aerial: 3 gal/ac (28 L/ha)

Mixing order:

1. Clean spray tank and fill one-third to half full with clean water. Start agitation or bypass.
2. Add the appropriate amount of Sierra 3.0 AG herbicide. Maintain sufficient agitation during both mixing and application.
3. Add the broadleaf weed herbicide.
4. Add non-ionic surfactant, such as Agral® 90, then complete filling tank with balance of water needed.

Effects of weather and use restrictions:

Weather

- Rainfast in one hour.

Application

- Use a registered non-ionic surfactant such as Agral 90 at a rate of 0.25% v/v (0.25 L/100 L total spray solution).
- Do not apply more than 58.3 mL/ac of Sierra 3.0 AG per growing season.

Re-cropping

- The following crops may be seeded 11 months after an application of Sierra 3.0 AG:

Soil zone			
Brown	Dark brown	Black	Grey-wooded
Spring wheat	Barley Canola Durum Field peas[5] Flax Soybean Spring wheat Sunflower	Barley Canola Durum Field beans Field peas[5] Flax Soybean Spring wheat Sunflower	Barley Canola Field peas[5] Spring wheat

[1]Suppression
[2]For control of yellow foxtail and barnyard grass, tank mix Inferno® WDG herbicide with 95–119 mL/ha of Sierra 3.0 AG.
[3]Wild buckwheat is suppressed only at 48.2 L/ac and 58.3 L/ac rates.

Pre-harvest interval

- 80 days

Storage

- Store in original container in a cool, dry place.
- Do not freeze.

Grazing

- Do not graze treated fields or use green crop for feed.
- Wheat grain or straw from harvested treated fields may be fed to livestock.

For the most up-to-date product and label information, follow the QR code

[5] Field peas may be grown provided all of the following conditions are met:
- Soil pH must be below 7.5.
- Organic matter must be greater than four percent.
- Precipitation must be equal to or above 10-year average (minimum 100 mm within 60 days of application in year of application).

Talinor™

It's not just about weed control, it's about the future of your farm.

Talinor™ is a post-emergence broadleaf herbicide for cereals with consistent, fast-acting control of your toughest weeds, including resistant biotypes that challenge this year's yield and next year's potential.

Active ingredient:

- Bicyclopyrone (Group 27 herbicide) and bromoxynil (Group 6 herbicide)

For use on:

- Barley
- Durum wheat
- Spring wheat

For control of:

Broadleaf weeds

- Annual Sow Thistle
- Canada thistle[1]
- Cleavers
- Common Chickweed
- Dandelion[1]
- Flixweed
- Hempnettle
- Horsetail[1]
- Kochia
- Lamb's quarters
- Narrow-leaved hawk's beard
- Redroot pigweed
- Round-leaved mallow[1]
- Russian thistle[1]
- Scentless chamomile[2]
- Shepherd's purse
- Stinkweed
- Wild buckwheat
- Volunteer canola
- White cockle[1]
- Wild mustard

Application timing:

- Crop: 2 leaf to 6 leaf, 3 tillers.
- Weeds: Refer to label for staging specific to target weed.

Use rates and packaging:

- 405 mL/ac (1 L/ha)

Packaging

- 2 x 8.1 L case (treats 40 ac)
- 129.6 L drum (treats 320 ac)
- 324 L tote (treats 800 ac)

Tank mixes:

- Refer to the product label and the most current Syngenta supported tank mixes (as per the PMRA tank-mix policy) for Western Canada on Syngenta.ca.
- Do not mix with AMS/UAN or other additives

Water volumes:

- Ground: 5-10 gal/ac (50-100 L/ha)
- Air: Minimum 3 gal/ac (30 L/ha)

[1] Suppression
[2] Spring seedlings only.

Mixing order:

1. Ensure that the sprayer tank interior is clean, then fill the spray tank with ½ the required amount of water and engage gentle agitation. Good agitation is indicated by a rippling or rolling action on the surface of the water.
2. Add any WG or DF formulation mix partners and agitate to ensure complete mixing.
3. Add any SE or SC formulation mix partners and agitate to ensure complete mixing.
4. Add Talinor herbicide (EC) and agitate to ensure complete mixing.
5. Add any additional EC formulation mix partners and agitate to ensure complete mixing.
6. Fill the tank to ¾ the required amount of water.
7. Add any solution (SN or SL) formulation mix partners and agitate to ensure complete mixing.
8. Finish filling the sprayer with water, maintaining good agitation.
9. After any break in spraying operations, agitate thoroughly before spraying again.
10. Spray the herbicide suspension the same day as mixing.
11. Do not mix, load or clean spray equipment where there is a potential to contaminate wells or aquatic systems.

When using chemical handling equipment to fill the sprayer, the following additional recommendations apply:

- WG and DF formulations are preferentially batch mixed.
- SC, SN, and SL formulations may be inducted or batch mixed.
- EC formulations are preferentially batch mixed.

Effects of weather and use restrictions:

Weather

- Do not apply during periods of dead calm
- Avoid application when winds are gusty
- Do not spray when the wind is blowing towards a nearby sensitive crop, garden or habitat
- If applying by air, do not spray Talinor when wind speed is greater than 16 km/h at flying height.

Application

- One application per year is permitted
- Talinor can be applied by ground or air.
- For best results, apply Talinor to actively growing weeds. An early application will help you maximize crop yields by reducing weed competition.
- Talinor can be applied alone or in combination with a range of grass weed herbicides, including Axial®. Consult the product label for a full list of compatible tank mix partners.
- Do not apply Talinor on any crop other than spring wheat, durum wheat and barley, as crop damage will result.
- Do not treat spring wheat, durum wheat and barley under-seeded to forages.

Re-cropping interval

- Ten months for alfalfa, canola, chickpeas, flax, mustard, potato, soybeans, barley, oats, wheat (spring and durum) and field peas[3].
- Twenty-two months for dry beans and lentils.

[3] Field peas may be grown the year following a Talinor application provided the following are met:
- Precipitation must be equal to or above 10-year average (min. 100mm within 60 days of application in the year of application)
- Organic matter must be above 2.5%
- Soil pH must be above 6.0

Pre-harvest interval

- 60 days for grain and straw
- 30 days for forage and hay

Restricted entry interval

- Do not enter or allow worker entry into treated areas for 12 hours.

Storage

- Keep in original container, tightly closed, during storage.
- Store in a cool, dry, well ventilated area way from feed and foodstuffs, and out of the reach of children and animals.
- To prevent contamination, store this product away from food or feed.

For the most up-to-date product and label information, follow the QR code

Traxos®

Wild oats, brace yourselves.

For spring wheat and durum growers that want the ideal balance of performance and value from their graminicide, Traxos® herbicide is the workhorse that delivers quick and consistent control that's safe on your crop.

Active ingredients:

- Pinoxaden (Group 1 herbicide) and clodinafop-propargyl (Group 1 herbicide)

For use on:

- Durum
- Spring wheat
- Winter wheat

For control of:

Grass weeds

- Barnyard grass
- Green foxtail
- Persian darnel
- Proso millet
- Volunteer canary seed
- Volunteer (tame) oats
- Wild oats
- Yellow foxtail

Application timing:

- Apply on spring wheat and durum prior to emergence of fourth tiller.
- Apply on actively growing weeds.
- Early application will help maximize crop yields by reducing weed competition.

Weed	Growth stage	Notes
Wild oats, volunteer canary seed, volunteer (tame) oats, proso millet	1–6 leaf stage on main stem	Prior to emergence of fourth tiller.
Green foxtail, yellow foxtail (wild millet, pigeon grass)	1–5 leaf stage on main stem	For optimum control, apply prior to emergence of third tiller and while foxtail is actively growing.
Barnyard grass, Persian darnel	1–5 leaf stage on main stem	For optimum control, apply before tillering and while barnyard grass and Persian darnel are actively growing.

Use rates and packaging:

- 0.5 L/ac (1.2 L/ha)

Packaging

- Case: 2 x 10 L (treats 40 ac)
- Drum: 80 L (treats 160 ac)
- Tote: 400 L (treats 800 ac)

Please refer to the current label for full product-use details.

Tank mixes[1]:

Ground

- Buctril® M
- Curtail® M
- Infinity®
- MCPA Ester
- Mextrol® 450
- Prestige® XC

Aerial

- Buctril® M

Water volumes:

- Ground: 5–10 gal/ac (50–100 L/ha)
- Aerial: 3 gal/ac (30 L/ha)

Mixing order:

1. Clean spray tank and half fill with clean water. Start agitation or bypass system.
2. If a broadleaf herbicide, insecticide or fungicide is to be used, add that product first and agitate for two to three minutes.
3. Add correct amount of Traxos herbicide.
4. Agitate for three to five minutes before adding remainder of water. Maintain constant agitation.
5. After any break in spraying operations, agitate thoroughly before spraying again.
6. Use the spray suspension as soon as it is prepared.

[1] Refer to the product label and the most current Syngenta supported tank mixes (as per the PMRA tank-mix policy) for Western Canada on Syngenta.ca.

Effects of weather and use restrictions:

Weather

- Rainfast in one hour.
- Avoid application when heavy rain is in the forecast.

Re-cropping

- No crop may be seeded until the following year.
- No crop limitations the year following application of Traxos.

Storage

- Store in a cool, dry, well-ventilated area.
- If frozen, allow to thaw and agitate thoroughly.

Pre-harvest interval

- 60 days for grain and straw.
- 30 days for hay.

Grazing

- Minimum seven days before grazing livestock on treated crops.

For the most up-to-date product and label information, follow the QR code

Traxos® Two

Post-emergent weed control in one convenient package.

Traxos®Two herbicide is an affordable and convenient solution that delivers fast and safe grass and broadleaf weed control. TraxosTwo includes four active ingredients and a simple, single-use rate in a co-pack for spring wheat and durum growers.

Active ingredients:

- Pinoxaden (Group 1 herbicide), clodinafop-propargyl (Group 1 herbicide), fluroxypyr (Group 4 herbicide) and 2,4-D (Group 4 herbicide)

For use on:

- Durum
- Spring wheat

For control of[1]:

Grass weeds

- Green foxtail
- Persian darnel
- Wild oats

Broadleaf weeds

- Cleavers
- Flixweed
- Hemp-nettle
- Kochia
- Lamb's-quarters
- Ragweed
- Round-leaved mallow
- Shepherd's-purse
- Stinkweed
- Stork's-bill
- Volunteer canola
- Volunteer flax
- Wild buckwheat

Application timing:

- Four leaf to flag leaf (prior to the fourth tiller)

Use rates and packaging:

- 0.5 L/ac (1.2 L/ha) of TraxosTwo Grass Component + 0.45 L/acre (1.1 L/ha) of TraxosTwo Broadleaf Component

Packaging

- Case: 10 L TraxosTwo Grass Component + 9 L TraxosTwo Broadleaf Component (treats 20 acres)
- Drum: 80 L TraxosTwo Grass Component + 72 L TraxosTwo Broadleaf Component (treats 160 acres)

Water volumes:

- Ground: 5–10 gal/ac (50–100 L/ha)
- Aerial: 3 gal/ac (30 L/ha)

[1] Refer to product label for a complete list of weeds controlled.

Mixing order:

1. Clean spray tank and half fill with clean water.
2. Start agitation or bypass system.
3. Add the required amount of TraxosTwo Broadleaf Component and agitate for two to three minutes. If required, add required number of jugs of 2,4-D ester herbicide.
4. Add correct amount of TraxosTwo Grass Component.
5. Agitate for three to five minutes before adding remainder of water and then maintain constant agitation.
6. After any break in spraying operations, agitate thoroughly before spraying again.
7. Use the spray suspension as soon as it is prepared.

Effects of weather and use restrictions:

Weather

- Rainfast in one hour.

Application

- One application per year is permitted.

Re-cropping

- No crop may be seeded until the following year.
- A year after application, seeding is limited to alfalfa, barley, canola, corn, dry beans, flax, forage grasses, lentils, mustard, oats, peas, potatoes, rye, soybeans, sugar beets, sunflowers, and wheat.

Pre-harvest interval

- 60 days for grain and straw.
- 30 days for forage or cut hay.

Storage

- Heated storage required.

