

EASTERN CANADA

FIELD GUIDE 2024



Innovation at Corteva Agriscience

OUR PURPOSE:

To enrich the lives of those who produce and those who consume, ensuring progress for generations to come.

Corteva Agriscience is founded on a rich tradition of innovation. We constantly challenge ourselves on how we can bring all our platforms together to offer farmers integrated solutions to their most pressing challenges. We believe in the power of collaboration, inviting in ideas from a wide variety of sources, and developing collaborations with universities and NGOs across the globe.

Food is the most basic human need and the engine of economic development. Yet while our world is growing, our food resources are not. As a champion of responsible agriculture, this is our challenge. Our response to the challenge is innovation.

Key Sources of Differentiation



Targeted Breeding



Environmental Impact and Sustainability



Digital Tools



Integrated Solutions

QUICK FACTS

Our open and agile agriculture research organization brings together worldwide resources:

5,000 scientists and researchers

2 innovation hubs:
• Johnston, Iowa
• Indianapolis, Indiana

150+ multi-platform R&D facilities in **32** countries

100+ crops

CLEAR INNOVATION PRINCIPLES

- Market driven
- Disciplined and accountable
- Built to differentiate
- Global yet local
- Focused on productivity

INDUSTRY-LEADING CAPABILITIES

Seed

- Genomics and breeding systems
- Biotech
- Advanced phenotyping

Crop Protection

- Chemistry discovery
- Formulation and process chemistry
- Natural products

Digital Tools

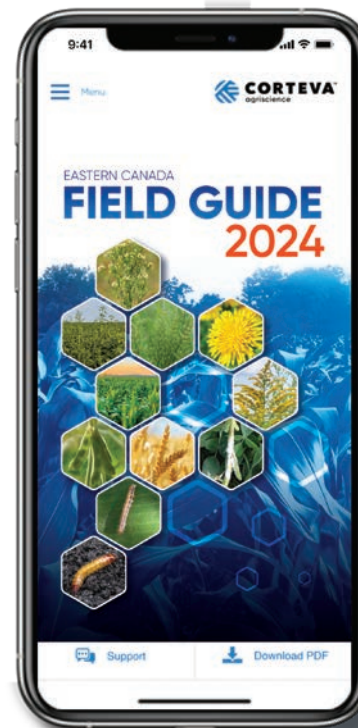
- Data analytics
- Predictive agriculture tools
- Farm management software

DOWNLOAD THE CORTEVA AGRISCIENCE FIELD GUIDE APP

The Corteva Agriscience Field Guide app showcases our expanded portfolio of Canadian crop protection products and is designed to help you get the most out of every acre. It's a quick access, easy and user-friendly tool that assists in choosing the right high performing products as well as the right order to tank-mix them.

AT THE CLICK OF A BUTTON HAVE ACCESS TO:

- Crop protection options
- Herbicide product quick facts
- Key product use information
- Insects and disease control solutions
- V/V% Calculator
- Links to online guides and info on our digital tools
- Enlist E3™ Soybeans Program Approach Tool



Download our new Field Guide App. Scan the code with your mobile device camera to find out more and easily download:



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Carrots



Salibro™ 4

Cucurbits



Salibro™ 4

Potatoes



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Tomatoes



Salibro™ 4

Salibro™

Reklemel™ active

NEMATICIDE

Salibro™ nematicide with Reklemel™ active is a novel sulfonamide nematicide with a unique mode of action against plant-parasitic nematodes.



Carrots



Cucurbits



Potatoes



Tomatoes

WHY USE SALIBRO™ NEMATICIDE?

- True nematicide with no insecticidal nor fungicidal activity, making it a highly effective and selective nematode control solution with a more favorable environmental profile compared to conventional treatments
- Protects crop roots without compromising beneficial insects that provide useful functions in the crop root zone
- Core component of an integrated nematode management program

NEMATODES CONTROLLED

- Root-knot nematodes* (*Melodogyne spp.*)

* Suppression in cucurbits

CROPS

Carrots

Cucurbits

Potatoes

Tomatoes

RATES AND ACRES TREATED

Rates:

Carrots, Potatoes
and Tomatoes: 0.90 - 1.81 L/ac
Cucurbits: 0.45 - 0.68 L/ac

Water volume:

55 L/ac (15 US gal/ac)

PACKAGING

Case:

• 2 x 9.6 L jugs

WHEN TO APPLY

- Pre-plant incorporated or broadcast followed by soil incorporation
 - Uniformly apply over the field and incorporate mechanically or through irrigation to a depth of 10-15 cm with incorporation equipment to ensure even distribution
 - For maximum residual efficacy, pre-plant incorporate within 7 days prior to planting
- In furrow (potatoes only)
 - Direct apply into the open furrow and cover with soil
- Chemigation
 - Apply the labeled rate in sufficient water and for sufficient duration to evenly cover the entire treated area

Soil Health

Salibro™ nematicide with Reklemel™ active is a selective, effective new generation nematicide that controls plant parasitic nematodes including root-knot nematodes. It has a unique mode of action, powered by Reklemel active, and has an excellent fit with precision application technology important to growers. Salibro™ helps support a healthy crop root system, by protecting against plant parasitic nematode damage, which is critical to maximizing water and nutrient utilization and providing the opportunity of realizing yield potential in the crop.

Crop rotation

Anytime: carrots

14 days: barley, wheat, oats, corn, soybeans, chickpeas, field peas, lentils, potatoes, sunflowers and flax

Pre-harvest interval

- The PHI for carrot is 65 days.
- The PHI for cucurbit and tomato is 1 day.
- The PHI for potato is 40 days.

seed treatments

BY CROP

Soybeans



Lumisena™ fungicide seed treatment 6

Lumiderm™ insecticide seed treatment 7

Corn



NEW Lumiscend™ Pro fungicide seed treatment 8

NEW Lumialza™ nematocide seed treatment 8

Lumivia™ insecticide seed treatment 9



with the NEW Corteva Agriscience™ Seed Applied Technologies Portfolio.

Corteva Agriscience™ is committed to discovering, developing, and delivering the industry's highest-quality seed treatments to help protect seed from the start, so it can develop to its full potential. With over 95 years in the seed business, no one understands the need to win the start better than us.

What Makes Our Portfolio Unique?

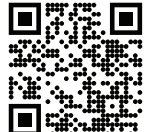
- We are discovering novel actives
- We develop products to solve on farm challenges
- Industry leading support & PASSER evaluation process.



Plantability	Maximizing seed flow and planting precision
Application	Refining processes to work across seed properties and environmental conditions
Stewardship	Minimizing adverse effects on people and the environment
Seed Safety	Ensuring seed treatments don't adversely affect seed germination
Efficacy	Evaluating protection and vigour to confirm seed treatment performs as expected
Regulatory	Meeting regulations and guidelines

Corteva Agriscience works to discover new actives for seed protection, drawing on the world class Corteva research pipeline, resources, and Centres for Seed Applied Technologies (CSAT). Every product formulation is thoroughly tested in the lab and in the field, ensuring the highest-level performance.

To learn more about Corteva Agriscience Seed Applied Technologies, speak to your local Corteva representative.



Lumisena™

FUNGICIDE SEED TREATMENT

Win the Start with the best phytophthora protection.



LUMISENA™ FUNGICIDE SEED TREATMENT ADVANTAGES

- Most advanced seed applied technology to **protect against phytophthora**
- Improves soybean emergence, vigour and root growth to **maximize stand and yield potential**
- The only seed applied technology that delivers **residual protection** across multiple stages of the phytophthora pathogen's life cycle
- Lumisena™ fungicide seed treatment is a Group 49, a **new class of chemistry** for superior disease protection

MOST ADVANCED CONTROL OF PHYTOPHTHORA FOR SOYBEANS

- Phytophthora is the #1 disease in soybeans and can significantly reduce yields
- Lumisena fungicide seed treatment offers an entirely new mode of action to provide the best protection against phytophthora
- Seed treatment research has demonstrated that Lumisena will provide greater protection against phytophthora than existing seed treatments

IMPROVES SOYBEAN YIELDS & PLANT STANDS

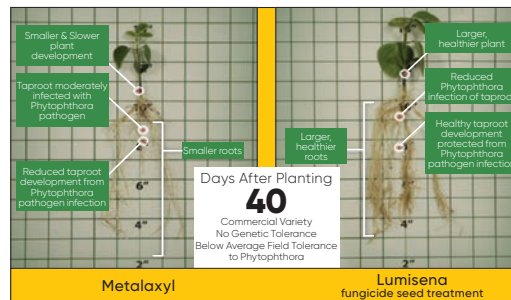
- Phytophthora is prevalent in North America. Growers with phytophthora pressure have suffered yield losses because of the limitations of existing seed treatments for soybeans
- In areas with phytophthora pressure, Lumisena improves plant stands, crop vigour and yield results

Look at the results

The first six weeks are important for a soybean crop's yield potential. Observe the difference in performance between two soybean plants, 40 days after planting, treated with the high rate of metalaxyl versus Lumisena when phytophthora is present.

Lumisena is the best choice for protection against phytophthora. It is the only seed-applied technology that delivers residual protection across multiple stages of the phytophthora pathogen's life cycle:

- preventative
- curative
- eradictive
- antispurulant

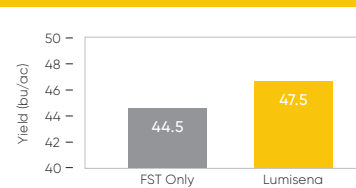


CROPS Soybeans

Lumisena™ fungicide seed treatment provides the best protection against phytophthora for healthier, more vigorous soybean stands and higher yield potential.

LUMISENA™ ENHANCES EMERGENCE AND VIGOUR TO MAXIMIZE YIELD POTENTIAL

SOYBEAN RESEARCH AUTHORIZATION TRIAL RESULTS



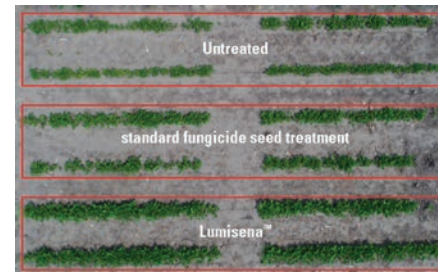
2017 Lumisena Yield Data - Canada, 8 Trial locations, 2 Reps per location, Moderate to High Pressure

Research shows that Lumisena seed treatment provides a 3 bushel per acre yield advantage under phytophthora pressure versus the standard phytophthora seed treatments.

Lumisena Yield Advantage

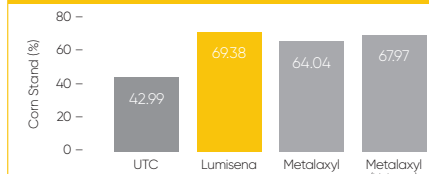
+3.0 BU/AC
In demo trials compared to competitor FST treatment

In multi-year, on-farm seed treatment research trials under phytophthora pressure, Lumisena improved plant stands by increasing the number of plants per acre versus the existing industry-standard seed treatment.



EFFICACY – PLANT STAND COUNT DATA

Soybean Plant Stand counts when Phytophthora is present



Seed Applied Technology Research Trials Data from 2011-2015, Average of 13 Trials

- Lumisena offers a new mode of action that controls phytophthora far better than previous industry-standard seed treatments.
- When you use Lumisena fungicide seed treatment you significantly improve your soybean plant stand, enhancing early-season plant growth and increasing yield potential.

Your Corteva soybean genetics are protected with Lumisena, as part of the LumiGEN® seed treatment package.

Lumiderm™

INSECTICIDE SEED TREATMENT

Win the Start with early season insect control.

LUMIDERM™ INSECTICIDE SEED TREATMENT ADVANTAGES

- **Broad spectrum protection** from early season insect pests in soybeans including soybean aphid, bean leaf beetle, and cutworms
- Excellent seedling protection delivers a **uniform, healthy stand** to maximize yield potential
- A **new mode of action** with a favourable environmental profile
- Simplifies your seed treatment decisions

INDUSTRY LEADING PROTECTION AGAINST EARLY SEASON INSECT PESTS

- Lumiderm™ insecticide seed treatment provides soybean seedlings with extended protection against key early season insects: soybean aphid, bean leaf beetle, seed corn maggot, European chafer, Japanese beetle, white grub, wireworm, and cutworms
- **Lumiderm is now registered for control of cutworms in soybeans**

FAVOURABLE ENVIRONMENTAL PROFILE & RESISTANCE MANAGEMENT

- Lumiderm contains a unique Group 28 insecticide, a non-neonic seed treatment option
- Minimal impact on the environment
- Minimal impact on beneficial insects and pollinators when used in accordance with the label¹

Application Rates		
Cutworm Rate	0.0375-0.075 mg ai/seed	Cutworms, Seedcorn maggot, Japanese beetle, European chafer, Masked chafers, Wireworms
Full-Spectrum Rate	0.075-0.200 mg ai/seed	Soybean aphid, Bean leaf beetle, Cutworms, Seedcorn maggot, Japanese beetle, European chafer, Masked chafers, Wireworms



Fungicide Seed Treatment Only



Lumiderm™ + Fungicide Seed Treatment

Ridgetown, ON

¹In line with Integrated Pest Management and Good Agricultural Practices, insecticide applications should be made when pollinators are not foraging to avoid unnecessary exposure.

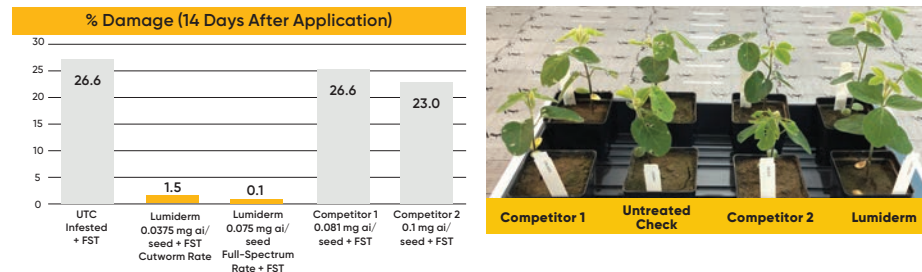


Soybeans

CROPS Soybeans

Lumiderm™ insecticide seed treatment complements Lumisena™ fungicide seed treatment and results in healthier, more abundant soybean stands.

LUMIDERM™ IS NOW REGISTERED FOR INDUSTRY LEADING CONTROL OF CUTWORMS IN SOYBEANS



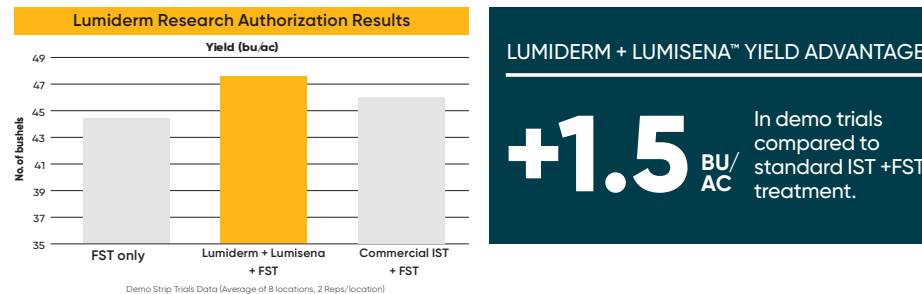
Competitor 1 Untreated Check Competitor 2 Lumiderm

EXCELLENT SEEDLING PROTECTION DELIVERS MORE UNIFORM, HEALTHY SOYBEAN STANDS

- Lumiderm delivers the latest technology for insect protection for soybean production.
- With Lumiderm, soybean growers can be confident that their vulnerable seedlings will be safe from cutworms, bean leaf beetle, soybean aphid, bean leaf beetle, seed corn maggot, European chafer, Japanese beetle, white grub, wireworm, and cutworms

To maximize yield potential, insect and disease protection go hand in hand.

Take a look at the powerful protection of Lumiderm and Lumisena™ fungicide seed treatment combined.



LUMIDERM + LUMISENA™ YIELD ADVANTAGE

+1.5 BU/AC
In demo trials compared to standard IST +FST treatment.



Lumiderm insecticide seed treatment complements Lumisena fungicide seed treatment and completes the soybean protection package. Add Lumiderm to maximize your soybean protection.

SEED APPLIED TECHNOLOGY

GROUP	GROUP	GROUP
4	7	22

NEW

Lumiscend™ Pro

FUNGICIDE SEED TREATMENT

Win the Start with early season disease protection.

The **NEW** LumiGEN® corn fungicide seed treatment, including new Lumiscend™ Pro fungicide seed treatment, is a unique combination of four active ingredients to deliver MMOA protection from early season seed and soil-borne diseases, adding a new level of protection against rhizoctonia and pythium species.

DISEASES:

- Pythium
- Phytophthora
- Fusarium
- Corn head smut

SEED APPLIED TECHNOLOGY

Biological

NEW

Lumialza™

NEMATICIDE SEED TREATMENT

Win the Start with powerful protection from nematodes.

WHY USE NEW LUMIALZA™ NEMATICIDE SEED TREATMENT?

- Provides protection from key **yield-robbing nematodes**
- Lumialza nematocide seed treatment provides **over 80 days of protection** by creating a large zone of protection of the root zone
- Enhances plant **vigour and yield potential**

NEMATODE PROTECTION

Key species of corn nematodes



Your Corteva corn genetics are protected with NEW Lumiscend Pro and NEW Lumialza. These products are exclusive to the LumiGEN seed treatment package.



Corn

WHAT IS LUMIALZA™ NEMATICIDE SEED TREATMENT?

- Lumialza™ contains a naturally occurring rhizobacteria, *Bacillus amyloliquefaciens*, that aggressively colonizes roots near the seed and soil surface and throughout the soil profile, resulting in an extensive zone of root protection
- Lumialza provides nematode control by colonizing the roots to form a biological barrier from nematode attack, as well as causing paralysis of juvenile nematodes
- Lumialza provides over 80 days of protection by creating a large zone of protection, encompassing the entire area of root growth including lower, mid and upper root zones

LUMIALZA PROVIDES MORE THAN

80 DAYS OF
PROTECTION



Lumialza

Non-nematocide

WHAT ARE NEMATODES?

Nematodes are non-segmented round worms that cannot be seen without a microscope. Plant parasitic nematodes live below ground with a life cycle that typically lasts about 30 days.

Plant parasitic nematodes quickly reproduce and infest crops with multiple generations within a single growing season. Nematodes can greatly impact yield and have widespread presence across Canada.

LUMIALZA PROVIDES EARLY SEASON PROTECTION AGAINST PLANT PARASITIC NEMATODES, RESULTING IN REDUCED FEEDING DAMAGE AND INCREASED ROOT BIOMASS.

- Lumialza grows with the roots to provide protection deep into the soil profile
- This not only provides an extended zone of protection, but also allows prolonged growth benefits extending late into the corn growing cycle
- Lumialza increases root biomass, plant vigour and crop uniformity resulting in improved plant performance



Non-nematocide

Lumialza

Non-nematocide

Lumialza

LUMIALZA
YIELD
ADVANTAGE

3-9 BU/
AC

IN DEMO TRIALS
COMPARED TO
NON-NEMATICIDE
TREATMENT

Based on 238 trials in the U.S.

Lumivia™



Corn
(all types)

INSECTICIDE SEED TREATMENT

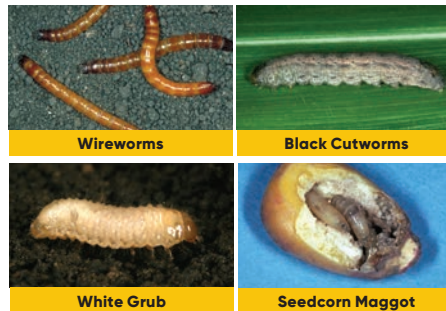
Win the start with broad-spectrum insect protection

WHY USE LUMIVIA™ INSECTICIDE SEED TREATMENT?

- Outstanding protection against key **early season corn insect pests** including wireworms, white grubs, cutworms, armyworms and seedcorn maggot* (European chafer)
- Provides seedling protection to develop **uniform and healthy stands** that maximize yield potential
- Offers a favourable environmental profile

EXCELLENT, LONG LASTING CORN SEEDLING PROTECTION

- Lumivia™ contains a unique mode of action that rapidly protects corn seeds and seedlings up to the 4-5 leaf stage against early-season, below-ground insect pests, like wireworms and seedcorn maggots. It also protects the crop against insect pests that feed on foliage, such as cutworms
- Lumivia remains concentrated in key areas of the corn plant after planting and protects through germination to the V5 growth stage



FAVOURABLE ENVIRONMENTAL PROFILE AND RESISTANCE MANAGEMENT

- Lumivia contains a unique Group 28 anthranilic diamide insecticide, a non-neonic seed treatment option
- Lumivia's favourable environmental profile results in minimal impact on the environment and on beneficial insects and pollinators, when used in accordance with the label¹



Commercial Standard

Source: Field trial, Stayner ON 2016



Lumivia

*Suppression

¹In line with Integrated Pest Management and Good Agricultural Practices, insecticide applications should be made when pollinators are not foraging to avoid unnecessary exposure

LUMIVIA™ INSECTICIDE SEED TREATMENT DELIVERS UNIFORM, HEALTHY STANDS & IMPROVED EARLY SEASON VIGOUR

- Lumivia™ provides immediate protection of seed and seedlings, resulting in uniform and healthy stand establishment
- Additionally, Lumivia protects yield potential through improved early season vigour
- Multi-year trials have shown that Lumivia consistently provides a yield advantage compared to a fungicide only seed treatment

Uniform, healthy stands & improved yield potential over fungicide only treated seed

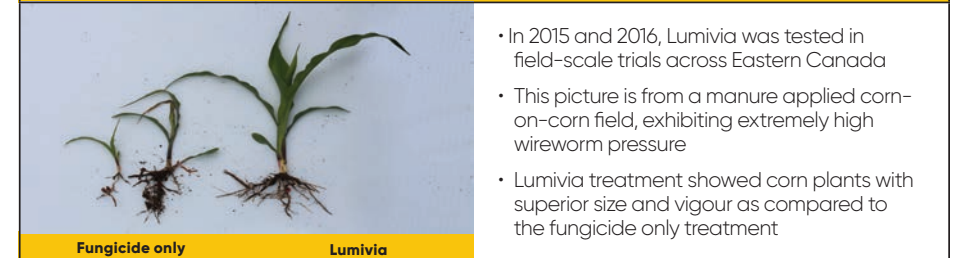


Lumivia

Fungicide Only

Source: Field trial, Shetland ON 2016

Lumivia Under High Wireworm Pressure



Fungicide only

Lumivia

- In 2015 and 2016, Lumivia was tested in field-scale trials across Eastern Canada
- This picture is from a manure applied corn-on-corn field, exhibiting extremely high wireworm pressure
- Lumivia treatment showed corn plants with superior size and vigour as compared to the fungicide only treatment