Grazing

- Wait a minimum of seven days before grazing livestock on crops treated with TraxosTwo.
- Stop meat animals from grazing at least three days before slaughter in fields treated with the TraxosTwo Broadleaf Component.
- Do not permit lactating dairy animals to graze fields within seven days after application of TraxosTwo Broadleaf Component.

For the most up-to-date product and label information, follow the QR code

Plant growth regulators

Contents

Moddus®

Give your cereal crop a storybook ending.

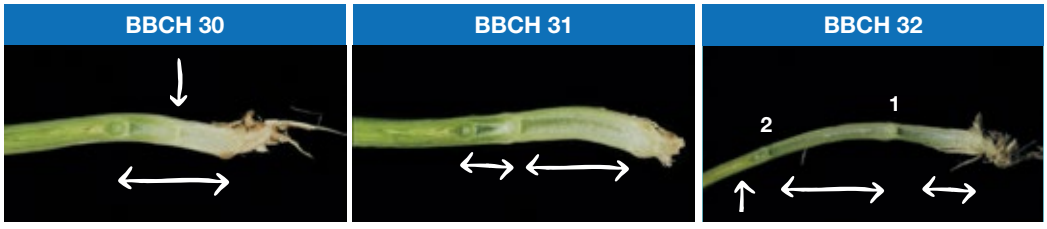
Moddus® plant growth regulator (PGR) lets you manage your cereals the way you want. It helps mitigate lodging to keep your crop standing strong until you harvest. With Moddus, you have the opportunity to grow the variety you want, the way you want.

Active ingredient:
- Trinexapac-ethyl

For use on:
- Barley
- Durum
- Oats
- Spring wheat
- Winter wheat
- Ryegrass grown for seed

For:
- Growth management in cereals.

Application timing:
In single application:
- BBCH 30-39 (spring wheat, durum, barley, and oats: pseudo stem erection to ligule of last leaf visible; in winter wheat this is beginning of stem elongation to flag leaf stage.)
- Optimal timing is BBCH 30-32 (start of stem elongation.)



↓ Position of first node with no internode greater than 1 cm

↔ Tip of developing ear is 1 cm or more from stem base

↔ Second internode is less than 2 cm

↔ First internode is 1 cm or more

1 First node

2 Second node

↑ Developing ear

↔ Second internode is more than 2 cm

↔ First internode is 1 cm or more

- Ryegrass grown for seed: BBCH 30-37. Optimum timing is BBCH 32 (when the second node on the main stem is detectable.)

In split applications (spring wheat, durum, barley and oats):
- Make the first application from first leaf fully emerged to end of tillering. Make the second application from flag leaf just visible to flag leaf fully unrolled (prior to early boot stage).

Use rates and packaging:

In spring wheat (including durum):

- 0.83–1.03 L/ha (0.34–0.42 L/ac) (100–125 g ai/ha) in a single application, OR
- 0.41–0.52 L/ha (0.17–0.21 L/ac) (50–63 g ai/ha) for two split applications

In winter wheat:

- 0.83–1.03 L/ha (0.34–0.42 L/ac) (100–125 g ai/ha)
- Use the higher rate in varieties that are more prone to lodging and in fields that are intensively managed (i.e. high fertility, high seeding rate).

In oats:

- 0.83 L/ha (0.34 L/ac) (100 g ai/ha) in a single application, OR
- 0.41 L/ha (0.17 L/ac) (50 g ai/ha) for two split applications

In barley:

- 1.03 L/ha (0.41 L/ac) (125 g ai/ha) in a single application, OR
- 0.52 L/ha (0.21 L/ac) (63 g ai/ha) for two split applications

Packaging

- Case: 2 x 10 L (treats 48–60 acres)
- Tote: 417 L (treats 1000–1250 acres)

Water volumes:

Use sufficient water to obtain thorough coverage.

- Ground: Use a minimum of 10 gal/ac (100 L/ha)
- Air: Use a minimum of 5 gal/ac (50 L/ha)

Mixing order:

1. Ensure the sprayer interior is clean, then fill the spray tank with half the required amount of water and engage gentle agitation. Good agitation is indicated by a rippling or rolling action on the surface of the water.
2. Add any WG or DF formulation mix partners and agitate to ensure complete mixing.
3. Add any SE or SC formulation mix partners and agitate to ensure complete mixing.
4. Add Moddus and agitate to ensure complete mixing.
5. Add any EC formulation mix partners and agitate to ensure complete mixing.
6. Fill the tank to three-quarters the required amount of water.
7. Add any solution (SN or SL) formulation mix partners and agitate to ensure complete mixing.
8. Finish filling the sprayer with water, maintaining good agitation.
9. After any break in spraying operations, agitate thoroughly before spraying again.
10. Spray the pesticide suspension the same day as mixing.
11. Do not mix, load, or clean spray equipment where there is potential to contaminate wells or aquatic systems.

Effects of weather and use restrictions:

Use restrictions

- To reduce the risk of crop injury, avoid overlapping and do not apply to wheat, barley, or oats that are diseased or insect damaged. Also avoid applying to crops stressed by environmental and agronomic factors such as low fertility, high temperatures, drought, or frost.

Application

- Do not apply Moddus past BBCH 39 (flag leaf stage: flag leaf fully unrolled, ligule just visible).
- Do not apply when weather conditions favour drift from treated areas.
- Avoid application when heavy rain is in the forecast.

Weather

- Rainfast in three hours.

Pre-harvest interval

- 30 days for hay and forage.
- Harvest grain and straw at maturity.
- Wheat and oats (forage): Do not feed forage to livestock or permit livestock to graze.

Storage

- Keep in original container, tightly closed, during storage.
- Store away from food or feed.
- Store in a cool, dry, well ventilated area out of the reach of children and animals.

For the most up-to-date product and label information, follow the QR code

Fungicides

Contents

Allegro®

The white mould authority.

Allegro® fungicide inhibits the formation and movement of spores, stopping diseases before they take over. Allegro provides activity on the challenging disease of white mould.

Active ingredient:
- Fluazinam (Group 29 fungicide)

For use on[1]:
- Dry shelled beans
- Edible podded legumes
- Soybeans

For control of[2]:
- White mould

Application timing in dry shelled beans[3]:
- Begin application when plants are at first bloom (i.e., when 10% to 30% of the plants have at least one open bloom).
- A second application may be made, if needed.
- Use the higher rate under conditions favourable for severe disease development.

Application timing in soybeans:
- Begin application when plants are at the R1 (early bloom) to R2 (full bloom) stage.
- A second application may be made, if needed.
- Under conditions favouring moderate to high disease development, use the high rate.

Use rates and packaging:

	Use rate	
	Suppression rate	Control rate
Dry bean	N/A	0.243 L/ac–0.405 L/ac (0.6–1.0 L/ha)
Soybean	0.178 L/ac (0.44 L/ha)	0.356 L/ac–0.473 L/ac (0.88–1.17 L/ha)

Packaging
- Case: 2 x 10 L

[1] See label for complete list of registered crops.
[2] See label for complete list of diseases controlled.
[3] See label for all crop and application timing recommendations.

Tank mixes:

- When used in dry shelled beans, Allegro can be tank mixed with Quadris® fungicide.
- There are no registered tank mixes for use in soybeans.

Water volumes:

- Use sufficient water to obtain adequate coverage of foliage.
- Ground:
  Dry shelled beans: 20–60 gal/ac (200–600 L/ha)
  Edible podded legumes: 30–100 gal/ac (300–1000 L/ha)
  Soybeans: 10–60 gal/ac (100–600 L/ha)
- Aerial: 4.5 gal/ac (45 L/ha)

Mixing order:

- Refer to WALES mixing guidelines on page 128 for correct mixing order.

Effects of weather and use restrictions:

Weather

- Rainfast in two hours.

Application

- Make two applications per year if conditions favourable for disease development persist.
- Repeat application at seven- to 10-day interval for dry shelled beans and edible podded legumes.
- Repeat application at 10- to 14-day interval for soybeans.

Re-cropping

- Treated areas may be re-planted with potatoes and dry shelled beans as soon as is practical after the last application.
- Other root crops and leafy vegetables can be planted 30 days after the last application.
- All other crops can be planted 70 days after the last application.

Pre-harvest interval

- Edible podded legume vegetables: 14 days
- Dry shelled beans, except soybeans: 30 days
- Soybeans: Do not apply after the R3 growth stage (early pod formation)

Storage

- Store in a secure, dry place, separate from fertilizer, food, or feed.

Grazing

- Do not allow livestock to graze treated areas.
- Do not feed hay from treated fields to livestock.

For the most up-to-date product and label information, follow the QR code

Bravo® ZN

Dependable foliar disease control that sticks and stays.

Bravo® ZN is a broad-spectrum, protectant fungicide that works by stopping disease infection before it has a chance to start. Bravo ZN features patented Weather Stik® surfactant technology that allows the product to stick to plant surfaces and resist the degenerative effects of rain, wind, sunlight, and humidity.

Active ingredient:

- Chlorothalonil (Group M-5 fungicide)

For use on:

- Chickpeas
- Dry peas
- Lentils

Use rates and packaging[1]:

Crop	Diseases	Use rate	Application interval (days)	Application timing
Chickpeas	Ascochyta blight *(Ascochyta rabiei)*	First application: 1.2–1.6 L/ac (3.0–4.0 L/ha) Second application: 0.8–1.2 L/ac (2.0–3.0 L/ha)	10	Use high rate for first application and low rate for the second application. The first application must be made before disease is established and no later than the onset of flowering. A second application can be made 10 days later. Application by ground only. No more than two applications per season.
Dry peas	Ascochyta blight *(Mycosphaerella pinodes)*	0.8–1.2 L/ac (2.0–3.0 L/ha)	10–14	Always apply the higher rate when conditions are favourable for disease. The first application must be made before disease is established and no later than onset of flowering. Make a second application at early pod set, around 10 days after the first.
Lentils	Anthracnose *(Colletotrichum truncatum)* Ascochyta blight *(Ascochyta lentis)*	0.8–1.6 L/ac (2.0–4.0 L/ha)	10–14	Apply at pre-flowering, prior to row closure. Make a second application 10 to 14 days after the first application (during bloom period).

Packaging

- Tote: 450 L to be used with closed transfer systems (treats 281–562.5 ac).

Tank mixes:

- To delay the development of Group 11 insensitive Anthracnose in lentils, consider mixing Elatus® with Bravo ZNC. Please consult the Bravo ZNC label for a complete list of tank-mix partners.

[1] For the complete list of crops, diseases and corresponding use rates, please consult the label.

Water volumes:

- Ground: 20 gal/ac (220 L/ha)
- Aerial: 4.5 gal/ac (45 L/ha)

Mixing order:

1. Ensure the sprayer interior is clean, then fill the spray tank with half the required amount of water and engage gentle agitation. Good agitation is indicated by a rippling or rolling action on the surface of the water.
2. Add any WG or DF formulation mix partners and agitate to ensure complete mixing.
3. Add Bravo ZN (SC) and agitate to ensure complete mixing.
4. Add any additional SC formulation mix partners and agitate to ensure complete mixing.
5. Add any EC formulation mix partners and agitate to ensure complete mixing.
6. Add any solution (SN) formulation mix partners and agitate to ensure complete mixing.
7. Finish filling the sprayer with water, maintaining good agitation.
8. After any break in spraying operations, agitate thoroughly before spraying again.
9. Spray the pesticide suspension the same day as mixing.
10. Do not mix, load, or clean spray equipment where there is potential to contaminate wells or aquatic systems.

Effects of weather and use restrictions:

Weather

- Rainfast in 30 minutes or when dry.

Application

- No more than two applications per season.
- Do not apply to chickpeas using aerial application equipment.

Re-cropping

- No restrictions.

Re-entry interval

- Chickpea scouting: 2 days
- Dry pea scouting: 1 day
- Lentil scouting: 3 days

Pre-harvest interval

- Chickpeas: 14 days
- Dry peas: 32 days
- Lentils: 48 days

Storage

- Protect product from excessive heat.

Grazing

- Do not allow grazing of treated crop.
- Do not feed straw from treated crop to livestock.

For the most up-to-date product and label information, follow the QR code

Bravo® ZNC

Dependable foliar disease control that sticks and stays.

Bravo® ZNC is a broad-spectrum, protectant fungicide that works by stopping disease infection before it has a chance to start. Bravo ZNC features patented WeatherStik® surfactant technology that allows the product to stick to plant surfaces and resist the degenerative effects of rain, wind, sunlight and humidity.

Active ingredient:

- Chlorothalonil (Group M-5 fungicide)

For use on:

- Chickpeas
- Dry peas
- Lentils

Use rates and packaging[1]:

Crop	Diseases	Use rate	Application interval (days)	Application timing
Chickpeas	Ascochyta blight *(Ascochyta rabiei)*	First application: 1.2–1.6 L/ac (3.0–4.0 L/ha) Second application: 0.8–1.2 L/ac (2.0–3.0 L/ha)	10	The first application must be made before disease is established and no later than the onset of flowering. A second application can be made 10 days later. Application by ground only. No more than two applications per season.
Dry peas	Ascochyta blight *(Mycosphaerella pinodes)*	0.8–1.2 L/ac (2.0–3.0 L/ha)	10–14	The first application must be made before disease is established and no later than the onset of flowering. Make a second application at early pod set, around 10 days after the first. Always apply the higher rate when conditions are favourable for disease. No more than two applications per season.
Lentils	Anthracnose *(Colletotrichum truncatum)* Ascochyta blight *(Ascochyta lentis)*	0.8–1.6 L/ac (2.0–4.0 L/ha)	10–14	Begin applying at pre-flowering prior to row closure. Make a second application 10 to 14 days after the first application (during bloom period). No more than two applications per season.

Packaging

- Case: 2 x 10 L jugs to be used with open transfer systems

Tank mixes:

- To delay the development of Group 11 insensitive Anthracnose in lentils, consider mixing Elatus® with Bravo ZNC. Please consult the Bravo ZNC label for a complete list of tank-mix partners.

[1]For the complete list of crops, diseases and corresponding use rates, please consult the label.

Water volumes:

- Specific to crop and disease. Use sufficient water to obtain adequate spray coverage.

Mixing order:

1. Ensure the sprayer interior is clean, then fill the spray tank with half the required amount of water and engage gentle agitation. Good agitation is indicated by a rippling or rolling action on the surface of the water.
2. Add any WG or DF formulation mix partners and agitate to ensure complete mixing.
3. Add Bravo ZNC and agitate to ensure complete mixing.
4. Add any additional SC formulation mix partners and agitate to ensure complete mixing.
5. Add any EC formulation mix partners and agitate to ensure complete mixing.
6. Fill the tank to three-quarters the required amount of water.
7. Add any solution (SN) formulation mix partners and agitate to ensure complete mixing.
8. Finish filling the sprayer with water, maintaining good agitation.
9. After any break in spraying operations, agitate thoroughly before spraying again.
10. Spray the pesticide suspension the same day as mixing.
11. Do not mix, load, or clean spray equipment where there is potential to contaminate wells or aquatic systems.

Effects of weather and use restrictions:

- When using Bravo ZNC, mixers and loaders cannot handle more than 340 kg a.i. chlorothalonil (680 L) per person per day.

Weather

- Rainfast in 30 minutes.

Application

- Do not exceed maximum number of applications stated on the label.
- Do not apply by air.

Restricted entry interval

- Chickpea scouting: 2 days
- Dry pea scouting: 1 day
- Lentil scouting: 3 days

Pre-harvest interval

- Chickpeas: 14 days
- Dry peas: 32 days
- Lentils: 48 days

Storage

- Protect product from excessive heat.

Grazing

- Do not allow grazing of treated crop.
- Do not feed straw from treated crop to livestock.

For the most up-to-date product and label information, follow the QR code

Elatus®

The leader of the pack.

Lead with Elatus® fungicide and the power of Solatenol® as the first fungicide pass in your lentils, so you can maximize quality and yield with long-lasting, early-season protection against Anthracnose.

Active ingredients:
- Solatenol® (Group 7 fungicide) and azoxystrobin (Group 11 fungicide)

For use on[1]:
- Lentils

For control of:
- Anthracnose
- Ascochyta blight
- Mycosphaerella blight
- Sclerotinia[2]

Application timing:
- Apply before disease is established at first flower (0-20% bloom), prior to row closure.
- A preventative application is important for optimal disease protection and best results.

Use rates and packaging:
Elatus® A at 202 mL/ac (500 mL/ha) + Elatus® B at 202–304 mL/ac (500–750 mL/ha). The common rate for Elatus® B is 202 mL/ac.

Packaging
- Case: 8.1 L Elatus® A + 8.1 L Elatus® B (treats 40 ac at the common rate)
- Bulk: 97.2 L Elatus® A + 97.2 L Elatus® B (treats 480 ac at the common rate)

Tank mixes:
- To delay the development of Group 11 insensitive Anthracnose in lentils, consider mixing Elatus® with Bravo® ZNC. Please consult the Bravo ZNC label for a complete list of tank-mix partners.

Water volumes:
- Ground: Minimum 10–20 gal/ac (100–200 L/ha)
- Aerial: Minimum 4.5 gal/ac (45 L/ha)
- Good spray coverage and canopy penetration are important for optimal results. This is achieved through application at recommended water volumes.

[1] Refer to label for a complete list of registered crops and diseases.
[2] Suppression

Mixing order:

1. Add half to three-quarters of the required amount of water to the spray or mixing tank.
2. With the agitator running, add Elatus® A to the tank.
3. Allow the Elatus® A to completely disperse into the mix water. Continue agitation while adding the remainder of the water and Elatus® B to the spray tank.
4. Spray the mixture with the agitator running.

Effects of weather and use restrictions:

Weather

- Rainfast in two hours or when dry on plant.
- Avoid application when heavy rain is in the forecast.

Application

- One application early in the crop year (i.e. single application at 0-20 percent flowering).

Re-cropping

- No restrictions.

Pre-harvest interval

- Lentils: 15 days

Storage

- Store in a cool, dry, well-ventilated area. Do not store below 0°C.

Grazing

- Do not feed dried vines to livestock.

For the most up-to-date product and label information, follow the QR code

Miravis® Ace

Don't wait for an ace to be dealt. Make it happen.

Backed by proven, powerful performance, Miravis® Ace is the trusted fungicide choice for Canadian cereal growers to drive yield and manage quality.

Active ingredients:
- ADEPIDYN® (Group 7 fungicide) and propiconazole (Group 3 fungicide)

For use on:
- Barley
- Oats
- Wheat (spring, durum, winter)

For protection against:
- Ergot[1]
- Fusarium head blight (*Fusarium* spp.)[1]
- All major leaf diseases[2]

Application timing:
- Wheat and oats: Apply within the range of at least 75 percent of heads on the main stem fully emerged to when 50 percent of the heads on the main stem are flowering (BBCH 57-65).
- Barley: Apply within the range of at least 70 percent of heads on the main stem fully emerged to three days after full head emergence (approximately 50 percent of florets are exposed).

Use rates and packaging:
- 0.4 L/ac (1 L/ha) tank mixed with 90% non-ionic surfactant at a rate of 0.125% v/v in the spray tank.

Packaging
- Case: 2 x 8.1 L (treats 40 ac)
- Tote: 405 L (treats 1000 ac)

Water volumes:
Use sufficient water to obtain thorough coverage.
- Ground: 10 gal/ac (100 L/ha)
- Aerial: 5 gal/ac (50 L/ha)

Tank mixes:
- No registered tank mixes on label.
- See page 127 for the list of supported non-ionic surfactants.

[1] Suppression.
[2] See label for full list of diseases.

Mixing order:

1. Ensure the sprayer interior is clean, then fill the spray tank with half the required amount of water and engage gentle agitation. Good agitation is indicated by a rippling or rolling action on the surface of the water.
2. Add any WG or DF formulation mix partners and agitate to ensure complete mixing.
3. Add Miravis® Ace and any additional SE or SC formulation mix partners and agitate to ensure complete mixing.
4. Add any EC formulation mix partners and agitate to ensure complete mixing.
5. Fill the tank to three-quarters the required amount of water.
6. Add adjuvant, where required, as directed in crop directions for use.
7. Finish filling the sprayer with water, maintaining good agitation.
8. After any break in spraying operations, agitate thoroughly before spraying again.
9. Spray the pesticide suspension the same day as mixing.
10. Do not mix, load, or clean spray equipment where there is potential to contaminate wells or aquatic systems.

Effects of weather and use restrictions:

Weather

- Rainfast in two hours or when dry on plant.
- Avoid application when heavy rain is forecast.
- Do not apply during periods of dead calm or if winds are gusting.

Application

- One application per season. Follow all precautions, restrictions, and directions on the labels of fungicide products used in an alternation program.
- Do not apply more than one application of a product containing ADEPIDYN® for suppression of Fusarium head blight.

Re-cropping

- Dried shelled pea and beans, soybeans, cereals, corn, and canola may be seeded the same year as Miravis® Ace application. All other crops may be seeded the year after a Miravis® Ace application (105 days).

Pre-harvest interval

- In wheat and oats, do not apply after BBCH 65. In barley, do not apply later than three days after full emergence of main stem heads.
- Grain and straw may be fed at normal maturity.
- For harvest of forage and hay, one application with a minimum pre-harvest interval of seven days is required.

Storage

- Keep in original container, tightly closed, during storage.
- Store in a cool, dry, well-ventilated area away from feed and foodstuffs, and out of the reach of children and animals.
- To prevent contamination store this product away from food or feed.

For the most up-to-date product and label information, follow the QR code

Miravis® Bold

Get an earlier start on Sclerotinia protection.

Remove the guesswork and protect your most valuable crop from variable in-season canola Sclerotinia pressure. Miravis® Bold delivers the best flexibility and convenience to drive yield in canola, regardless of what the season may throw at you.

Active ingredient:
- ADEPIDYN® (Group 7 fungicide)

For use on:
- Canola
- Sunflowers[1]

For protection against:
- Sclerotinia stem rot

Application timing:
- Apply once at 10-50% bloom.

Use rates and packaging:
- 0.3–0.4 L/ac (0.75–1 L/ha) tank mixed with a non-ionic surfactant at a rate of 0.125% v/v in the spray tank.
- Case: 2 x 8.1 L (treats 40–53 ac)

Water volumes:
Use sufficient water to obtain thorough coverage.
- Ground: 10 gal/ac (100 L/ha)
- Aerial: 5 gal/ac (50 L/ha)

Tank mixes:
- No registered tank mixes on label.
- See page 127 for the list of supported non-ionic surfactants.

[1] Refer to label for application information.

Mixing order:

1. Ensure the sprayer interior is clean, then fill the spray tank with half the required amount of water and engage gentle agitation. Good agitation is indicated by a rippling or rolling action on the surface of the water.
2. Add any WG or DF formulation mix partners and agitate to ensure complete mixing.
3. Add Miravis® Bold fungicide and any additional SE or SC formulation mix partners and agitate to ensure complete mixing.
4. Add any EC formulation mix partners and agitate to ensure complete mixing.
5. Fill the tank to three-quarters of the required amount of water.
6. Add any solution (SN or SL) formulation mix partners and agitate to ensure complete mixing.
7. Add adjuvant, where required, as directed in crop directions for use.
8. Finish filling the sprayer with water, maintaining good agitation.
9. After any break in spraying operations, agitate thoroughly before spraying again.
10. Spray the pesticide suspension the same day as mixing.
11. Do not mix, load, or clean spray equipment where there is potential to contaminate wells or aquatic systems.

Effects of weather and use restrictions:

Weather

- Rainfast in two hours or when dry on plant.
- Avoid application when heavy rain is in the forecast.
- Do not apply during periods of dead calm or if winds are gusting.

Application

- Under conditions of extended or heavy disease pressure, a subsequent application with an alternate fungicide should be considered.

Re-cropping[2]

- Canola, cereals, corn, cucurbits, dried shelled peas and beans, fruiting vegetables, leaf petiole vegetables, leafy green vegetables, peanuts, potatoes, and soybeans may be seeded immediately following a Miravis® Bold application. All other crops may be seeded 30 days after a Miravis® Bold application.

Pre-harvest interval

- Do not apply within 30 days of harvest.