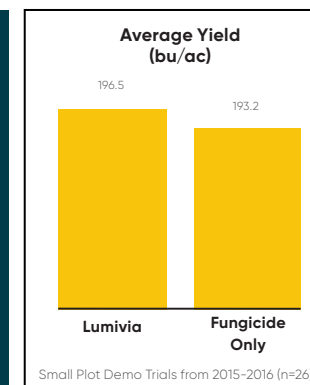
Source: Field trial, Stayner, ON 2016

LUMIVIA INCREASES YIELD

Lumivia
Yield Advantage

+3.2
BU/AC

In demo trials compared
to FST only treatment



Small Plot Demo Trials from 2015-2016 (n=26)



Lumivia



Fungicide only

Source: Field trial, Mount Forest ON, 2016



Your Corteva corn genetics are protected with Lumivia, as part of the LumiGEN™ seed treatment package.

herbicides

BY CROP

Corn



Accent™ IS	11
Broadstrike RC™	12
Destra™ IS	16
Engarde™	18
Enlist Duo™	20
Enlist™ 1	21
Lontrel™ XC	24
Steadfast™ IS	29

Cereals



Pixxaro™	25
Prominex™	27
Simplicity™ GoDRI™	28

Soybeans



Broadstrike™ RC	12
Canopy™ PRO	13
Classic™	14
Commenza™	15
Diligent™	17
Enlist Duo™	20
Enlist™ 1	21
FirstRate™	22
Freestyle™	23

Potatoes



Prism™ SG	26
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HERBICIDE
POST-EMERGENCE

GROUP

2

ACCENT IS APPLICATION GUIDELINES

NEW

Accent™ IS

HERBICIDE

Accent™ IS herbicide delivers outstanding control of annual and perennial grass weeds in field corn, seed corn² and sweet corn³. With a built-in crop safener, Accent IS can be applied with confidence under a wide range of weather and growth stages.

WHY USE ACCENT IS HERBICIDE?

- With a built-in crop safener, Accent IS delivers even better crop safety on low heat unit hybrids, seed corn inbreds and sweet corn varieties
- Contact and systemic post-emergence control providing consistent grass control
- Wide window of application and re-cropping flexibility

WEEDS CONTROLLED

- Barnyard Grass
- Foxtail, Green
- Foxtail, Yellow¹
- Old Witchgrass
- Panicum, Fall
- Quackgrass
- Sandbur, Long-spined
- Wild Oats



CROPS

Field Corn
Seed Corn
Sweet Corn

RATES AND ACRES TREATED

Rates:
• 18.5 g/ac
Acres treated:
• 20 ac/bottle
Water volume:
• 10-20 US gal/ac

PACKAGING

• 370 g bottle

WHEN TO APPLY

- **Hybrid field corn:** 1-8 leaves (6 visible collars = V6)
 - **Seed corn:** 1-7 leaves (5 visible collars = V5)
 - **Sweet corn:** 1-6 leaves (4 visible collars = V4)
- Weed staging:** annual grasses: 1-6 leaf, quackgrass: 3-6 leaf

RAINFAST

• 2 hours

Application information

Adjuvants: Accent IS must be applied with one of the following adjuvants:

- Non-ionic surfactant: 2L/1000L (0.2% v/v)
- Adapt Oil Concentrate: 10L/1000L (1% v/v)
- Merge or Sure-Mix: 5L/1000L (0.5% v/v)
- Non-ionic surfactant + UAN: 2L/1000L + 5 L/ha

Tank-Mixes: Accent IS may be tank-mixed with a registered broadleaf herbicide. Consult the label of the tank-mix partner and follow both labels to ensure compliance with all use precautions.

Crop Rotation (Eastern Canada):

4 months: Winter wheat

10 months: spring barley, canola, soybeans, white beans, red clover, sorghum, field corn and alfalfa.

Pre-harvest interval

- The PHI for corn (silage, fodder or grain) is 30 days.
- The PHI for sweet corn is 40 days.

¹ Suppression only. For improved control, apply Accent IS with Merge (0.5% v/v) or NIS + UAN (0.2% v/v + 5 L/ha)

² Use only on seed corn inbreds approved by the seed corn company

³ Use only on labelled sweet corn varieties

HERBICIDE
PRE-PLANT, PRE-EMERGENCE, PRE-PLANT
INCORPORATED, EARLY POST-EMERGENCE

GROUP

2

BROADSTRIKE RC APPLICATION GUIDELINES

Broadstrike™ RC



Field Corn



Soybeans

HERBICIDE

Broadstrike™ RC herbicide is your soil applied broadleaf weed control solution for soybeans.

WHY USE BROADSTRIKE RC HERBICIDE?

- Soil-applied weed control solution
- Season-long control
- Outstanding crop safety in all soybean varieties

WEEDS CONTROLLED

Field corn (25 g/ac)

- Canada Fleabane¹
- Chickweed, Common
- Lamb's-quarters, Common⁴
- Mustard, Wild
- Mustard, Wormseed
- Nightshade, Eastern Black
- Pigweed, Redroot⁴
- Ragweed, Common^{2,3}
- Velvetleaf

Soybeans (35 g/ac)

- Canada Fleabane¹
- Carrot, Wild²
- Chickweed, Common
- Cocklebur³
- Foxtail, Green²
- Horsetail, Field²
- Lady's-thumb²
- Lamb's-quarters, Common⁴
- Mustard, Wild
- Mustard, Wormseed
- Nightshade, Eastern Black
- Pigweed, Redroot⁴
- Ragweed, Common^{2,3}
- Velvetleaf

¹ Populations resistant to Group 2 herbicides exist in certain areas of Eastern Canada. Broadstrike RC alone may not control all weed biotypes resistant to Group 2 herbicides.

² Suppression

³ If weed pressure in soybeans is heavy, tank mix with another product that provides a different mode of action.

⁴ Including triazine-tolerant biotypes

CROPS

Field Corn

Soybeans

RATES AND ACRES TREATED

Rates:

- Soybeans: 35 g/ac
- Field corn: 25 g/ac

Acres treated:

- Soybeans: 20 ac/bottle
- Field corn: 28 ac/bottle

Water volume: 10-20 US gal/ac

PACKAGING

Case:

- 12 x 0.715 kg bottles

WHEN TO APPLY

- Soybeans: Surface Pre-plant, pre-plant incorporated, pre-emergence
- Field corn: Surface Pre-plant, pre-emergence, pre-plant incorporated, early post-emergence

RAINFAST

- 2 hours

HERBICIDE TANK MIXES

Field Corn:

Registered:

Dual II Magnum[®]

Supported:

Atrazine
Enlist Duo™ herbicide
VP480™ herbicide
Polaris™ MAX herbicide
Other straight glyphosate products

Soybeans:

Registered:

Dual II Magnum
Treflan™ E.C.

Other straight
glyphosate products

Supported:

Boundary[®]
Enlist Duo

Application information

Apply Broadstrike RC in conventional, conservation tillage or no-till corn, and soybean production systems.

Field corn: Do not apply to areas where the soil pH is greater than 7.8 or where the soil organic matter is less than 2.0%.

Soybeans: Do not apply to areas where the soil pH is greater than 7.8 and organic matter is less than 2% (both apply) as this may result in decreased crop tolerance.

Crop rotation

4 months: winter wheat

10 months: spring wheat, spring barley, oats, soybeans, common beans (dry, snap), lima beans, processing peas, field corn and seed corn

Rotational crop restrictions: Following an application of Broadstrike RC in a dry year, the risk of injury to rotational crops may increase in light-textured soils containing less than 2% organic matter due to a higher bioavailability of herbicide residues for plant uptake.

Pre-harvest interval

- The PHI is 90 days.

HERBICIDE
PRE-PLANT, PRE-EMERGENCEGROUP
2GROUP
5MULTI
MODE
OF ACTION

CANOPY PRO APPLICATION GUIDELINES

Canopy™ PRO

HERBICIDE

Canopy™ PRO pre-emergence herbicide delivers broad-spectrum and residual activity to help maximize early-season control of tough weeds.



WHY USE CANOPY PRO HERBICIDE?

- Powerful weed control performance
- Proactive weed resistance management
- Production system flexibility

WEEDS CONTROLLED

Field corn (25 g/ac)

Broadleaf weeds

- Buckwheat, Wild

- Canada Fleabane⁴

- Carpetweed

- Chickweed, Common

- Cocklebur¹

- Corn Spurry

- Dandelion

- Hemp-nettle

- Jimsonweed¹

- Lady's-thumb

- Lamb's-quarters, Common

- Mustard, Wild

- Pigweed, Prostrate

- Pigweed, Redroot

- Potato Vine, Wild

- Ragweed, Common

- Shepherd's-purse

- Smartweed, Green

- Sow-thistle, Annual⁵

- Thistle, Russian

- Velvetleaf

- Woodsorrel, Yellow

Annual grasses

- Barnyard Grass²

- Cheatgrass²

- Crabgrass²

- Foxtail, Giant²

- Foxtail, Green²

- Foxtail, Yellow²

- Johnsongrass²

- Nutsedge, Yellow³

- Panicum, Fall²

- Witchgrass²

¹ Large-seeded weeds that germinate deep in the soil, such as cocklebur and jimsonweed, may not be fully controlled.

² Partial control

³ Suppression

⁴ Including glyphosate-resistant biotypes. Must be tank mixed with Eragon®. For RoundupReady 2 Xtend™ soybeans, tank mix with a low volatile dicamba herbicide. For Enlist E3™ soybeans, tank mix with Enlist Duo™ or Enlist™ 1.

⁵ Must be tank mixed with glyphosate

CROPS

Soybeans

RATES AND ACRES TREATED

Rates:

- 14.4 g/ac + 225 g/ac

Acres treated:

- New 40 ac/case

Water volume:

- 10-20 US gal/ac

PACKAGING

Case:

- New – Classic 2 x 288 g bottles + Metribuzin Mx 2 x 4.5 kg jugs

WHEN TO APPLY

PRE: Apply after planting but prior to crop emergence

Pre-Plant Burndown: Apply up to 14 days before planting

RAINFAST

- 2 hours

HERBICIDE TANK MIXES

Registered:

- 2,4-D Ester
- Dual II Magnum®
- Enlist Duo™ or Enlist™ 1⁶

- Eragon® LQ
- Frontier® MAX
- Glyphosate

⁶ Only for use in Enlist E3™ soybeans

Application information

Formulated as a dry flowable granule to be mixed in water and applied as uniform broadcast spray. Only apply using ground equipment. This product is not registered for aerial application.

Crop rotation

The recropping intervals are dependent on the pH of the soil, as well as the sensitivity of the specific rotational crop. Consult product labels for rotation intervals across a full range of soil pH levels.

Soil pH ≤ to 7.4:

3 months: winter wheat

10 months: field corn, soybeans, white beans and alfalfa

12 months: tomatoes

See product label for full list of crop rotation guidelines.

Pre-harvest interval

- The PHI is 60 days.

Mixing Instructions

1. Fill the sprayer tank with ½ to ¾ of the required amount of water
2. Continue agitation throughout the mixing and spraying procedure
3. Add the required amount of Classic™ and allow time for product to fully disperse
4. Add the required amount of Metribuzin Mx
5. If required for a burndown, add liquids or suspension concentrates such as Enlist 1 or Enlist Duo
6. If required for a burndown, add glyphosate and continue agitation
7. Complete filling the sprayer tank

HERBICIDE
PRE-PLANT, PRE-EMERGENCE,
POST-EMERGENCE

GROUP

2

CLASSIC APPLICATION GUIDELINES

Classic™

HERBICIDE

Classic™ herbicide offers exceptional control of hard-to-control broadleaf weeds in soybeans.

WHY USE CLASSIC HERBICIDE?

- **Hard-to-control weeds.** Classic helps you manage some of the toughest weeds including nutsedge, sow-thistle and dandelions
- **Convenience.** Low use rate and easy to tank-mix with PRE and POST herbicides
- **Application flexibility.** Classic has a wide window of application from 14 days pre-plant up to early post-emergence

WEEDS CONTROLLED

Weeds controlled at 14.4 g/ac + Non-ionic surfactant at 0.2% v/v

- Bean, Adzuki¹
- Carrot, Wild²
- Dandelion¹
- Nutsedge, Yellow
- Pigweed, Redroot
- Ragweed, Common
- Velvetleaf

Additional weeds controlled when tank-mixed with glyphosate at 900 g ae/ha

- Annual sow-thistle
- Prickly lettuce

¹ Top growth control
² Suppression



Soybeans

CROPS

Soybeans

RATES AND ACRES TREATED

Rates:
Classic: 14.4 g/ac
Acres treated:
• 20 ac/288 g bottle
• 40 ac/576 g bottle
Water volume:
• 15-20 US gal/ac

PACKAGING

• 288 g bottle
• 576 g bottle

WHEN TO APPLY

Crop Stage:

Soil applied: Apply 14 days pre-plant up to pre-emergence
Post-emergence: Apply from soybean emergence up to just before the initiation of flowering. For best performance apply by the 3rd trifoliolate stage

RAINFAST

• 2 hours

HERBICIDE TANK MIXES

Registered:
Assure® II
Glyphosate
Metribuzin 75 DF
Imazethapyr SL

Supported:

Enlist Duo™³
Enlist™ 1³

³ Only for use in Enlist E3™ soybeans

Application information

Add a registered NIS such as Agral 90® or Ag-Surf® at 2 L per 1,000 L of spray solution (0.2% v/v).

For more consistent control of velvetleaf, add 28% UAN at 0.8 L/ac
For tank-mixes with glyphosate, a non-ionic surfactant is not required.
Apply Classic only once per year.

Crop rotation

The recropping intervals are dependent on the pH of the soil, as well as the sensitivity of the specific rotational crop. Consult product labels for rotation intervals across a full range of soil pH levels.

3-4 months: winter wheat

10 months: field corn, white beans, soybeans and alfalfa (soil pH value <7.4 only)

11 months: cabbage, garden peas and sweet corn (Southern Ontario only, pH value <7.0 only)

12 months: tomatoes

Rotational crop restrictions: Warning: sweet corn varieties may vary in their sensitivity to Classic residues.

Pre-harvest interval

- The PHI 60 days.

HERBICIDE
PRE-PLANT, PRE-EMERGENCE,
PRE-PLANT INCORPORATED

GROUP GROUP GROUP
2 5 15

MULTI
MODE
OF ACTION

COMMENZA APPLICATION GUIDELINES

Commenza™

HERBICIDE

Commenza™ herbicide provides three active ingredients and residual activity for soil applied cross-spectrum broadleaf and grass control in soybeans. Multi-mode of action technology ensures robust performance against resistant and hard-to-control weeds.

WHY USE COMMENZA HERBICIDE?

- **Soil-applied weed control solution.** Commenza is a pro-active approach to establish early season control of most major annual weeds in soybeans. For IP soybeans, this is essential to starting the growing season clean
- **Multi-mode of action.** Commenza contains 3 proven active ingredients from 3 herbicide groups for overlapping effective modes of action on key weeds such as Eastern Black Nightshade
- **Convenience and confidence.** 20 acre co-pack is easy to handle and measure. A complete herbicide program from one manufacturer provides you with confidence and assurance of performance

WEEDS CONTROLLED

- Barnyard Grass
- Canada Fleabane¹
- Carpetweed (pre-emergence only)
- Carrot, Wild²
- Cheatgrass
- Chickweed, Common
- Cocklebur³
- Corn Spurry
- Crabgrass, Hairy
- Crabgrass, Smooth
- Dandelion (seedling)
- Foxtail, Giant
- Foxtail, Green
- Foxtail, Yellow
- Horsetail, Field²
- Jimsonweed (pre-emergence only)
- Johnson Grass (seedling)
- Lady's-thumb (suppression if pre-plant incorporated application)
- Lamb's-quarters, Common⁴
- Mallow, Prickly (pre-emergence only)
- Mustard, Wild
- Mustard, Wormseed
- Nightshade, American
- Nightshade, Eastern Black
- Nutsedge, Yellow (PPI only)
- Old Witchgrass
- Panicum, Fall
- Pigweed, Prostrate
- Pigweed, Redroot^{1,4}
- Ragweed, Common^{1,2,3}
- Shepherd's-purse
- Smartweed, Green
- Thistle, Russian
- Velvetleaf
- Wild Potato Vine
- Yellow Woodsorrel (pre-emergence only)

¹ Populations resistant to Group 2 herbicides exist in certain areas of Eastern Canada. Commenza alone may not control all weed biotypes resistant to Group 2 herbicides.

² Suppression

³ If weed pressure in soybeans is heavy, tank mix with another product that provides a different mode of action.

⁴ Including triazine-tolerant biotypes



CROPS

Soybeans

RATES AND ACRES TREATED

- Rates:**
- 35 g/ac + 225 g/ac + 525 mL/ac
- Acres treated:**
- 20 ac/case
- Water volume:**
- 10-20 US gal/ac

PACKAGING

- Case:
- Broadstrike RC: 715 g bottle
 - Metribuzin Mx 75 DF: 4.5 kg jug
 - S-Metolachlor 960: 10.5 L jug

WHEN TO APPLY

Soybean Application Methods:
Surface pre-plant, pre-emergence, pre-plant incorporated

RAINFAST

- 2 hours

HERBICIDE TANK MIXES

- Registered:**
Glyphosate
- Supported:**
Enlist Duo™ herbicide⁵
Enlist™ 1 herbicide⁵

⁵ Only for use in Enlist E3™ soybeans

Application information

Apply Commenza in conventional, conservation tillage or no-till soybean production systems.

Soybeans: Do not apply to areas where the soil pH is greater than 7.8 and organic matter is less than 2% (both apply) as this may result in decreased crop tolerance.

Crop rotation

4 months: winter wheat

10 months: spring wheat, spring barley, oats, soybeans, common beans (dry, snap), lima beans, processing peas, field corn and seed corn.

Following an application of Commenza in a dry year, the risk of injury to rotational crops may increase in light-textured soils containing less than 2% organic matter due to a higher bioavailability of herbicide residues for plant uptake.

Pre-harvest interval

- The PHI is 90 days.

Mixing Instructions

1. Fill the sprayer tank with 1/2 to 3/4 of the required amount of water
2. Continue agitation throughout the mixing and spraying procedure
3. Add the required amount of Broadstrike™ RC and allow time or product to fully disperse. Add the required amount of Metribuzin Mx
4. If required for a burndown, add liquids or Suspension concentrates such as Enlist 1 or Enlist Duo
5. Add the required amount of S-metolachlor 960
6. If required for a burndown, add glyphosate and continue agitation
7. Complete filling the sprayer tank

Destra™ IS

HERBICIDE

Destra™ IS herbicide delivers convenient, one-pass, early post-emergence weed control in glyphosate-tolerant corn.



Field Corn

WHY USE DESTRA IS HERBICIDE?

- **Easy to use.** Advanced dry blend formulation and low use rate of Destra IS makes sprayer loading efficient and allows you to cover more acres
- **Wide application window.** Destra IS has both knockdown and residual activity allowing you to start as early as the 3 leaf stage and spray as late as the 8 leaf stage
- **Excellent crop safety.** Because Destra IS contains isoxadifen, a built-in safener, Destra IS provides crop safety on a wide range of hybrids including short-season corn hybrids

WEEDS CONTROLLED

- Canola, Volunteer¹
- Foxtail, Green
- Lamb's-quarters, Common
- Nightshade, Eastern Black
- Old Witchgrass
- Panicum, Fall
- Pigweed, Green
- Pigweed, Redroot
- Quackgrass*
- Ragweed, Common*
- Velvetleaf

CROPS

Field Corn

RATES AND ACRES TREATED

- Rates:**
- Destra IS: 110 g/ac
- Acres treated:**
- 40 ac/4.4 kg jug
- Water volume:**
- 15-20 US gal/ac

PACKAGING

- Case:
- 2 x 4.4 kg jugs

WHEN TO APPLY

- Crop Stage:** 3 to 8 leaf stage of corn (2-6 visible collars)
- Weed Stage:** Ideal application timing is when weeds are small and the extended residual activity can help to control later flushes of weeds.

RAINFAST

- 2 hours

HERBICIDE TANK MIXES

- Registered:**
- Glyphosate (glyphosate-tolerant corn only)
 - AAtrex® Liquid 480
- Supported:**
- Lontrel™ XC

Application information

For post-emergence applications, Destra IS herbicide must be tank mixed with a recommended non-ionic surfactant, either Citowett Plus, Agral® 90 or Ag-Surf® at 2 L per 1,000 L spray solution (0.2% v/v).

When Destra IS herbicide is tank mixed with a glyphosate herbicide, a non-ionic surfactant is not required.

Crop rotation

- 4 months:** winter wheat
- 10 months:** field corn
- 11 months:** soybeans and white beans

Pre-harvest interval

- The PHI is 100 days.

* Suppression

¹ Excluding Clearfield® canola

HERBICIDE
PRE-PLANT, PRE-EMERGENCE

GROUP GROUP
2 14

MULTI
MODE
OF ACTION

DILIGENT APPLICATION GUIDELINES

Diligent™

HERBICIDE

Diligent™ herbicide offers flexible defense against a range of tough and resistant broadleaf weeds in soybeans, including glyphosate-resistant waterhemp.



Soybeans

WHY USE DILIGENT HERBICIDE?

- **Early control for a strong start.** It can be applied from early pre-plant to pre-emergence
- **Two modes of action defend against resistance.** With a multi-mode defense against Group 2, 5 and 9 resistant broadleaf weeds, Diligent provides a proactive approach to weed resistance management
- **Flexible defense.** Diligent can be used in any production system, including Enlist E3™ soybeans, Roundup Ready 2 Xtend® soybeans or identity-preserved (IP)

WEEDS CONTROLLED

- Amaranth, Palmer
- Chickweed, Common
- Dandelion¹
- Foxtail, Green²
- Lamb's-quarters, Common
- Nightshade, Eastern Black
- Nightshade, Hairy
- Panicum, Fall³
- Pigweed, Green
- Pigweed, Redroot
- Ragweed, Common
- Waterhemp³

CROPS

Soybeans

RATES AND ACRES TREATED

- Rates:**
- Diligent: 70.4 g/ac
- Acres treated:**
- 40 ac/2.816 kg jug
- Water volume:**
- 10-20 US gal/ac

PACKAGING

- Case:
- 2 x 2.816 kg jugs

WHEN TO APPLY

- Soybeans:**
- Pre-plant:** up to 30 days before planting
- Pre-emergence:** Up to 3 days after planting, prior to soybean emergence

RAINFAST

- 2 hours

HERBICIDE TANK MIXES

- Prowl® H2O
 - Focus® or Zidua™
- If weeds are present at the time of application, tank mix Diligent herbicide with a glyphosate herbicide for the burndown of emerged weeds.