Storage

- Keep in original container, tightly closed, during storage.
- Store in a cool, dry, well-ventilated area out of the reach of children and animals.
- Store this product away from food or feed.

For the most up-to-date product and label information, follow the QR code

[2] Refer to product label for crop specific re-cropping restrictions before making an application of Miravis® Bold.

Miravis® Era

Make this your golden era.

For cereal growers seeking the pinnacle of protection against Fusarium head blight, Miravis® Era combines two proven, powerful active ingredients to achieve the best marketable yield.

Active ingredient:
- ADEPIDYN® (Group 7 fungicide) and prothioconazole (Group 3 fungicide)

For use on:
- Barley
- Oats
- Wheat (spring, winter, durum)

For protection against:
- Fusarium head blight[1]
- Various leaf diseases[2]

Application timing:
- Wheat: Apply within the range of at least 75 percent of heads on the main stem fully emerged to when 50 percent of the heads on the main stem are flowering (BBCH 57-65).
- Barley: Apply within the range of at least 70 percent of heads on the main stem fully emerged to three days after full head emergence (approximately 50 percent of florets are exposed).

Use rates and packaging:
Use rate
- 0.25 L/ac (0.625 L/ha) Miravis® Era A + 0.2 L/ac (0.5 L/ha) of Miravis® Era B tank mixed with a non-ionic surfactant at a rate of 0.125% v/v in the spray tank

Packaging
- One case contains 10.1 L of Miravis® Era A + 8.1 L of Miravis® Era B (treats 40 acres)

Water volumes:
- Ground: 10 gal/ac (100 L/ha)
- Aerial: 5 gal/ac (50 L/ha)

Tank mixes:
- No registered tank mixes on label.
- See page 127 for the list of supported non-ionic surfactants.

Miravis® Era is currently available in the geographies that consistently experience high Fusarium head blight pressure.

[1] Suppression
[2] See label for full list of diseases.

123 Mixing order:

Miravis® Era A: SC
Miravis® Era B: EC

1. Ensure the sprayer interior is clean, then fill the spray tank with half the required amount of water and engage gentle agitation. Good agitation is indicated by a rippling or rolling action on the surface of the water.
2. Add any WG or DF formulation mix partners and agitate to ensure complete mixing.
3. Add Miravis® Era A and any additional SE or SC formulation mix partners and agitate to ensure complete mixing.
4. Add Miravis® Era B and any additional EC formulation mix partners and agitate to ensure complete mixing.
5. Fill the tank to three-quarters of the required amount of water.
6. Add any solution (SN or SL) formulation mix partners and agitate to ensure complete mixing.
7. Add adjuvant, where required, as directed in crop directions for use.
8. Finish filling the sprayer with water, maintaining good agitation.
9. After any break in spraying operations, agitate thoroughly before spraying again.
10. Spray the pesticide suspension the same day as mixing.
11. Do not mix, load or clean spray equipment where there is potential to contaminate wells or aquatic systems.

When using chemical handling equipment to fill the sprayer, the following additional recommendations apply:

- WG and DF formulations are preferentially batch mixed.
- SC, SN, and SL formulations may be inducted or batch mixed.
- EC formulations are preferentially batch mixed.

Effects of weather and use restrictions:

Weather

- Rainfast in two hours, or when dry on the plant.
- Avoid application when heavy rain is in the forecast.
- Do not apply during periods of dead calm or if winds are gusting.

Application

- One application per season. Follow all precautions, restrictions and directions on the labels of fungicide products used in an alternation program.
- Do not apply more than one application of a product containing ADEPIDYN® for suppression of Fusarium head blight.

Re-cropping

- Treated areas may be replanted with any crop specified on the label as soon as practical after the last application. For crops not listed on the label, do not plant back within 30 days of last application.

Pre-harvest interval

- In wheat, do not apply after BBCH 65 (50% of main heads in flower). In barley, do not apply later than three days after full emergence of main stem heads.
- For harvest of grain, forage, and hay, one application with a minimum pre-harvest interval of 30 days is required.

Storage

- Keep in original container, tightly closed, during storage.
- Store in a cool, dry, well-ventilated area way from feed and foodstuffs, and out of the reach of children and animals.
- To prevent contamination, store this product away from food or feed.

For the most up-to-date product and label information, follow the QR code

Miravis® Neo

CEREALS

Three modes of action, one powerful product for leaf disease.

Build more yield when you count on Miravis® Neo fungicide to protect your wheat, barley, and oats from all major leaf diseases. Simplify your leaf disease management with powerful, broad-spectrum activity and long-lasting performance.

Active ingredients:

- ADEPIDYN® (Group 7 fungicide), propiconazole (Group 3 fungicide) and azoxystrobin (Group 11 fungicide)

For use on:

- Wheat
- Barley
- Oats
- Rye
- Triticale

For control of:

	Crown rust (leaf rust)	Net blotch	Scald	Septoria leaf blotch	Spot blotch	Stripe rust	Tan spot
Wheat	●			●	●	●	●
Barley		●	●	●	●	●	●
Oats	●			●			
Rye			●	●		●	●
Triticale				●			

Application timing:

- Make one application between end of tillering to 50 percent of heads on main stem emerged (BBCH 29-55), with optimal application timing at flag leaf to maximize yield potential.
- Apply before disease development or at the beginning of disease.

Use rates and packaging:

- 0.3 L/ac (0.75 L/ha)

Packaging

- Case: 2 x 10.125 L (treats 67.5 acres at the 0.3 L/ac rate)
- Drum: 97.2 L (treats 324 acres at the 0.3 L/ac rate)
- Tote: 405 L (treats 1350 acres at the 0.3 L/ac rate)

Water volumes:

- Ground: 10 gal/ac (100 L/ha)
- Aerial: 5 gal/ac (50 L/ha)

Mixing order:

1. Ensure that the sprayer interior is clean, then fill the spray tank with half the required amount of water and engage gentle agitation. Good agitation is indicated by a rippling or rolling action on the surface of the water.
2. Add Miravis® Neo and agitate to ensure complete mixing.
3. Finish filling the sprayer with water, maintaining good agitation.
4. After any break in spraying operations, agitate thoroughly before spraying again.
5. Spray the pesticide suspension the same day as mixing.
6. Do not mix, load, or clean spray equipment where there is a potential to contaminate wells or aquatic systems.

Effects of weather and use restrictions:

Weather

- Rainfast in two hours or when dry on plant.
- Do not apply before heavy rain is forecasted. Miravis® Neo is most effective when applied and allowed to dry before a rainfall.

Application

- One application no later than BBCH 55. Follow all precautions, restrictions and directions on the labels of fungicide products used in an alternation program.

Re-cropping

- Fields sprayed with Miravis® Neo can be re-cropped immediately to peas, beans, soybeans, cereals, corn and canola.
- All other crops may be seeded 105 days after application.

Pre-harvest interval

- Straw and grain: 45 days
- Hay: 30 days

Storage

- Keep in original container, tightly closed, during storage.
- Store in a cool, dry, well-ventilated area way from feed and foodstuffs, and out of the reach of children and animals.
- To prevent contamination, store this product away from food or feed.

For the most up-to-date product and label information, follow the QR code

Miravis® Neo

CORN

Unmistakably effective protection.

Miravis® Neo fungicide offers the most comprehensive protection for your corn, with three modes of action for preventative, early curative, and long-lasting activity on the broadest range of diseases, including both leaf diseases and Fusarium, or Gibberella ear rot.

Active ingredients:

- ADEPIDYN® (Group 7 fungicide), propiconazole (Group 3 fungicide), and azoxystrobin (Group 11 fungicide)

For use on:

- Corn

For control of:

- Anthracnose leaf blight *(Colletotrichum graminicola)*
- Common rust (*Puccina sorghi*)
- Eye spot *(Aureobasidium zeae)*
- Fusarium and Gibberella ear rots[1]
- Grey leaf spot (*Cercospora zeae-maydis*)
- Northern corn leaf blight (*Setosphaeria turcica*)
- Southern corn leaf blight (*Cochliobolus heterostrophus*)
- Tar spot *(Phyllachora maydis)*

Application timing:

- Maximum two applications per season.

Leaf diseases:

- Make the first application at the first sign of disease. A second application can be made 14 days after the first application when disease pressure is high or when conditions favour disease development.

Fusarium and Gibberella ear rots[1]:

- Make a single application of Miravis® Neo from the developmental stage of corn between the tip of stigmata visible to the stigmata drying. Miravis® Neo will reduce both disease symptoms and levels of mycotoxins in the grain.

Use rates and packaging:

- 0.3 L/ac–0.5 L/ac (0.75 L/ha–1.25 L/ha). Common rate is 0.405 L/ac (1.0 L/ha).
- Use the 0.5 L/ac (1.25 L/ha) application rate when disease pressure is high or if susceptible hybrids are planted.

Packaging

- Case: 2 x 10.125 L (treats 50 acres at 0.405 L/ac rate)
- Drum: 97.2 L (treats 240 acres at 0.405 L/ac rate)
- Tote: 405 L (treats 1000 acres at 0.405 L/ac rate)

[1] Suppression

Water volumes:

- Ground: 20 gal/ac (200 L/ha)
- Aerial: 5 gal/ac (50 L/ha)

Mixing order:

1. Ensure the sprayer interior is clean, then fill the spray tank with half the required amount of water and engage gentle agitation. Good agitation is indicated by a rippling or rolling action on the surface of the water.
2. Add Miravis® Neo and agitate to ensure complete mixing.
3. Finish filling the sprayer with water, maintaining good agitation.
4. After any break in spraying operations, agitate thoroughly before spraying again.
5. Spray the pesticide suspension the same day as mixing.
6. Do not mix, load, or clean spray equipment where there is potential to contaminate wells or aquatic systems.

Effects of weather and use restrictions:

Weather

- Rainfast in two hours or when dry on plant.
- Do not apply before heavy rain is in the forecast. Miravis® Neo is most effective when applied and allowed to dry before a rainfall.

Application

- Two applications on grain, stover and sweet corn. Do not make more than one application for forage. Then switch to a non-Group 3, 7, or 11 fungicide.

Re-cropping

- Fields sprayed with Miravis® Neo can be re-cropped immediately to peas, beans, soybeans, wheat, barley, corn, and canola.
- Oats and rye may be seeded 45 days after application.
- All other crops may be seeded 105 days after application.

Pre-harvest interval

- Corn grain: 30 days
- Sweet corn: 14 days
- Forage: 30 days
- Grain and stover may be fed or harvested 30 days after last application.

Storage

- Keep in original container, tightly closed, during storage.
- Store in a cool, dry, well-ventilated area away from feed and foodstuffs, and out of the reach of children and animals.
- To prevent contamination, store this product away from food or feed.

For the most up-to-date product and label information, follow the QR code

Miravis® Neo

PULSES

Three modes of action, one powerful product.

Miravis® Neo fungicide provides longer-lasting, consistent protection against key diseases such as Ascochyta and Mycosphaerella blight in peas and chickpeas. With three modes of action - including ADEPIDYN® fungicide - growers can count on Miravis® Neo for built-in resistance management, reliable performance, and peace of mind come harvest time.

Active ingredients:

- ADEPIDYN® (Group 7 fungicide), propiconazole (Group 3 fungicide), and azoxystrobin (Group 11 fungicide)

For use on:

- Chickpeas
- Peas

For control of:

- Anthracnose
- Mycosphaerella blight
- White mould[1]
- Ascochyta blight
- Powdery mildew

Application timing:

- Make one application before disease establishment and no later than the onset of flowering.