Application information

No-till planters that incorporate the soil during planting may result in decreased weed control in the row. When these types of planters are used, apply Diligent Herbicide within 3 days after planting and before soybeans emerge.

Moisture is necessary to activate Diligent Herbicide in soil for residual weed control.

Crop rotation

Crop rotation varies by crop and soil pH.

4 months: winter wheat

10 months: field corn (soil pH ≤ 7.8 only) and soybeans (soil pH ≤ 7.8 only)

11 months: alfalfa (soil pH ≤ 7.4 only)

Pre-harvest interval

- The PHI is 60 days.

¹Early-season control on medium-textured soils

²Suppression

³Including biotypes resistant to herbicide Groups 2, 5 and 9

HERBICIDE
PRE-EMERGENCE,
EARLY POST-EMERGENCE

GROUP GROUP
2 27

MULTI
MODE
OF ACTION

ENGARDE APPLICATION GUIDELINES

Engarde™

HERBICIDE

Engarde™ herbicide gives you flexibility, convenience and performance against yield-robbing weeds in corn, for clean fields from start to finish.

WHY USE ENGARDE HERBICIDE?

- **Early knockdown and residual control of weeds.** Application flexibility from pre-emergence to the 2-leaf stage of corn allows you to keep spraying even after crop emergence
- **Two modes of action.** Engarde has 2 powerful modes of action to provide early season weed control
- **Easy to use.** Low use rate dry blend technology makes handling, sprayer loading and application easy

WEEDS CONTROLLED

Broadleaf Weeds

- Canola, Volunteer
- Lamb's-quarters, Common
- Mustard, Wild
- Pigweed, Redroot (including triazine resistant)
- Ragweed, Common¹
- Velvetleaf

Grasses

- Barnyard Grass
- Foxtail, Green
- Crabgrass, Hairy/ Large¹
- Foxtail, Yellow¹
- Panicum, Fall
- Quackgrass¹
- Witchgrass



Field Corn

CROPS

Field Corn

RATES AND ACRES TREATED

- Rates:**
- Engarde: 139.2 g/ac
- Acres treated:**
- 40 ac/5.568 kg jug
- Water volume:**
- 15-20 US gal/ac

PACKAGING

- Case:**
- 2 x 5.568 kg jugs

WHEN TO APPLY

- Field corn:**
- Pre-emergence
 - Post-emergence up to the 2 leaf stage

RAINFAST

- 2 hours

HERBICIDE TANK MIXES

- For additional residual annual weed control, tank mix Engarde with a Group 15, soil-applied grass herbicide

Application information

For early post-emergence applications, Engarde herbicide must be tank mixed with a recommended non-ionic surfactant, either Agral® 90, Citowett Plus or Ag-Surf® at 2 L per 1,000 L spray solution (0.2% v/v).

When tank mixed with a glyphosate herbicide containing a built-in adjuvant system, a non-ionic surfactant is not required.

Crop rotation

- 4 months:** winter wheat
- 10 months:** field corn
- 11 months:** soybeans and white beans

Pre-harvest interval

- The PHI is 100 days.

¹ Suppression only

ENLIST™
WEED CONTROL SYSTEM
**THE ENLIST™ WEED CONTROL SYSTEM WILL CHANGE HOW YOU
THINK ABOUT WEED MANAGEMENT IN SOYBEANS.**

The best and most flexible weed control system on the market.

INTRODUCING THE ENLIST WEED CONTROL SYSTEM

The Enlist weed control system will help growers meet the challenge of farming today and in the future.

The Enlist weed control system delivers:

- A system with new traits providing herbicide tolerance in soybeans and corn
- Herbicide solutions built on an improved form of 2,4-D that lands and stays on target, enables management of hard-to-control and resistant weeds with Group 4 herbicides
- Enlist herbicide Stewardship resources that support the use of multiple modes of action to manage resistant weeds, provide training, and promote responsible and sustainable use

ENLIST E3™ SOYBEANS

Enlist E3 soybeans provide high yield potential soybean genetics and industry leading triple-mode of action herbicide tolerance.

Features and benefits:

- Enlist E3 soybeans are tolerant to 2,4-D, glyphosate and glufosinate herbicides, which are part of a strong resistance management strategy
- Excellent crop tolerance enabling applications up to the R2 growth stage

THE PROGRAM APPROACH

is a **two-pass system** that uses multiple modes of action to effectively manage hard-to-control and resistant weeds in **Enlist E3™ soybeans**.

BENEFITS INCLUDE:

- ✓ **Reduced early season competition** from annual grass and broadleaf weeds
- ✓ Multi-modes of action for **resistance management**
- ✓ Timely post-emergent applications for **optimum weed control** and **reduced weed competition**

Start clean with tillage, burndown herbicide, or a soil residual herbicide

PLANT ENLIST E3™
SOYBEANS

If not applied before planting, apply soil residual herbicide

Apply Enlist Duo™ or Enlist™ 1 herbicide
No later than R2 or full flowering stage

Enlist™ herbicides – no plant-back restriction



Broadstrike™ RC
Canopy™ PRO
Commenza™
Diligent™
Freestyle™

Enlist Duo™
with COLEX-D™ technology

Enlist™ 1
with COLEX-D™ technology

Apply Liberty™ 200 SN herbicide
No later than R1 or beginning bloom

Liberty 200 SN
Herbicide


APPLYING ENLIST HERBICIDES:


- Boom height at 60cm or less



- Use nozzles that deliver coarse to extremely coarse spray droplets



- Optimum spray volume at 15 GPA



- Spray when winds are between 3-16 km/h
- Do not spray in winds that exceed 25 km/h
- Do not spray during a temperature inversion

HERBICIDE
PRE-PLANT, PRE-EMERGENCE,
POST-EMERGENCE

GROUP 4
GROUP 9

MULTI
MODE
OF ACTION

ENLIST DUO WITH COLEX-D™ TECHNOLOGY
APPLICATION GUIDELINES

Enlist Duo™

with COLEX-D™ technology

HERBICIDE

Enlist Duo™ provides the convenience of both 2,4-D choline and glyphosate in one formulation for control of grasses and broadleaf weeds including hard-to-control and resistant weeds.



WHY USE ENLIST DUO HERBICIDE?

- Improved control from two modes of action: Groups 4 & 9
- Multiple modes of action in a convenient formulation
- Improved tank stability for a spray solution that stays mixed
- Spray solution does not adhere to sprayer components providing easy and fast sprayer cleanout

WEEDS CONTROLLED

Enlist E3™ soybeans (1.74 L/ac)

- Barley, Volunteer
- Barnyard Grass
- Biennial Wormwood²
- Bindweed, Field²
- Bindweed, Hedge
- Blue Lettuce²
- Bluebur
- Buckwheat, Tartary
- Buckwheat, Wild
- Burdock (before 4-leaf)
- Burdock²
- Canola, Volunteer¹
- Chickweed, Common
- Chickweed, Mouse-eared²
- Cleavers, Common
- Cocklebur
- Corn Spurry
- Cow Cockle
- Crabgrass, Large
- Crabgrass, Smooth
- Dandelion
- Fall Panicum
- False Flax
- Field Peppergrass
- Fleabane, Canada

- Fleabane, Daisy
- Flixweed
- Foxtail, Giant
- Foxtail, Green
- Goat's-beard
- Hairy Galinsoga
- Hawk's-beard, Narrow-leaf
- Hemp-nettle
- Hoary Cress
- Horsetail, Field
- Knotweed (before 4-leaf)
- Kochia
- Lady's-thumb
- Lamb's-quarters
- Leafy Spurge²
- Mallow, Roundleaf²
- Milkweed, Common^{3,4}
- Mustard, Dog
- Mustards (except green tansy)
- Nightflowering Catchfly
- Nightshade, Eastern Black Flowering
- Nutsedge, Yellow^{5,6}
- Oak Leaf Goosefoot
- Palmer Amaranth³
- Pigweed, Redroot
- Pigweed, Russian

- Pigweed, Smooth
- Pineappleweed
- Plantain, Common
- Proso Millet, Wild
- Purslane, Common
- Quackgrass
- Ragweed, Common
- Ragweed, Giant
- Russian Thistle
- Shepherd's Purse
- Smartweed, Green
- Smartweed, Pennsylvania
- Sow-thistle, Annual
- Sow-thistle, Perennial^{3,5}
- Stinkweed
- Sunflower, Annual
- Sweet Clover
- Tansy, Common
- Thistle, Canada^{3,4}
- Velvetleaf
- Vetch
- Waterhemp, Common
- Wheat, Volunteer
- Wild Oats
- Wild Radish
- Wild Tomato

¹ Including glyphosate-tolerant and Clearfield™ canola varieties.

² Top growth control only.

³ Use 2 applications for best control. The 2nd application should be no later than the R2 stage (full flowering stage) of soybeans.

⁴ Milkweed: 15-60 cm in height and actively growing.

⁵ Thistle, Canada and Sow-thistle, Perennial: should be from the rosette stage to 50 cm in height and actively growing.

⁶ Nutsedge, Yellow: 5-15 cm in height and actively growing.

CROPS

Enlist™ corn

Enlist E3™ soybeans

Burndown
before field corn,
wheat (spring,
winter, durum),
barley, rye

RATES AND ACRES TREATED

Rates:

Enlist™ field corn and

Enlist E3™ soybeans:

• 1.18 – 1.74 L/ac

Burndown ahead of corn and

cereal crops:

• 0.89 – 1.74 L/ac

Acres treated (1.74 L/ac rate):

• 10 ac/case

• 320 ac/tote

Water volume:

• 10-15 gal/ac

• Do not exceed more than 3.48 L/ac per use season.

PACKAGING

Case:

• 2 x 8.7 L

Tote:

• 556.8 L

WHEN TO APPLY

Crop Stage:

Enlist corn: Up to V8 growth stage or 120 cm height

Enlist E3 soybeans: Up to R2 stage (full flowering)

Burndown before field corn, wheat (spring, winter, durum),

barley, rye: Prior to planting or after planting

(BUT BEFORE CROP EMERGENCE)

RAINFAST

• 2 hours

HERBICIDE TANK MIXES

Consult the Enlist Product Use Guide available at EnlistCanada.ca.

Application information

On-Target Application Requirements:

Droplet Size: Coarse to extremely coarse (ASAE S-572 Standard) to greatly reduce drift potential.

Boom Height: 60 cm or less

Spray Volume: 15 gal/ac is optimum

Wind: 3-16 km/hr. Do not spray during a temperature inversion. Do not spray in winds that exceed 25 km/h

Enlist corn, Enlist E3 soybeans: Make 1 to 2 applications with a minimum of 12 days between applications.

Crop Rotation

Any crop may be grown the year following an application of Enlist Duo.

Pre-harvest Interval

Enlist E3 soybeans:

Do not harvest for forage or hay. Do not graze treated Enlist E3 soybeans.

Enlist corn:

Do not permit lactating dairy animals to graze fields within 7 days after application.

Do not harvest forage or cut hay within 30 days after application. Withdraw meat animals from treated fields at least 3 days before slaughter.