Use rates and packaging:

- 0.4 L/ac–0.5 L/ac (1 L/ha–1.25 L/ha)

Packaging

- Case: 2 x 10.125 L (treats 50 acres at the 0.4 L/ac rate; treats 40 acres at the 0.5 L/ac rate)
- Drum: 97.2 L (treats 240 acres at the 0.4 L/ac rate; treats 194 acres at the 0.5 L/ac rate)
- Tote: 405 L (treats 1000 acres at the 0.4 L/ac rate; treats 810 acres at the 0.5 L/ac rate)

Miravis® Neo rate by disease

	Mycosphaerella blight	Powdery mildew	Anthracnose	Ascochyta blight	White mould (Sclerotinia suppression)
Peas	0.4 L/ac	0.4 L/ac	0.4 L/ac		0.5 L/ac
Chickpeas		0.4 L/ac	0.4 L/ac	0.5 L/ac	0.5 L/ac

[1] Suppression

Water volumes:

- Ground: 10 gal/ac (100 L/ha)
- Aerial: 5 gal/ac (50 L/ha)

Mixing order:

1. Ensure the sprayer interior is clean, then fill the spray tank with half the required amount of water and engage gentle agitation. Good agitation is indicated by a rippling or rolling action on the surface of the water.
2. Add Miravis® Neo and agitate to ensure complete mixing.
3. Finish filling the sprayer with water, maintaining good agitation.
4. After any break in spraying operations, agitate thoroughly before spraying again.
5. Spray the pesticide suspension the same day as mixing.
6. Do not mix, load, or clean spray equipment where there is potential to contaminate wells or aquatic systems.

Effects of weather and use restrictions:

Weather

- Rainfast in two hours or when dry on plant.
- Do not apply before heavy rain is in the forecast. Miravis® Neo is most effective when applied and allowed to dry before a rainfall.

Application

- One application. Follow all precautions, restrictions and directions on the labels of fungicide products used in an alternation program.

Re-cropping

- Fields sprayed with Miravis® Neo can be re-cropped immediately to peas, beans, soybeans, cereals, corn, and canola.
- All other crops may be seeded 105 days after application.

Pre-harvest interval

- Do not apply within 30 days of harvest.
- Dry pea hay and vines may be fed or harvested 14 days after application.
- Do not feed dried pea vines to livestock.

Storage

- Keep in original container, tightly closed, during storage.
- Store in a cool, dry, well-ventilated area away from feed and foodstuffs, and out of the reach of children and animals.
- To prevent contamination, store this product away from food or feed.

For the most up-to-date product and label information, follow the QR code

Miravis® Star

Your guiding light to better canola

The combination of two proven, high-performing active ingredients in Miravis® Star provides the most powerful, reliable Sclerotinia protection–letting canola growers focus on maximizing yields.

Active ingredient:
- ADEPIDYN® (Group 7 fungicide) and Fludioxonil (Group 12 fungicide)

For use on:
- Canola

For protection against:
- Sclerotinia stem rot (*Sclerotinia sclerotiorum*)

Application timing:
- Apply once at 10-50% bloom

Use rates and packaging:
- 0.4 L/ac–0.485 L/ac (1L/ha–1.2L/ha) tank mixed with a non-ionic surfactant at a rate of 0.125% v/v in the spray tank.

Packaging
- Case: 2 x 8.1 L (treats 33–40 ac)

Water volumes:
Use sufficient water to obtain thorough coverage.
- Ground: 10 gal/ac (100 L/ha)
- Aerial: 5 gal/ac (50 L/ha)

Tank mixes:
- No registered tank mixes on label.
- See page 127 for the list of supported non-ionic surfactants.

Mixing order:
1. Ensure that the sprayer interior is clean, then fill the spray tank with half the required amount of water and engage gentle agitation. Good agitation is indicated by a rippling or rolling action on the surface of the water.
2. Add any WG or DF formulation mix partners and agitate to ensure complete mixing.
3. Add Miravis® Star Fungicide and any additional SE or SC formulation mix partners and agitate to ensure complete mixing.
4. Add any EC formulation mix partners and agitate to ensure complete mixing.
5. Fill the tank to three-quarters of the required amount of water.
6. Add any solution (SN or SL) formulation mix partners and agitate to ensure complete mixing.

7. Add adjuvant, where required, as directed in crop directions for use.
8. Finish filling the sprayer with water, maintaining good agitation.
9. After any break in spraying operations, agitate thoroughly before spraying again.
10. Spray the pesticide suspension the same day as mixing.
11. Do not mix, load or clean spray equipment where there is a potential to contaminate wells or aquatic systems.

When using chemical handling equipment to fill the sprayer, the following additional recommendations apply:

- WG and DF formulations are preferentially batch mixed.
- SC, SN, and SL formulations may be inducted or batch mixed.
- EC formulations are preferentially batch mixed.

Effects of weather and use restrictions:

Weather

- Rainfast in two hours or when dry on plant.
- Avoid applying when heavy rain is forecast.
- Do not apply during periods of dead calm or if winds are gusting.

Application

- Application can be made by ground or air.
- Do not apply more than one application per season of an ADEPIDYN® containing product for control of Sclerotinia stem rot in canola.

Re-cropping

- Treated areas may be replanted with any crop specified on the label as soon as practical after the last application. For crops not listed on the label, do not plant back within 30 days of last application.

Pre-harvest interval

- Do not apply within 30 days of harvest.

Storage

- Store this product away from food or feed.
- Keep in original container, tightly closed, during storage.
- Store in a cool, dry, well-ventilated area away from feed and foodstuffs, and out of the reach of children and animals.
- If product freezes, allow to thaw and circulate prior to use.

For the most up-to-date product and label information, follow the QR code

Quadris®

Protection that grows with your crop.

Quadris® fungicide provides consistent, wall-to-wall coverage against foliar diseases in pulses at critical growth stages. By using the plant's own feeding system, Quadris moves quicker and farther into the plant, protecting it throughout. Quadris protects pulse crops against Ascochyta, anthracnose, and Mycosphaerella blight.

Active ingredient:

- Azoxystrobin (Group 11 fungicide)

For use on[1]:

- Pulse crops (Crop Group 6): Chickpeas, lentils, peas, beans, and soybeans

For control of:

- Anthracnose
- Ascochyta blight
- Asian soybean rust
- Cercospora leaf spot (soybeans)
- Mycosphaerella blight
- Powdery mildew (soybeans and field peas)
- Sclerotinia[2]

Application timing:

Chickpeas, lentils, beans, and peas

- First application: At first sign of disease and no later than onset of flowering.
- Second application: 10–14 days after first application.

Soybeans

- First application: R1–R3 stage or when there is five percent disease level.
- Second application: 14 days after first application.

Use rates and packaging:

- The recommended rate for most pulse crops and diseases is 202 mL/ac (0.5 L/ha). Please refer to the product label for a complete list of rates by crop.

Packaging

- Case: 4 x 3.78 L (treats 75 ac at the most common rate)

[1]See label for complete list of crops.
[2]Suppression

Water volumes:

- Ground: 10 gal/ac (100 L/ha)
- Aerial: 4.5 gal/ac (45 L/ha)

Mixing order:

1. Ensure the sprayer interior is clean, then fill the spray tank with half the required amount of water and engage gentle agitation. Good agitation is indicated by a rippling or rolling action on the surface of the water.
2. Add any WG or DF formulation mix partners and agitate to ensure complete mixing.
3. Add Quadris (SC) and agitate to ensure complete mixing.
4. Add any additional SC formulation mix partners and agitate to ensure complete mixing.
5. Add any EC formulation mix partners and agitate to ensure complete mixing.
6. Fill the tank to three-quarters the required amount of water.
7. Add any solution (SN or SL) formulation mix partners and agitate to ensure complete mixing.
8. Finish filling the sprayer with water, maintaining good agitation.
9. After any break in spraying operations, agitate thoroughly before spraying again.
10. Spray the pesticide suspension the same day as mixing.

Effects of weather and use restrictions:

Application

- Do not make more than two applications per crop per season.

Re-cropping

- 30 days required on all crops intended for food and feed.

Pre-harvest interval

- Crop Group 6C (dry shelled pea and bean): 15 days

Storage

- Do not freeze.

Grazing

- Do not feed dried pea vines to animals.

For the most up-to-date product and label information, follow the QR code

Quilt®

We know a thing or two about disease control.

With two active ingredients for preventative and early curative disease protection, Quilt® fungicide protects and preserves crop yield and quality.

Active ingredients:

- Propiconazole (Group 3 fungicide) and azoxystrobin (Group 11 fungicide)

For use on:

- Canola
- Cereals
- Pulse crops (chickpeas, lentils, peas, beans and soybeans)

Use rates and packaging[1]:

For use on[1]	For control of	Application timing	Use rates[2]
Canola	Virulent blackleg	Apply during the rosette stage between second true leaf and bolting (two- to six-leaf stage).	0.405 L/ac (1.0 L/ha)
Cereals	Barley net blotch Barley scald Crown rust (oats) Septoria Stripe, stem and leaf rusts Tan spot	Between stem elongation and head half emerged.	The common use rate for most diseases in cereals is 0.405 L/ac (1.0 L/ha).
Pulse crops: Chickpeas, lentils, peas, beans, and soybeans	Anthracnose Leaf Rust Mycosphaerella blight Powdery mildew	Make the first application at the first sign of disease and no later than the onset of flowering. A second application should be made no more than 14 days later if disease conditions persist.	Please refer to label for use rates.

Packaging

- Case: 2 x 10.125 L (treats 33–50 ac)
- Drum: 101.25 L (treats 167–250 ac)
- Tote: 405 L (treats 670–1,000 ac)

Water volumes:

- Use sufficient water volumes to ensure thorough coverage and canopy penetration.
- Ground: Minimum 10 gal/ac (100 L/ha)
- Aerial: Minimum 4.5 gal/ac (45 L/ha)

Mixing order:

1. Prepare only as much spray mixture as is required for the immediate operation.
2. Add one-half to two-thirds of the required amount of water to the spray tank. Begin agitation and continue through mixing and spraying.
3. Add the required amount of Quilt.
4. Finish filling the tank with the correct amount of water. If applying to canola, add glyphosate or Liberty® herbicide, if applicable.

Effects of weather and use restrictions:

Weather

- Rainfast in two hours.

Application

- Do not make more than one application per season in canola or more than two applications per season in cereals and pulses.
- Maximum of one application for forage and hay.
- Crops that Quilt is registered on may be planted immediately after an application

Re-cropping

- Oats and rye may be planted 45 days after an application. All other crops may be planted 105 days after an application.
- Do not plant any other crop intended for food, grazing or any component of animal feed or bedding within 105 days of application unless the second crop is listed on the Quilt label.

Pre-harvest interval

- Canola, pulses and soybeans: 30 days
- Wheat and barley grain and straw: 45 days
- Forage and hay: 30 days

Storage

- Avoid freezing.

Grazing

- Cereals: Do not make more than one application for forage and hay.
- Pulses: Do not graze or feed livestock any treated forage or cut green crop for hay or silage. Do not feed dried pea vines to livestock.

NOTE:

Quilt fungicide is not a substitute for good blackleg management practices. Crop rotation, growing seed with a strong blackleg genetic package, and planting seed treated with a seed treatment recommended for control of blackleg are all important in managing blackleg, in addition to foliar fungicide applications.

For the most up-to-date product and label information, follow the QR code

[1]See label for complete list of crops.
[2]Please refer to the product label for a complete list of rates by crop.

Desiccants

Contents

Reglone® Ion

Remember, use labeled PPE

PULSES

It's not a race, but if it were you'd win.

Reglone® Ion desiccant controls harvest timing while protecting yield and grade. It provides fast, complete drydown of your crop, allowing you to take control of your harvest. It also has the surfactant pre-mixed, so you always use the right one.

Active ingredient:

- Diquat ion (Group 22 desiccant)

For use on[1]:

- Beans: White, red kidney and adzuki
- Flax
- Peas: Field (dry)
- Sunflowers
- Chickpeas
- Lentils
- Soybeans

Reglone Ion is safe to use on any registered crop–germination is not adversely affected.

For control of:

- Desiccation of of pulse, oilsee and legume forage seed crops.

Application timing:

Field peas

Apply Reglone Ion when:

- Upper pods are fleshy green or starting to turn yellow. Seeds may be immature.
- The middle pods are light green to yellow and somewhat shrunken and leathery. The seeds are full size and soft, but not juicy, and split when squeezed.
- The bottom pods are dry and translucent. Seeds are detached from pods.

Lentils

Apply Reglone Ion when:

- Upper pods are fleshy green but seeds are immature. The middle pods are light green to yellow and seeds are full size and soft, but not juicy.
- Bottom pods are brown and dry, but not split, while the seeds are quite hard and will rattle.