HERBICIDE
PRE-PLANT, PRE-EMERGENCE,
POST-EMERGENCE

GROUP

4

ENLIST 1 WITH COLEX-D™ TECHNOLOGY
APPLICATION GUIDELINES

Enlist™ 1

with COLEX-D™ technology

HERBICIDE

Enlist™ 1, a standalone 2,4-D choline formulation provides the flexibility to tank-mix and adjust the rates of glyphosate or glufosinate for hard-to-control and resistant weeds.



Field Corn
Enlist™



Soybeans
Enlist E3

WHY USE ENLIST 1 HERBICIDE?

- Enlist 1 with Colex-D technology is designed to land and stay on target with excellent performance on the toughest weeds
- **Flexibility.** Enlist 1 allows you to customize use rates and ratios of tank-mix partners
- **Compatibility.** Enlist 1 can be tank-mixed with glyphosate (Group 9), Liberty® 200 SN (glufosinate, Group 10), or other approved products

WEEDS CONTROLLED

Enlist E3™ soybeans (0.73 L/ac)

- Biennial Wormwood²
- Bindweed, Field²
- Bindweed, Hedge
- Blue Lettuce²
- Bluebur
- Buckwheat, Tartary
- Buckwheat, Wild
- Burdock (before 4-leaf)
- Burdock²
- Canola, Volunteer¹
- Chickweed, Common
- Chickweed, Mouse-eared²
- Cocklebur
- Dandelion
- False Flax

- Field Peppergrass
- Fleabane, Daisy
- Flixweed
- Goat's-beard
- Hairy Galinsoga
- Hoary Cress
- Horsetail, Field
- Knotweed (before 4-leaf)
- Kochia
- Lady's-thumb
- Lamb's-quarters
- Leafy Spurge²
- Mustard, Dog
- Mustards (except green tansy)
- Oak Leaf Goosefoot
- Pigweed, Redroot
- Pigweed, Russian
- Pineappleweed

- Plantain, Common
- Purslane, Common
- Ragweed, Common
- Ragweed, Giant
- Russian Thistle
- Shepherd's Purse
- Smartweed, Green
- Smartweed, Pennsylvania
- Sow-thistle, Annual
- Sow-thistle, Perennial²
- Sunflower, Annual
- Sweet Clover
- Tansy, Common
- Thistle, Canada²
- Velvetleaf
- Vetch
- Wild Radish

CROPS

Enlist™ corn

Enlist E3™
soybeans

RATES AND ACRES TREATED

Rates:

Enlist 1: 0.3 to 0.73 L/ac

Hard-to-Control weeds: 0.73 L/ac

Acres treated (0.73 L/ac rate):

- 28 ac/case
- 750 ac/547 L Tote
- 616 ac/450 L Returnable tote

Water volume:

- 10-15 gal/ac
- Do not exceed 1.46 L/ac per use season

PACKAGING

- 2 x 10.2 L Case
- 547 L tote
- **New** 450 L returnable tote

WHEN TO APPLY

- Enlist E3 soybeans tank-mix with glyphosate up to R2 (full flower)
- Enlist E3 soybeans tank-mix with Liberty 200 SN* (glufosinate) up to R1 (beginning bloom)
- Enlist corn up to V8 or 120 cm in height

RAINFAST

- 2 hours

HERBICIDE TANK MIXES

Consult the Product Use Guide available at EnlistCanada.ca

Registered tank-mixes:

Glyphosate at 900 gai/ha (Group 9)

Supported tank-mixes:

Liberty 200 SN (glufosinate – Group 10)

Control of volunteer Enlist corn in Enlist E3 soybeans: Select™, Centurion®, Poast® Ultra

Application information

On-Target Application Requirements:

Droplet Size: Coarse to extremely coarse (ASAE S-572 Standard) to greatly reduce drift potential.

Boom Height: 60 cm or less.

Spray Volume: 10-15 gal/ac is optimum.

Wind: 3-16 km/hr. Do not spray during a temperature inversion. Do not spray in winds that exceed 25 km/h.

Enlist corn: Make 1 to 2 applications with a minimum of 12 days between applications before the V8 growth stage.

Enlist E3 soybeans: Make 1 to 2 applications with a minimum of 12 days between applications. Apply up to R2 stage.

Crop Rotation

Any crop may be grown the year following an application of Enlist 1.

Pre-harvest interval

Enlist E3 soybeans: Do not harvest for forage or hay. Do not graze treated Enlist E3 soybeans.

Enlist corn: Do not permit lactating dairy animals to graze fields within 7 days after application. Do not harvest forage or cut hay within 30 days after application. Withdraw meat animals from treated fields at least 3 days before slaughter.

¹ Including glyphosate-tolerant and Clearfield™ canola varieties.

² Top growth control only.

HERBICIDE
PRE-EMERGENCE,
POST-EMERGENCEGROUP
2

FIRSTRATE APPLICATION GUIDELINES

FirstRate™**HERBICIDE**

FirstRate™ herbicide is your solution for effective pre- and post-emergence control of the most troublesome broadleaf weeds in soybeans.

WHY USE FIRSTRATE HERBICIDE?

- **Broadleaf weed control.** FirstRate provides a high level of control of some of the toughest broadleaf weeds including cocklebur, horsenettle and jimsonweed
- **Wide application window.** FirstRate can be applied any time from pre-emergence up to just before flowering (R1)
- **Tank mix flexibility.** FirstRate can be tank-mixed with other herbicides and used in non-GMO or glyphosate tolerant soybeans to improve control of broadleaf weeds

WEEDS CONTROLLED**Pre-emergence (8.5 g/ac)**

- Ragweed, Common¹
 - Lamb's-quarters, Common¹
 - Velvetleaf
- Pre-emergence (17 g/ac)**
- Above weeds plus
 - Cocklebur
 - Lamb's-quarters (heavy infestations)

Post-emergence (8.5 g/ac)

- Ragweed, Common¹ (4-8 leaf)
- Ragweed, Giant¹ (4-6 leaf)
- Velvetleaf (2-4 leaf)
- Cocklebur, Common (4-8 leaf)
- Jimsonweed (2-4 leaf)



Soybeans

CROPS

Soybeans

RATES AND ACRES TREATED

Rates:
Pre-emergence: 8.5-17 g/ac
Post-emergence: 8.5 g/ac
Acres treated:
(Post-emergence rate):
 • 40 ac/bottle
 • 160 ac/case
Water volume:
 • 10-20 US gal/ac

PACKAGING

10 x 17 g packets
 per package
 340 g Bottle:
 • 4 x 340 g/case

WHEN TO APPLY

- Pre-emergence:
 - Apply after planting but prior to crop or weed emergence
- Post-emergence:
 - Any time prior to soybean flowering stage

RAINFAST

• 2 hours

HERBICIDE TANK MIXES**Registered:**

Broadstrike™
 Dual Pursuit®
 Roundup®

Application information

Application prior to full emergence of 1st trifoliolate leaf may cause temporary yellowing of soybeans. This effect is transient and has no effect on yields.

Adequate soil moisture is necessary for optimal efficacy. Sufficient rainfall to moisten the soil to depth of 5cm is generally sufficient. If no rainfall within 7-10 days, a shallow cultivation or rotary hoe is recommended.

Post-emergent applications of FirstRate require the addition of a non-ionic surfactant at 0.25% v/v plus liquid fertilizer (28-0-0 or 32-0-0) at 2.5% v/v.

Crop rotation**0 months:** Soybeans**4 months:** Wheat**9 months:** Corn**Pre-harvest interval**

- The PHI is 65 days.

¹Note: Group 2 resistant biotypes are known to exist and these populations will not be controlled

HERBICIDE
PRE-PLANT, PRE-EMERGENCE,
POST-EMERGENCE

GROUP

2

FREESTYLE APPLICATION GUIDELINES

Freestyle™



Soybeans

HERBICIDE

Freestyle™ herbicide is a flexible solution for early-season weed control in any soybean production system. It provides enhanced residual control of grass and broadleaf weeds, including tough weeds like Eastern Black Nightshade.

WHY USE FREESTYLE HERBICIDE?

- **Adds residual.** Freestyle adds residual control of broadleaf and grass weeds to your herbicide program
- **Fits any soybean production system.** Soil applied or early post-emergence, Freestyle fits conventional IP soybeans or enhances glyphosate in a GT system
- **Broad-spectrum and residual season-long weed control.** Adds control of weeds such as velvetleaf, Eastern black nightshade and nutsedge

WEEDS CONTROLLED

Broadleaf weeds:

- Dandelion¹
- Lady's-thumb
- Lamb's-quarters, Common
- Lettuce, Prickly¹
- Mustard, Wild
- Nightshade, Eastern Black
- Pigweed, Redroot
- Smartweed
- Velvetleaf

Grass weeds:

- Barnyard Grass
- Foxtail, Green
- Foxtail, Yellow
- Old Witchgrass
- Nutsedge, Yellow

CROPS

Soybeans

RATES AND ACRES TREATED

Rates:

- Pre-plant or pre-emergence:
• 14.4 g/ac + 125 mL/ac
- Early post-emergence:
• 9.6 g/ac + 83 mL/ac

Acres treated:

- Pre-plant or pre-emergence:
• 40 ac/case
- Early post-emergence:
• 60 ac/case

Water volume:

- 10-20 US gal/ac

PACKAGING

Case:

- Classic
• 2 x 288 g bottle +
• 2 x 2.5 L Imazethapyr SL
herbicide

WHEN TO APPLY

- Glyphosate tolerant soybeans: Pre-plant or pre-emergence
- Glyphosate tolerant soybeans: Early post-emergence
- Non-GM soybeans: Early pre-plant to pre-emergence

RAINFAST

- 4 hours

HERBICIDE TANK MIXES

Glyphosate – burndown or Post-emergence
in Glyphosate Tolerant soybeans
Boundary® LQD – for IP soybeans

Application information

Glyphosate tolerant soybeans – Pre-plant or Pre-emergence (14.4g/ac + 125 mL/ac)

- Apply up to 14 days before planting

Glyphosate tolerant soybeans – Early Post-emergence (9.6 g/ac + 83 mL/ac)

- Apply up to the 3rd trifoliolate stage; Tank-mix with 0.67-1 L/ac of a 540 g/L glyphosate

Non-GM soybeans – Early pre-plant to pre-emergence (14.4 g/ac + 125 mL/ac)

- Tank-mix with a pre-emergence grass herbicide such as Boundary LQD for additional residual and modes of action

Adjuvants: For control of emerged weeds add a non-ionic surfactant at 2 L/1,000 L of spray solution (0.2% v/v). When tank mixed with a glyphosate herbicide containing a built-in adjuvant system, a non-ionic surfactant is not required.

Crop rotation

Based on soil pH of ≤ 7.4:

3 months: winter wheat

10 months: field corn, soybeans and white beans

Pre-harvest interval

- The PHI is 100 days.

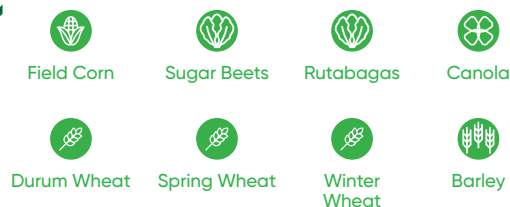
Mixing Instructions

1. Fill the sprayer tank with ½ to ¾ of the required amount of water
2. Continue agitation throughout the mixing and spraying procedure
3. Add the required amount of Classic™ and allow time for product to fully disperse
4. Add the required amount Imazethapyr SL and allow time for product to fully disperse
5. If required, add glyphosate and continue agitation
6. If not tank-mixing with glyphosate add surfactant
7. Complete filling the spray tank

¹ Pre-plant burndown applications

HERBICIDE
POST-EMERGENCEGROUP
4

LONTREL XC APPLICATION GUIDELINES

Lontrel™ XC**HERBICIDE**

Lontrel™ XC herbicide improves the control of thistles and other hard to control broadleaf weeds in field corn and other field crops.

WHY USE LONTREL XC HERBICIDE?

- **Gets to the root of the problem.** Lontrel XC is highly systemic and moves down to the roots to help manage deep rooted perennials
- **Targets hard-to-control weeds.** Controls the toughest broadleaf weeds in corn including certain glyphosate resistant biotypes
- **Crop safety.** Lontrel XC is a different Group 4 than products like dicamba. You can apply with confidence up to the 8 leaf stage without injury or volatility

WEEDS CONTROLLED

- Alfalfa, Volunteer/Stand
- Alsike Clover
- Buckwheat, Wild
- Chamomile, Scentsless
- Daisy, Oxeye¹
- Groundsel, Common
- Kudzu
- Ragweed, Common
- Sorrel, Sheep¹
- Sow-thistle, Perennial
- Thistle, Canada
- Vetch

CROPS

Barley
Canola
Durum Wheat
Field Corn
Rutabagas
Spring Wheat
Sugar Beets
Winter Wheat

RATES AND ACRES TREATED

Rates:
• 69-202 mL/ac
(Use rates vary by crop)
Field corn: 69-101 mL/ac
Acres treated:
Field corn: 26-39 ac/jug
Water volume:
• 10-20 US gal/ac

PACKAGING

Case:
• 4 x 2.67 L

WHEN TO APPLY**Crop Stage:**

- Field corn: spike to 8 leaf (V6)
- Canola: 2-6 leaf
- Cereals: 3 leaf to flag leaf
- Sugar beets: Cotyledon to 8 leaf

Weed Stage:

- Canada thistle, Perennial sow thistle, Scentsless chamomile – rosette to pre-bud
- Volunteer alfalfa – 5-50 cm height

RAINFAST

- 4 hours

HERBICIDE TANK MIXES

May be safely tank mixed with many other registered herbicides. Refer to the specific crop use recommendations for tank mix guidance.

Application information

Field Corn: 69 mL/acre: Tank mix with glyphosate (glyphosate tolerant corn only) for enhanced control of Canada thistle, dandelions, perennial sow-thistle and wild buckwheat.

101 mL/acre: Canada thistle (top growth), vetch and alsike clover

Do not apply to seed corn, sweet corn or popcorn.

Cereals (spring wheat, winter wheat, durum wheat, barley): 69-101 mL/acre: Tank mix with 2,4-D Ester or Amine, MCPA Ester or Amine

Canola (Ontario only): 101 mL/acre: For top growth control of Canada thistle

Apply at the 2-6 leaf stage of canola.

Sugar Beets: 138-202 mL/acre

Rutabaga: 138 mL/acre: For control of common ragweed

Lontrel XC does not require additional adjuvants or surfactants.

Crop Rotation

Fields previously treated with Lontrel XC herbicide can be seeded the following year to wheat, oats, barley, rye (not underseeded with legumes, clover or alfalfa), forage grasses, flax, canola, mustard, soybeans*, sunflowers*, field peas*, sugar beets.

* Refer to product label for detailed information.

Pre-harvest interval

Field corn – allow 40 days after application before harvesting field corn for silage as feed or allowing livestock to graze.

Sugar beets – 90 days.

Rutabaga – 83 days.

Durum wheat – 60 days.

¹ Suppression

HERBICIDE
POST-EMERGENCE

GROUP

4

PIXXARO WITH ARYLEX™ ACTIVE
APPLICATION GUIDELINES

Pixxaro™

Arylex™ active

HERBICIDE

Spray Pixxaro™ when you want, with confidence.

Durum
WheatSpring
WheatWinter
Wheat

Barley

WHY USE PIXXARO HERBICIDE?

- **Flexibility.** 95% or greater control of most labelled weeds. Whether they are small or large weeds, in early or late crop staging and even in cool or dry conditions
- **Elite performance.** Control your toughest weeds, including glyphosate resistant Canada fleabane, cleavers, chickweed and hemp-nettle and many other broadleaf weeds

WEEDS CONTROLLED

based on
PIXXARO A + MPCA Ester 600

- | | | |
|--|--|--|
| <ul style="list-style-type: none"> • Alfalfa, Volunteer (up to 25 cm in height) • Barnyard Grass (up to the 5-leaf, 2-tiller stage) • Buckwheat, Wild • Burdock (before the 4-leaf stage) • Canada Fleabane² • Canola, Volunteer • Chickweed, Common • Cleavers¹ • Cocklebur • Dandelion** | <ul style="list-style-type: none"> • Flixweed • Hemp-nettle¹ • Henbit • Horsetail, Field (up to 15 cm in height)* • Kochia¹ • Lady's-thumb* • Lamb's-quarters, Common • Mallow, Roundleaf • Mustard, Ball • Mustard, Wild¹ • Nightshade species, (including eastern black, hairy and cutleaf, up to the 6-leaf stage) • Pennycress, Field | <ul style="list-style-type: none"> • Pigweed, Redroot • Plantain, Common • Prickly Lettuce • Ragweed, Common² • Ragweed, Giant² • Shepherd's-purse • Smartweed, Annual* • Smartweed, Green* • Sow-thistle, Annual • Sow-thistle, Perennial (up to the 6-leaf stage)* • Stork's-bill, Long • Thistle, Canada (up to the bolting stage, 30 cm in height)* • Vetch |
|--|--|--|

*Suppression.

** Dandelion suppression - seedlings and over-wintered rosettes up to 30 cm in diameter.

¹ Including ALS resistant.² Including ALS and glyphosate resistant.

CROPS

Durum Wheat
Spring Wheat
Winter Wheat
Barley

RATES AND ACRES TREATED

Rates:

- Pixxaro A/Pixxaro Flexx: 123 mL/ac
- Plus M Ester 600: 236 mL/ac

Acres treated:

- Pixxaro co-pack: 40 ac/case
- Pixxaro A/Pixxaro Flexx: 80 ac/jug

Water volume:

- 10-20 US gal/ac

Pixxaro is the combination of Pixxaro A or Pixxaro Flexx with MCPA Ester 600. It is available in a 40 acre co-pack or as a tank-mix using a 600 g/L MCPA Ester herbicide.

PACKAGING

Pixxaro co-pack:

- Pixxaro A: 1 x 4.9 L jug
- Plus M Ester 600: 1 x 9.45 L jug

Pixxaro A/Pixxaro Flexx:

- 2 x 9.8 L jugs/case

WHEN TO APPLY

Crop Stage:

3 leaf to just prior to flag leaf emergence

Weed Stage:

1-8 leaf (or larger; see label)

RAINFEST

- 1 hour

HERBICIDE TANK MIXES

For grass and broadleaf weed control, tank mix with any grass herbicide registered for use in wheat or barley.

Registered fungicides:

- Stratego[®]
- Tilt™

With Pixxaro A or Pixxaro Flexx, tank mix with a MPCA Ester herbicide such as Adama 2,4-D Ester 700 or NuFarm 2,4-D Ester 600. Follow recommended label rates for MPCA Ester tank mixes.

Pixxaro co-pack does not require an additional MPCA Ester tank mix as the co-pack already contains Plus M Ester 600.

Application information

If MPCA Ester 600 is used with Pixxaro A as intended (supplied in the Pixxaro co-pack or as a tank-mix), no surfactant is required.

Crop rotation

3 months: fall rye and winter wheat

6 months: soybeans

10 months: spring wheat, spring barley, oats, canola, corn, sunflowers, flax, field peas, potatoes (except seed potatoes), mustard, alfalfa, dry beans (species including pinto, kidney and white types) and timothy or fields can be summer fallowed.

22 months: lentils

Pre-harvest interval

- The PHI for treated crops is 60 days.
- The PHI for hay or silage is 21 days.

Mixing Instructions

1. Fill the spray tank with ½ to ¾ of the required amount of water
2. Continue agitation throughout the mixing and spraying procedure
3. If water conditioner is required, add now
4. Add the required amount of Pixxaro™ A
5. Add the required amount of Plus M (MCPA Ester 600)
6. Complete filling the sprayer tank with water

Prism™ SG**HERBICIDE**

Outstanding post-emergent control of quackgrass, pigweed and annual grasses.

WHY USE PRISM™ SG HERBICIDE?

- Can be used on all types of potatoes, including seed and early maturing varieties.
- Flexible re-cropping options.

WEEDS CONTROLLED

- Barnyard Grass
- Fall Panicum
- Foxtail, Green
- Foxtail, Yellow
- Lamb's-Quarters*
- Pigweed, Redroot
- Quackgrass
- Witchgrass



Potatoes

CROPS

Potatoes

RATES AND ACRES TREATED

- 24 g/ac
- Acres treated:**
- 20 ac/jug
- Water volume:**
- 40 L/ac (10 US gal/ac)

PACKAGING

- 12 x 480 g jug

WHEN TO APPLY

- Application to control annual grasses and quackgrass must be made before the crop canopy can interfere with spray coverage of the target weeds.
- Cultivation is NOT recommended within 7-10 days prior to or after application of Prism™ SG Herbicide.

RAINFAST

- 4 hours

HERBICIDE TANK MIXES

Prism SG can be tank mixed with Tricor 75DF herbicide post-emergent, plus a non-ionic surfactant i.e. Agral 90 or AgSurf at 2 L per 1000 L of spray solution (0.2% v/v).

Crop rotation

Anytime: field corn

4 months: winter wheat

10 months: spring barley, spring wheat (including durum), oats, canola, soybeans, dry beans, white beans, red clover, sorghum, chickpeas, potatoes, sunflowers, corn (sweet or seed), field peas, lentils, flax and faba beans.

Adjuvant information

Prism SG must be applied with a recommended non-ionic surfactant, either Agral 90 or Ag-Surf, at 2 L per 1000 L spray solution (0.2% v/v).

Pre-harvest interval

The PHI for potatoes is 30 days.

*Suppression

HERBICIDE
POST-EMERGENCE

GROUP

4

PROMINEX™ WITH ARYLEX™ ACTIVE
APPLICATION GUIDELINES**Prominex™**

Arylex™ active

HERBICIDE

Prominex™ herbicide with Arylex™ active delivers exceptional control of annual AND perennial broadleaf weeds with the convenience of an all-in-one formulation.

WHY USE PROMINEX™ HERBICIDE IN WHEAT AND BARLEY?

- **Unmatched Weed Control.** Prominex provides control of both annual AND perennial broadleaf weeds.
- **Just GO.** Thanks to Arylex active, you can Just GO on small or large broadleaf weeds, in early or late crop staging, and even in cool or dry conditions.
- **Tank Mix Flexibility.** Choose whether to tank mix with a Group 1 grass herbicide in your wheat or barley and a Group 2 grass herbicide in your wheat.
- **Convenient Formulation.** All-in-one ME formulation allows for ultimate convenience and easy loading.
- **Expanded Group 4 Mode of Action Control.** Tank mix with MCPA Ester 600 or 2,4-D Ester for expanded Group 4 broadleaf weed control.