Chickpeas

- Desi: Apply when the majority of plants are yellow, most pods are mature and seeds have turned from green to yellow or brown (upper part of plant may still be green).
- Kabuli: Apply when the majority of plants and pods are ripe and dry, and seeds have turned from green to white or tan and detached from the pods.

Sunflowers

- Apply when seeds reach maturity (20-50% moisture in seed and hull). Combine 15-20 days after spraying.

[1] Refer to the label for a complete list of registered crops.

Use rates and packaging[2]:

	Ground (L/ac)	Aerial (L/ac)
Lentils Peas Sunflowers	0.83	0.83–1.12
Chickpeas	0.83	0.83

Packaging

- Case: 2 x 10 L (treats 24 ac at 0.83 L/ac rate)
- Drum: 115 L (treats 139 ac at 0.83 L/ac rate)
- Tote: 450 L (treats 542 ac at 0.83 L/ac rate)

Water volumes:

- Ground: Minimum 25 gal/ac (225 L/ha)
- Aerial: Minimum 4.5 gal/ac (45 L/ha)

Effects of weather and use restrictions:

Weather

- Rainfast in 15 minutes.
- Drought stress will thicken plant cuticles, reducing the efficacy of Reglone Ion.
- Late-season moisture can spur growth of indeterminate crops, such as pulses, and reduce efficacy of Reglone Ion.

Re-cropping

- No restrictions.

Storage

- Store above 0°C.
- If crystallization occurs because of storage below 0°C, warm to room temperature and agitate gently until reconstituted.

Grazing

- Crop residues may be fed to livestock.

Harmful or fatal if swallowed. Causes severe eye and skin injury. Effects can be delayed. Take immediate action if splashed on skin or in eyes and seek medical attention. Always read and follow label directions, including required personal protective equipment (PPE).

For the most up-to-date product and label information, follow the QR code

[2] Refer to the label for a complete list of crops and product rates. Use higher rates for dense canopy and/or weedy crops.

Reglone Ion desiccant staging best practices on pulses

Staging lentils

Apply Reglone Ion when:

- Most of the plants are turning yellow (excluding low spots and hilltops).
- Upper pods may be fleshy green and seeds may still be immature.
- Middle pods are light green to yellow. Seeds are full size but not juicy.
- Bottom pods are brown and dry, but not split. The seeds should be hard and will rattle.

Staging green peas

Apply Reglone Ion when:

- Upper pods may be fleshy green or starting to turn yellow; seeds may be immature.
- Middle pods are light green to yellow, somewhat shrunken and leathery. Seeds should be full size and soft, but not juicy, and they'll split when squeezed.
- Bottom pods are dry, translucent and seeds are easily detached from them.

Staging yellow peas

Apply Reglone Ion when:

- You see an onset of colour change from green to yellow.
- The top and middle pods are shrunken and leathery, and seeds split when squeezed.
- Lower and middle pods are dry, translucent and shrunken, and seeds within pods are detached.

Staging chickpeas

Apply Reglone Ion when:

DESI CHICKPEAS

- Majority of plants are yellow
- Most pods are mature
- Seeds have turned from green to yellow or brown (upper part of the plant may still be green)

KABULI CHICKPEAS

- Majority of plants and pods are ripe and dry
- Seeds have turned from green to white (or tan) and detached from the pods.

Reglone® Ion

Remember, use labeled PPE

CANOLA

It's not a race, but if it were you'd win.

Reglone Ion provides fast, complete drydown of your canola. Desiccating allows you to start combining your canola crop sooner, so you can get it in the bin faster.

Active ingredient:
- Diquat ion (Group 22 desiccant)

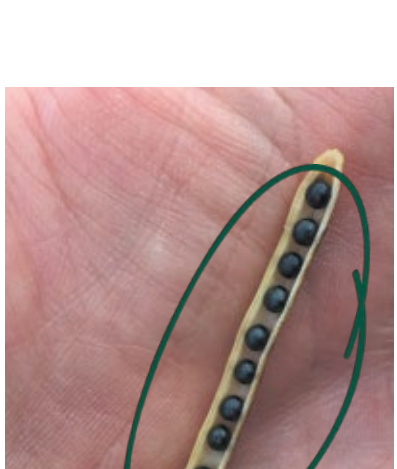
For use on:
- Canola[1]

For control of:
- Desiccation of green stem, pod and leaf material in canola.

Application timing:

To get the most out of a Reglone Ion application, remember that it is a true desiccant and stage the application accordingly:

1. Look for brown colouring in the upper pods and stems. The crop should be shifting from green in colour to yellowish-brown.
2. Listen for a rattle in your pods. Mature seeds are loose in the pod and rattle when the plant is shaken.
3. Strip out seeds from several areas of the field. Aim for when the crop has 90% brown seeds throughout the plants.



Use rates and packaging:
- Ground: 0.83 L/ac
- Aerial: 0.83–1.12 L/ac

Packaging
- Case: 2 x 10 L (treats 24 ac at 0.83 L/ac rate)
- Drum: 115 L (treats 139 ac at 0.83 L/ac rate)
- Tote: 450 L (treats 542 ac at 0.83 L/ac rate)

Water volumes:
- Ground: 25 gal/ac (225 L/ha)
- Aerial: 4.5 gal/ac (45 L/ha)

[1] Consult your canola seed provider to confirm variety suitability for straight cut harvest prior to using Reglone Ion.

Effects of weather and use restrictions:

Weather

- Rainfast in 15 minutes.

Storage

- Store above 0˚C.
- If crystallization occurs because of storage below 0˚C, warm to room temperature and agitate gently until reconstituted.

Grazing

- Crop residues may be fed to livestock.

Harmful or fatal if swallowed. Causes severe eye and skin injury. Effects can be delayed. Take immediate action if splashed on skin or in eyes and seek medical attention. Always read and follow label directions, including required personal protective equipment (PPE).

For the most up-to-date product and label information, follow the QR code

Application best practices

Weather, spray timing, sprayer speed, boom height, and water volume all play roles in successful application of Reglone Ion in canola.

Weather

- Reglone Ion is activated by sunlight. Spraying in low light scenarios (cloudy days, evenings) gives the product time to spread over the plant before sunlight causes the plant's surface cells to burst and release moisture.
- Rainfast in 15 minutes.

Application rate

- Apply at 0.83 L/ac.

Water volume

- Use high water volume for maximum plant coverage.
- Ground: 20 gal/ac
- Aerial: 4.5 gal/ac

Sprayer tips

- Thorough coverage and maximum canopy penetration are critical to success.
- Maintain a slow, steady speed.
- Optimal boom/spray nozzle height is 20 inches above the canopy.
- Optimize the sprayer nozzle pattern for good canopy penetration.

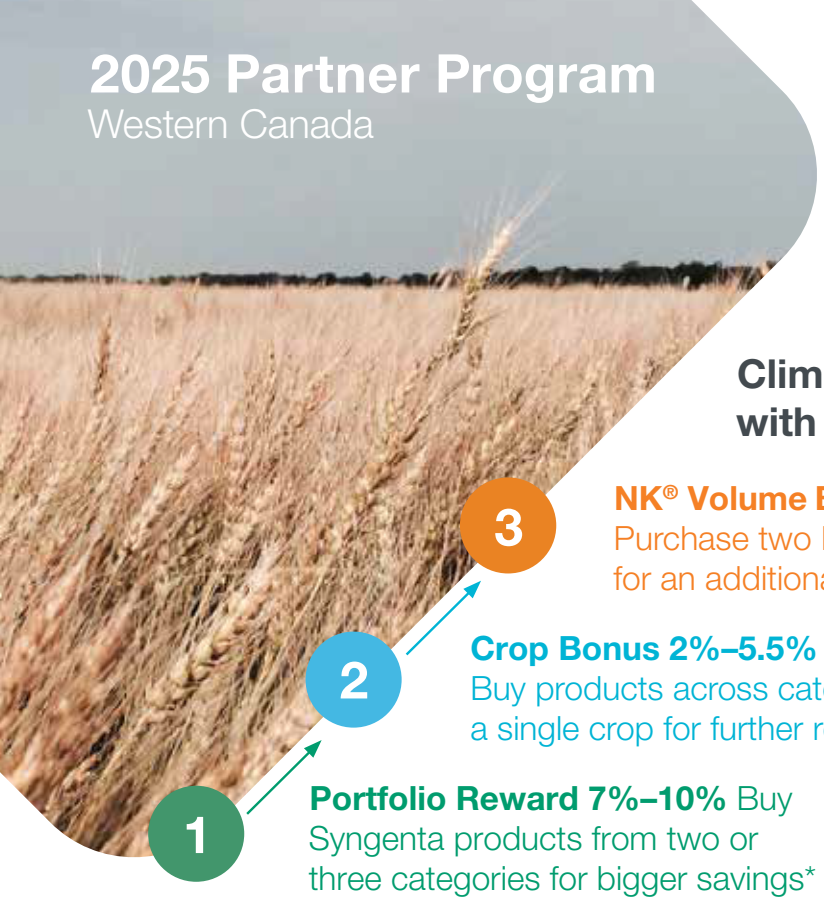
Quick tip

When checking the crop for seed colour change, look at the top 10 percent of pods. If these top-most pods aren't brown, it's an indication that the timing for Reglone Ion application may still be too early.

Resources

Contents

2025 Partner Program
Western Canada



Partner Program™

The Partner Program™ is our way of saying thanks for counting on Syngenta products to help you grow your best crop. When you combine your agronomic know-how with the Syngenta line-up, you get rewarded with yield, quality and cash.

Climb the steps to greater rewards with savings up to 15.5%

3 **NK® Volume Bonus $2/ac****
Purchase two NK soybean seed varieties for an additional bonus*

2 **Crop Bonus 2%–5.5%**
Buy products across categories within a single crop for further rewards*

1 **Portfolio Reward 7%–10%** Buy Syngenta products from two or three categories for bigger savings*

* Refer to rules and regulations for full details.
** To qualify for NK Volume Bonus growers must purchase a minimum of 400 units of NK seed to receive an extra $1 per unit on all seed acres purchased, or 800 units of NK seed to receive an extra $2 per unit.

How to qualify for the 2025 Partner Program:

Purchase a minimum 320 acres in two Portfolio Reward categories.

For full program details or to register, visit this QR code:

Calculate your rewards here:

SGP is Suggested Grower Price. Grower must purchase a minimum of 320 acres in two Portfolio reward categories to qualify for Partner Program™ rewards.

Partner Program™

syngenta®

The best partners don't just talk. They dig in.

Whether your goal is to increase sustainability practices on your farm, produce more marketable yield, spend less time in your sprayer, or store your crop with confidence, Syngenta can help.

Our products are backed by a team of experts specialized in research, sustainability, digital ag, technical, regulatory and on-ground support. They work hard to help you reach your goals while keeping the best tools in your toolbox, and discovering new solutions.

The knowledge and research-driven approach of our Syngenta team combined with the effectiveness of our products will provide you with the best opportunity to grow your best crop.

Check out our suite of offerings for your potato crop.

Seed treatment	Planting	Vegetative	Tuber initiation	Full flower	Tuber fill	Vine kill	Post-harvest
Vibrance Ultra Potato			Ridomil Gold			Reglone	Stadium
CruiserMaxx Potato Extreme	Quadris	Bravo ZN					
CruiserMaxx Vibrance	Elatus	Quadris Top					
Actara 240SC		Aprovia Top					
	Orondis Gold Potato	Miravis Duo					
		Revus					
			Orondis Ultra				
				Allegro			
		MEGAFOL					
		Envita					
					Minecto Pro		
	Boundary LQD						
	Dual II Magnum						
	Reflex						
		Venture L					

For more potato resources, visit this QR code:

For more information, reach out to your local Syngenta rep, retail partner, or our Customer Interaction Centre (1-87-SYNGENTA).

Resistance management

The issue of resistance management is important for all classes of crop protection products: seed treatments, herbicides, fungicides, and insecticides. All products are classified by chemical group and it is absolutely critical to rotate groups within product categories to help reduce resistance development in target pests.

If you suspect a weed, disease, or insect has developed resistance, call your Syngenta Representative or local agronomist to find out:

- What avenues are available to confirm that resistance has been established
- What pest control options are available to you

Personal safety

When handling any crop protection product, ensure you use the proper personal protective equipment as outlined on all product labels. At minimum, this should include:

- Long-sleeved shirt
- Long pants
- Chemical-resistant gloves
- Dust mask

Container disposal

Syngenta Canada is a member of the Cleanfarms® container and obsolete crop protection products initiative. This non-profit industry stewardship organization is committed to environmental responsibility through the reduction, reuse, recycling and safe disposal of agricultural waste products that are less than 20 L in size.

cleanfarms

Cleanfarms® has over 1,100 collection sites located throughout Canada. To find a site near you, please visit **Cleanfarms.ca.**

How you can help

Jugs:

- Triple-rinse or pressure-rinse jugs, adding the rinse water to the mixture in your spray tank.[1]
- Remove the label booklet and place it with your other paper recyclables.
- Render the jug unusable, so it does not end up being used for some other purpose.
- Return the jug to your local collection site.

Totes and drums:

- Some of these containers are reusable by manufacturers and distributors.
- Return all empty containers to your dealer; do not open, reuse, or rinse.
- Syngenta will collect the containers directly from dealers.

[1] Check label for correct water volumes.

2025 Syngenta supported non-ionic surfactants for use with Miravis® Ace, Miravis® Bold, Miravis® Era and Miravis® Star fungicides

Miravis® brand fungicides are formulated with ADEPIDYN® to deliver power, spectrum and stamina for protection against a number of diseases, in a number of crops across Canada.

The products mentioned above should be tank mixed with a non-ionic surfactant (NIS) to help ensure consistent performance. When combined with an NIS at the labeled rate, we see better product coverage, increased retention of spray particles on the target, and ultimately, better product performance.

As per the product labels, add ***non-ionic surfactant to achieve a final concentration of 0.125% v/v in the spray tank.***

NIS products supported by Syngenta for use with Miravis® Ace, Miravis® Bold, Miravis® Era and Miravis® Star:[1]

1. Activate Plus™ (90%) – Add at **1.25 L** per 1000 L/water
2. Agral® 90 (92%) – Add at **1.25 L** per 1000 L/water
3. Agsurf II® (90%) – Add at **1.25 L** per 1000 L/water
4. CO-OP® Surfactant NI (100%) – Add at **1.25 L** per 1000 L/water
5. Cornerstone® - Add at **1.25 L** per 1000 L/water
6. HI Activate® (90%) – Add at **1.25 L** per 1000 L/water
7. Keysal™ 90 – Add at **1.25 L** per 1000 L/water
8. Liberate® (100%) – Add at **1.25 L** per 1000 L/water
9. LI700 (80%) – Add at **1.25 L** per 1000 L/water
10. Masterlock® – Add at **3.25 L** fiper 1000 L/water (this rate will deliver a final NIS concentration of 0.125%)
11. Pro Surf II™ (90%) – Add at **1.25 L** per 1000 L/water
12. Sentry™ (90%) – Add at **1.25 L** per 1000 L/water

How do I determine how many Litres of NIS I need to add to my tank?

Rate of NIS listed above x litres of spray solution in the tank* / 1000 = litres of NIS needed

* 1 imperial gallon = 1.201 US gallons 1 US gallon = 3.785 litres

Example:
Farmer A is planning to use Agral 90 with their Miravis® Bold application and would like to know how much Agral 90 to add to the 3636 L (800 gallons) of spray solution in their tank.

1.25 L (rate of Agral 90 per 1000 L water) **x 3636 L** spray solution in the tank **/ 1000** = **4.55 L of Agral 90 is needed in this example.**

[1] Syngenta will support the tank mixes that are listed in this chart, as well as all tank mixes that are presently included on product labels. If a tank mix is not on this list, then anyone who applies or recommends an unlabeled mix does so at their own risk and liability. A grower is free to apply mixes within the scope of the policy, but they are liable should any problems be encountered. Should growers, crop advisors, agronomists, retailers or provincial extension staff make tank mix recommendations that are not registered nor supported by Syngenta, they are assuming the liability.

Follow all precautions and restrictions on the label of each product.

Supported NIS products listed above have been tested for compatibility in the tank, but not all have been tested for crop safety or performance.

WALES mixing order

W–Add Water, including conditioners (ammonium sulfate (AMS), ammonium thiosulfate (ATS), pH modifiers) and pre-mixed liquid fertilizer, into the spray tank before anything else. Fill tank at least one-quarter to half full and start agitation before adding crop protection products.

W–Add products packaged in Water Soluble Powders, Pouches or Packets (WSP) or Water Soluble Bags (WSB) into clean water before any other material. These are typically highly potent products, such as sulfonyl ureas, and packaged in small pouches made of a water soluble film. Allow the water soluble bags to completely dissolve before adding any other products. Add Solid Fertilizer (SFert).

W–Add Wettable Powders (WP).

W–Add Water Dispersible Granules or Wettable Dry Granules (WDG), Wettable Granules (WG), or Dry Flowables (DF).

A–Maintain Agitation and allow the dry products to mix thoroughly to ensure uniform dispersion before adding other products. This might take a few minutes. Agitate thoroughly to ensure dispersion and/or dissolution of solids.

L–Add Flowable Concentrates for Seed treatment (FS) such as Capsule Suspension Concentrates (CS), Suspension Concentrates (SC[1]), Suspo-emulsions (SE), Zeon Concentrates (ZC) or Microemulsion (ME). (L = Liquids: active ingredients are present as particles and are not dissolved so product appears opaque.)

E–Add Emulsifiable Concentrates or Emulsion Concentrates (EC) or Microemulsifiable Concentrates (MEC).

S–Add Soluble Liquids (SL) or Solutions (SN). SL and SN products are both almost always clear or translucent (even if very dark in colour) since active ingredients are dissolved in solution; these products are water-based.

Complete filling of the tank with water. Lastly, add any surfactants such as Non-Ionic Surfactant (NIS) or Crop Oil Concentrates (COC) (when required by the label). Maintain agitation until all of the solution has been sprayed.

[1] Typical SC products contain many compounds that ensure delivery of the active ingredient to its target site: water, adjuvant, antifoam, biocide, antifreeze, anti-settling agent, dispersing agent, and active ingredient.

Canola seed treatment comparison

	Foundation seed treatments				Enhanced seed treatments				
	Helix® Saltro®	Helix® Vibrance®	Prosper® EverGol®	LumiGEN®	Fortenza® Advanced	BUTEO™ start	Fortenza®	Lumiderm®	Lumiposa®
Active ingredient(s)	Thiamethoxam Difenoconazole Metalaxyl-M Fludioxonil Sedaxane ADEPIDYN®	Thiamethoxam Difenoconazole Metalaxyl-M Fludioxonil Sedaxane	Clothianidin Penflufen Trifloxystrobin Metalaxyl	Cyantraniliprole Thiamethoxam Inpyrfluxam Metalaxyl Ipconazole Picoxystrobin	Sulfoxaflor Cyantraniliprole	Flupyradifurone	Cyantraniliprole	Cyantraniliprole	Cyantraniliprole
Fungicide group(s)	3, 4, 7, 12	3, 4, 7, 12	4, 7, 11	3, 4, 7, 11					
Insecticide group(s)	4A	4A	4	4A, 28	4C, 28	4D	28	28	28
Insects									
Crucifer flea beetle	●	●	●	●	●	●		[4]	
Striped flea beetle	●	●	●	●	●	●		[4]	
Cutworm				●	●		●	●	●
Leafhoppers	●	●							
Diseases									
Seed- and soil-borne Alternaria *(Alternaria* spp.*)*	● [1]	●	● [1]	● [1]					
Airborne blackleg *(Leptosphaeria maculans)*	●			●					
Seed-borne blackleg *(Phoma lingam)*			●						
Seed-borne blackleg *(Leptosphaeria maculans)*	●	●		●					
Seedling disease complex (damping-off, seedling blight, seed rot, and root rot) caused by *Fusarium* spp.	●	●	● [2]	●					
Seedling disease complex (damping-off, seedling blight, seed rot, and root rot) caused by *Pythium* spp.	●	●	●	●					
Seedling disease complex (damping-off, seedling blight, seed rot, and root rot) caused by *Rhizoctonia* spp.	●	●	● [3]	●					

Legend

● Control

[1] Control of seed-borne Alternaria only.

[2] Control of damping-off and seed rot caused by soil-borne *Fusarium* spp. only.

[3] Control of damping-off and seed rot caused by soil-borne *Rhizoctonia solani* only.

[4] Lumiderm® is registered for control of striped and crucifer flea beetles at rates of 960 to 1600 mL/100 kg of seed. Lumiderm® is commercially applied at a rate of 640 mL/100 kg of seed and tank-mixed with a foundation seed treatment. It is registered for control of flea beetles when tank-mixed at this rate.

All product information is taken from Pest Management Regulatory Agency (PMRA) approved labels. Please refer to specific product labels for full product details.

Seed treatments are only available on commercially treated canola seed, and must be ordered at the time of seed purchase.

Cereal seed treatment comparison

	Cruiser® Vibrance® Quattro VIGOR TRIGGER®	Vibrance® Quattro	Raxil® PRO Shield	Raxil® PRO	Insure® Cereal FX4	Lumivia® CPL	Teraxxa® F4
Active ingredient(s)	Difenoconazole Metalaxyl-M Sedaxane Fludioxonil Thiamethoxam	Difenoconazole Metalaxyl-M Sedaxane Fludioxonil	Prothioconazole Tebuconazole Metalaxyl Imidacloprid	Prothioconazole Tebuconazole Metalaxyl	Pyraclostrobin Triticonazole Fluxapyroxad Metalaxyl	Chlorantraniliprole	Pyraclostrobin Triticonazole Fluxapyroxad Metalaxyl Broflanilide
Fungicide group(s)	3, 4, 7, 12	3, 4, 7, 12	3, 4	3, 4	3, 4, 7, 11		3, 4, 7, 11
Insecticide group	4		4			28	30
Crops registered	Wheat, barley, oats, rye and triticale	Wheat, barley, oats, rye and triticale	Wheat, barley and oats	Wheat, barley and oats	Wheat, barley, oats, rye and triticale	Wheat, barley, oats, rye	Wheat, barley, oats, rye and triticale
Insecticidal activity							
Wireworm	● [1]		● [1]			● [1]	●
Wheat diseases							
Loose smut	●	●	●	●	●		●
Common bunt	●	●	●	●	●		●
Pythium spp.	●	●	●	●	●		●
Fusarium spp.[2]	●	●	●	●	●		●
Common root rot	◆	◆	◆	◆	◆		◆
Penicillium spp.	●	●	◆	◆			
Aspergillus spp.	●	●	●	●			
Take-all	◆	◆					
Rhizoctonia	●	●	◆	◆	●		●
Seed-borne Alternaria	● [3]	●					
Seed-borne *Cochliobolus sativus*	◆ [3]	◆	◆	◆	●		●
Barley diseases							
True loose smut	●	●	●	●	●		●
False/covered smut	●	●	●	●	●		●
Pythium spp.	●	●	●	●	●		●
Fusarium spp.	●	●	●	●	●		●
Common root rot	◆	◆	◆	◆	◆		◆
Rhizoctonia spp.	●	●	◆	◆	●		●
Take-all	◆	◆					
Leaf stripe			●	●			
Seed-borne Alternaria	● [3]	●					
Seed-borne *Cochliobolus sativus*	◆ [3]	◆	◆	◆	●		●
Application rate mL/100 kg seed	325	325	325 mL of Raxil® PRO + 50 mL of Stress Shield®	325	300	24 - 40	300

Legend

- ● Control
- ◆ Suppression

[1] In-season protection.
[2] Fusarium crown and foot rot are suppression only.
[3] This product has not completed the registration process and cannot be used to control seed-borne common root rot in Canada at this time.
All source information taken from Pest Management Regulatory Agency (PMRA) approved labels. Please refer to specific product labels for full product details.

Pulse seed treatment comparison

	Vibrance Maxx RFC		Vibrance Maxx with INTEGO		Trilex® EverGol®		Insure® Pulse		Vitaflo® 280		Rancona® Trio	
Active ingredient(s)	Fludioxonil Metalaxyl-M Sedaxane		Fludioxonil Metalaxyl-M Sedaxane Ethaboxam		Penflufen Trifloxystrobin Metalaxyl		Metalaxyl Fluxapyroxad Pyraclostrobin		Carbathiin Thiram		Ipconazole Metalaxyl Carbathiin	
Fungicide group(s)	4, 7, 12		4, 7, 12, 22		4, 7, 11		4, 7, 11		7 M		3, 4, 7	
Inoculant compatibility [1]	Yes		Yes		Yes		[1]		[1]		[1]	
Crop	**Pea**	**Lentil**	**Pea**	**Lentil**	**Pea**	**Lentil**	**Pea**	**Lentil**	**Pea**	**Lentil**	**Pea**	**Lentil**
Insects												
Wireworm	●	●	●	●	●	●						
Pea leaf weevil	●		●		●							
	Wireworm and pea leaf weevil are controlled in-season if sufficient rate of Cruiser® 5 FS is added to tank mix. Refer to label.				Wireworm and pea leaf weevil are controlled in-season if sufficient rate of Stress Shield® is added to tank mix. Refer to label.							
Diseases												
Pre- and post-emergence damping off caused by *Fusarium* spp. and *Rhizoctonia solani*	●	●	●	●	●	●					●	●
Seed rot caused by *Fusarium* spp.	●	●	●	●	●	●	●	●	●	●	●	●
Seedling blight caused by *Fusarium* spp.	●	●	●	●			●	●	●	●	●	●
Seedling root rot caused by *Fusarium* spp.		●		●			◆	◆		●	◆	◆
Seed rot caused by *Rhizoctonia* spp.	●	●	●	●	●	●	●	●	●	●	●	●
Seedling blight caused by *Rhizoctonia* spp.	●	●	●	●			●	●	●	●	●	●
Pre- and post-emergence damping off caused by *Pythium* spp.	●	●	●	●							●[2]	●
Seed rot caused by *Pythium* spp.	●	●	●	●	●	●	●	●	●	●	●[2]	●
Seedling blight caused by *Pythium* spp.	●	●	●	●	●	●	●	●	●	●	●[2]	●
Seed-borne Ascochyta blight caused by *Ascochyta lentis*		●		●		◆		●				●
Seed rot caused by *Ascochyta pinodes*	●		●		◆				●			
Seedling blight caused by *Ascochyta pinodes*	●		●		◆		●		●			
Seed rot and seedling blight caused by seed-borne *Botrytis* spp.		●		●		●		◆		●		
Early-season root rot caused by *Aphanomyces euteiches*			◆	◆							◆	◆

Legend

● Control

◆ Suppression

[1] Consult the inoculant labels for a full listing.

[2] *Pythium* spp. is controlled on dry pea and chickpea at low disease pressures only.

Soybean fungicide seed treatment comparison

	Complete base offer			
	Vayantis® IV RFC	Vibrance® Maxx RFC	EverGol® Energy	Lumisena™
Active ingredient(s)	Metalaxyl-M Sedaxane Fludioxonil Picarbutrazox	Metalaxyl-M Sedaxane Fludioxonil	Metalaxyl Penflufen Prothioconazole	Oxathiapiprolin
Fungicide group(s)	4, 7, 12, U17	4, 7, 12	3, 4, 7	U15
Crops registered	Soybeans	Soybeans, dry beans	Soybeans, dry beans	Soybeans
Inoculant compatibility	Yes	Yes	▲	▲
Application rate (mL/100 kg seed)	130	100	65	39.6-79.2
Diseases/Pathogens				
Pythium spp.	★	●	●	
Fusarium spp.	★	●	●	
Rhizoctonia spp.	●	●	●	
Phytophthora root rot[1]	★	●[3]		★
Phomopsis pod and stem blight[1,2]	●	●	●	
Sudden death syndrome				
Soybean cyst nematode				
Packaging				
Dye colour of built-in colourant	Red	Blue		

Legend

★ More broad-spectrum or stronger activity

● Registered

▲ Refer to inoculant company's technical shee for compatibility

[1] Soybeans only.

[2] Control claim for seed-borne Phomopsis.

[3] Vibrance® Maxx RFC provides early season protection against Phytophthora root rot for toleran varieties only.

[4] Partial suppression.

Soybean insecticide seed treatment comparison

	Group 4 offers		Group 28 offers	
	Cruiser 5FS	Stress Shield® 600	Fortenza	Lumiderm™
Active ingredient(s)	Thiamethoxam	Imidacloprid	Cyantraniliprole	Cyantraniliprole
Insecticide group(s)	4	4	28	28
Crops registered	Soybeans, dry beans	Soybeans, dry beans	Soybeans	Soybeans
Inoculant compatibility	Yes	▲	Yes	▲
Application rate (mL/100 kg seed)	50	104	41.5-83[4]	See label
Insects				
White grubs[1, 2]	●	●	●	●
Wireworm[3]	●	●	●	●
Seedcorn maggot	●	●	●	●
Cutworm[1]			●	
Bean leaf beetle[1]	●	●	●	●
Aphid[1]	●	●	●	●
Potato leaf hopper[3]	●	●		
Packaging				
Dye colour of built-in colourant				

Legend

★ More broad-spectrum or stronger activity

● Registered

▲ Refer to inoculant company's technical sheet for compatibility

[1] Soybeans only.

[2] The white grubs registered are either/and European Chafer, June or Japanese beetles species.

[3] Dry beans only.

[4] Apply Fortenza® at the high rate when targeting wireworms, bean leaf beetles and aphids.

2025 Rainfast reference sheet

Rainfastness is an indication of how long it takes a product to dry, bind, or integrate into plant tissue to the point where it remains effective after rainfall or irrigation. It is an important metric to consider, as water contact before a rainfast state can significantly affect efficacy and impede your ability to achieve your yield and quality goals.

The chart below provides rainfast recommendations for biologicals, herbicides, fungicides, PGRs, and desiccants to help ensure consistent performance from your product investments. If you are uncertain whether your conditions are suitable to make an application, please contact Syngenta for additional guidance.

Product	Rainfast recommendation
Biologicals	
Envita	Do not apply if a rain event is likely within 2 hours of spraying
Megafol	Rainfast in 4 hours
YieldON	Rainfast in 4 hours
Herbicides	
Axial	Rainfast in 1 hour
Axial Maxx	Rainfast in 1 hour
Axial Xtreme	Rainfast in 1 hour
Axial Xtreme iPak™	Rainfast in 1 hour
Canvista	Rainfast in 3 hours
Callisto	Rainfast in 3 hours
Flexstar GT	Activity is unaffected by rain falling four hours after application
Erebus Xtreme	Rainfast in 1 hour
Horizon NG	Rainfast in 30 minutes
Nelatic	Rainfast in 6 hours
Sierra 3.0 AG	Rainfast in 1 hour
Talinor	Rainfast in 1 hour
Traxos	Rainfast in 1 hour
TraxosTwo	Rainfast in 1 hour
Plant Growth Regulators	
Moddus	Avoid application when heavy rain is in the forecast

Product	Rainfast recommendation
Fungicides	
Allegro	Rainfast in 2 hours
Bravo ZN	Rainfast in 30 minutes or when dry
Bravo ZNC	Rainfast in 30 minutes
Elatus	Rainfast in two hours or when dry on plant
Miravis® Ace	Rainfast in two hours or when dry on plant
Miravis® Bold	Rainfast in two hours or when dry on plant
Miravis® Era	Rainfast in two hours or when dry on plant
Miravis® Neo	Rainfast in two hours or when dry on plant
Miravis® Star	Rainfast in two hours or when dry on plant
Quadris	Rainfast in 6 hours
Quilt	Rainfast in 2 hours
Desiccants	
Reglone Ion	Rainfast in 15 minutes

All information is current at the time of publication and is subject to change without notice.
For more information, visit Syngenta.ca, contact our Customer Interaction Centre at 1-87-SYNGENTA (1-877-964-3682), or connect with us on Social Media @SyngentaCanada.

Bayer is a member of Excellence Through Stewardship® (ETS). Bayer products are commercialized in accordance with ETS Product Launch Stewardship Guidance, and in compliance with Bayer's Policy for Commercialization of Biotechnology-Derived Plant Products in Commodity Crops. These products have been approved for import into key export markets with functioning regulatory systems. Any crop or material produced from these products can only be exported to, or used, processed or sold in countries where all necessary regulatory approvals have been granted. It is a violation of national and international law to move material containing biotech traits across boundaries into nations where import is not permitted. Growers should talk to their grain handler or product purchaser to confirm their buying position for these products. Excellence Through Stewardship® is a registered trademark of Excellence Through Stewardship.

Always read and follow label directions. Roundup Ready® 2 Technology contains genes that confer tolerance to glyphosate. Roundup Ready 2 Xtend® soybeans contain genes that confer tolerance to glyphosate and dicamba. Glyphosate will kill crops that are not tolerant to glyphosate. Dicamba will kill crops that are not tolerant to dicamba. Roundup Ready®, Roundup Ready 2 Xtend® and Roundup Ready 2 Yield® are registered trademarks of Bayer Group. Used under license. Bayer CropScience Inc. is a member of CropLife Canada.

All information is current at time of publishing and is subject to change without notice.
For more information, visit Syngenta.ca or contact our Customer Interaction Centre at 1-87-SYNGENTA (1-877-964-3682).

Always read and follow label directions. Axial® Maxx is a co-pack of Axial Maxx A herbicide and Axial Maxx B herbicide. Axial® Xtreme iPak™ is a co-pack of Axial Xtreme herbicide and Infinity® herbicide. Elatus® is a co-pack of Elatus® A fungicide and Elatus® B fungicide. Fortenza® Advanced is an on-seed application of Fortenza Seed Treatment insecticide and Rascendo® Seed Treatment insecticide. Helix Saltro® is an on-seed application of Helix Vibrance® Seed Treatment fungicide/insecticide and Saltro® Seed Treatment fungicide. Miravis® Era is a co-pack of Miravis® Era A and Miravis® Era B fungicides. Miravis® Neo refers to Miravis® Neo 300SE. Orondis® Gold Potato is an in-furrow application of Orondis Gold A 200SC and Orondis Gold B 480SL. Traxos®Two is a co-pack of TraxosTwo Broadleaf Component herbicide and TraxosTwo Grass Component herbicide. Vayantis® IV RFC is an on-seed application of Vibrance Trio fungicide seed treatment and Vayantis fungicide seed treatment. Vibrance Maxx is an on-seed application of: (i) Vibrance 500FS Seed Treatment fungicide and (ii) Apron Maxx® RTA® Seed Treatment fungicide. Vibrance Maxx with INTEGO® is an on-seed application of Vibrance Maxx RFC seed treatment fungicide and INTEGO® Solo fungicide. AAtrex®, Actara®, ADEPIDYN®, Agral®, Apron®, Apron Maxx®, Aprovia®, Atuva™, Axial®, Boundary®, Bravo®, Callisto®, Canvista®, Cruiser®, Cruiser Maxx®, Dual II Magnum®, Elatus®, Erebus™, Flexstar®, Fortenza®, Helix®, Horizon®, Minecto®, Miravis®, Moddus®, Nelatic®, NK®, Orondis®, Partner Program™, Pelta™, Quadris®, Quadris Top®, Quilt®, RTA®, Rascendo®, Reflex®, Reglone®, Revus®, Ridomil Gold®, Rooting Power®, Saltro®, Seedcare™, Sierra®, Solatenol®, Stadium®, Talinor™, Target®, Traxos®, Turbocharge®, Weather Stik®, Vayantis®, Venture®, Vibrance®, Vigor Trigger™, the Alliance Frame, the Purpose Icon and the Syngenta logo are trademarks of a Syngenta Group Company. Allegro® is a trademark of ISK Biosciences Corporation. Infinity® is a registered trademark of Bayer and iPak™ is a trademark of Bayer. INTEGO® is a trademark of Valent U.S.A. Amatis™, Megafol® and YieldON® are trademarks of Valagro®, a division of a Syngenta Group Company. Envita® is a trademark of Azotic Technologies Limited. Used under license. Other trademarks are property of their respective owners.

WESTERN CANADA

syngenta®