Prominex + 236 mL/ac MCPA Ester 600**GRASS WEEDS CONTROLLED**

- Barnyard Grass

ANNUAL WEEDS CONTROLLED

- American Dragonhead
- Ball Mustard
- Burdock
- Canada Fleabane**
- Canada Thistle
- Chickweed**
- Cleavers**
- Cocklebur
- Common Ragweed**
- Cow Cockle
- False Ragweed
- Flixweed*
- Giant Ragweed**
- Hemp-nettle*
- Henbit
- Kochia**
- Lamb's-quarters
- Nightshade species (Eastern black, hairy and cutleaf)
- Plantain
- Prickly Lettuce
- Redroot Pigweed
- Round-leaved Mallow
- Shepherd's Purse*
- Stinkweed
- Stork's-bill
- Velvetleaf
- Vetch
- Volunteer Alfalfa
- Volunteer Canola (all herbicide tolerant varieties)
- Volunteer Flax
- Wild Buckwheat
- Wild Mustard
- Wild Radish

WEEDS SUPPRESSED

- Dandelion
- Field Horsetail
- Perennial Sow-thistle
- Smartweed*

Durum
WheatSpring
WheatWinter
Wheat

Barley

CROPS

- Barley
- Durum wheat
- Spring wheat
- Winter wheat

RATES AND ACRES TREATED

- Rates:**
 - 414 mL/ac
- Acres treated:**
 - 40 ac/case (20 ac/jug)
- Water volume:**
 - 10-20 US gal/ac

PACKAGING

- Case:**
 - 2 x 8.3 L jugs

WHEN TO APPLY

- 3-leaf to just prior to flag leaf emergence

RAINFAST

- 4 hours

HERBICIDE TANK MIXES

- MCPA Ester 600 • 2, 4-D Ester 700
- Simplicity™ GoDRI

Crop rotation

- Barley
- Canola
- Corn
- Flax
- Forage grasses
- Oats
- Mustard
- Peas¹
- Fall rye (not underseeded with legumes, clover or alfalfa)
- Soybeans
- Summerfallow
- Wheat

22 months:

- Lentils
- Chickpeas

¹For pea or soybean rotation, rainfall from June 1 to August 31 in the year of application must be greater than 140 mm (5.5 inches) and annual rainfall must be greater than 175 mm (6.9 pouces).

*Including Group 2 resistant biotypes

**Including Groups 2 & 9 resistant biotypes

For a complete weed list and specific weed staging, please refer to the Prominex label.

Simplicity™ GoDRI™

HERBICIDE



Durum
Wheat



Spring Wheat



Winter
Wheat

Simplicity™ GoDRI™ herbicide delivers superior control of wild oat, annual grass and broadleaf weeds with no re-cropping restrictions. It comes in a convenient, easy-to-use, highly concentrated, low dose formulation.

WHY USE SIMPLICITY GoDRI HERBICIDE?

- **Effective resistance management with a wide application window.**
The only Group 2 wild oat herbicide that can be applied up to the flag leaf stage
- **Exceptional flexibility.** Allows for tank mixing with many Corteva Agriscience crop protection products such as Pixxaro™
- **Convenient formulation.** GoDRI Rapid Dispersion Technology is a highly concentrated easy to use formulation

WEEDS CONTROLLED

Group 1 resistant wild oats, and bonus broadleaf weeds in wheat.

- | | |
|--|---------------------|
| Grass | • Hemp-nettle |
| • Barnyard Grass | • Lady's-thumb |
| • Brome, Downy | • Mallow, Roundleaf |
| • Brome, Japanese | • Pennycress, Field |
| • Foxtail, Green* | • Pigweed, Redroot |
| • Foxtail, Yellow | • Shepherd's-purse |
| • Oat, Wild | • Smartweed* |
| Broadleaf | • Spurry, Corn |
| • Buckwheat, Wild* | • Thistle, Canada* |
| • Canola, Volunteer
(excluding Clearfield*) | • Thistle, Russian* |
| • Chickweed, Common | |
| • Cleavers | |
| • Cowcockle | |
| • Dandelion* | |
| • Flixweed | |

*Suppression. Corteva Agriscience research trials indicate that application to small stage, actively growing plants provides an increased level of control.

CROPS

- Durum wheat
- Spring wheat
- Winter wheat

RATES AND ACRES TREATED

- Rates:**
- 28 g/ac
- Acres treated:**
- 80 ac/jug (320 ac/case)
- Water volume:**
- 10-20 US gal/ac

PACKAGING

- Case:**
- 4 x 2.24 kg jugs

WHEN TO APPLY

- Crop Stage:**
- 2 leaf stage to the flag leaf stage
- Weed Stage:**
- Wild oats: 1 to 6 leaf
 - Broadleaf weeds: 1 to 5 leaf

RAINFAST

- 2 hours

HERBICIDE TANK MIXES

- | | |
|------------------------------|--------------------|
| Broadleaf herbicides: | Fungicides: |
| 2,4-D Ester | Acapela™ |
| Buctril™ M | Stratego™ |
| MCPA™ Ester | Tilt™ |
| Pixxaro™ | |
| Refine™ SG | |

Application information

Simplicity GoDRI always requires the addition of a non-ionic surfactant (NIS) at 0.25% v/v such as: Agral 90 at 0.25% v/v, Sentry™ at 0.25% v/v, Ag-Surf Original at 0.25% v/v.

Crop rotation

10 months: field corn, sunflower and potatoes

11 months: barley, brown mustard, canola, dry beans (species including pinto, kidney and white types), flax, canola, lentils, oats, field peas, chickpea, spring wheat, soybean and yellow mustard or fields can be summer fallowed

Pre-harvest interval

- The PHI is 50 days.

Steadfast™ IS



Field Corn

HERBICIDE

Steadfast™ IS herbicide provides robust post-emergence grass control in field corn including non-GMO hybrids

WHY USE STEADFAST IS HERBICIDE?

- **Proven control of annual grasses.** Steadfast IS provides dependable control of key annual grasses such as green foxtail and wild oat
- **Crop safety under a wide range of conditions.** Includes a safener allowing for use on short season hybrids
- **Wide window.** Steadfast IS can be safely applied to field corn up to the 8 leaf stage (V6)

WEEDS CONTROLLED

- Foxtail, Green
- Canola, Volunteer
- Oat, Wild
- Wheat, Volunteer

CROPS

Field Corn

RATES AND ACRES TREATED

- Rates:**
- 27 g/ac
- Acres treated:**
- 20 ac/bottle
- Water volume:**
- 10-20 US gal/ac

PACKAGING

- Case:**
- 6 x 540 g bottles

WHEN TO APPLY

- Crop Stage:**
- Spike to 8 leaf (V6)
- Weed Stage:**
- Annual grasses: 1-4 leaf (up to early tillering)
 - Volunteer canola: cotyledon to 5 leaf

RAINFAST

- 2 hours

HERBICIDE TANK MIXES

Non-GMO field corn:

Steadfast IS can be tank-mixed with registered broadleaf herbicides to ensure cross-spectrum control of grass and broadleaf weeds

Glyphosate Tolerant Corn:

Glyphosate

Application information

When using Steadfast IS herbicide in conventional corn, it must be tank mixed with a non-ionic surfactant at 2 L/1000 L (0.2% v/v).

Steadfast IS must be applied only when the temperature in the 24 hours before and after application ranges between 5°C and 30°C. Temperatures beyond this range increase the potential for crop response. Make only one application per growing season.

For maximum crop safety, Steadfast IS should only be applied to corn which has not been treated with a highly systemic organophosphorus soil insecticide, such as Lorsban™. Do not tank mix with any organophosphorus insecticide. Do not apply a foliar organophosphorus insecticide within 7 days before or after applying Steadfast IS.

Crop rotation

4 months: winter wheat

10 months: spring wheat (including durum), oats, barley, canola, soybeans, dry beans, white beans, chickpeas, potatoes, sunflowers, corn (sweet or seed), field peas, lentils and flax

Anytime: field corn

Pre-harvest interval

- 30 days for corn (silage, fodder or grain).

fungicides BY CROP

Corn



Acapela™ 31

Soybeans



Acapela™ 31

Viatude™ 33

Cereals



Acapela™ 31

Potatoes



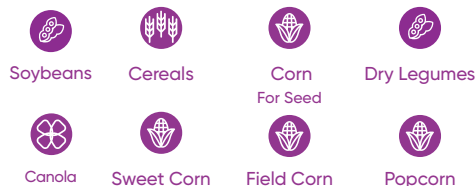
Tanos™ 32

FUNGICIDE
POST-EMERGENCEGROUP
11

ACAPELA APPLICATION GUIDELINES

Acapela™

FUNGICIDE



Protect your soybean and corn crops against key diseases with Acapela™ fungicide, a unique Group 11 fungicide.

WHY USE ACAPELA FUNGICIDE?

- **Outstanding disease protection** in soybeans, corn, cereals & dry legumes.
- **Unique movement properties** that quickly and efficiently surrounds, penetrates, and protects.
- **Rapidly absorbed**, moving quickly into and within each plant.
- **Supports positive plant performance** by increasing chlorophyll content and plant productivity, even in stressful conditions.

DISEASES CONTROLLED

Soybeans

- Septoria brown spot
- Frogeye leaf spot
- Asian soybean rust
- White mould¹

Corn (field, sweet, seed, popcorn)

- Northern corn leaf blight
- Tar Spot¹

Cereals (barley, oats, rye, triticale, wheat)

- Scald (barley and rye)
- Crown rust (oats)
- Septoria leaf blotch (wheat, rye, barley and triticale)
- Leaf rust (wheat, rye and triticale)
- Net blotch (barley)
- Powdery mildew (cereal grains)
- Stripe rust (cereal grains)
- Tan spot (wheat)

Dry legumes

- Anthracnose (lentils and dry beans)
- Ascochyta blight (lentils)
- Asian soybean rust
- Mycosphaerella blight¹ (field peas)
- White mould¹

Potatoes

- Early blight
- Late blight
- White mould

Oilseed (flax)

- Pasmó

CROPS

Canola

Cereals

Corn
(for seed)

Dry legumes

Soybeans

Sweet corn

Field corn

Popcorn

RATES AND ACRES TREATED

Rates:

- 0.21 to 0.35L/ac

Water volume:

- Ground: 10 US gal/ac minimum
- Air: 4.5 US gal/ac minimum

• Soybeans:

- For white mould (Sclerotinia)
 - 0.35 L/ac (27 ac/jug)
- For Asian soybean rust, brown spot (Septoria) and frogeye leaf spot (Cercospora sojina)
 - 0.24 to 0.35L/ac (27-40 ac/jug)

• Corn (field, sweet, seed, popcorn)

- For northern corn leaf blight
 - 0.21 to 0.32L/ac (30 to 45 ac/jug)

PACKAGING

Case:

- Case 2 x 9.6 L Jugs
- Drum 115.2 L

WHEN TO APPLY

- Acapela fungicide is registered for ground sprayer and aerial application.
- Use sufficient water to obtain thorough coverage of plants. Minimum aerial application volume is 4.5 US gal/ac and minimum ground application volume is 10 US gal/ac.

RAINFAST

- 1 hour

Application information

Soybeans:

For white mould, make initial preventative application at R1 (beginning bloom). Follow with 2nd application 7-10 days later at R2 (full bloom).

For Asian soybean rust, brown spot (Septoria) and frogeye leaf spot (Cercospora sojina) begin applications prior to disease development and continue on a 7 to 14 day interval. Use higher rate and shorter interval when disease pressure is high.

For foliar diseases, the optimal time for application is typically at the R2 to R3 growth stage (full bloom to beginning pod).

Corn (field, sweet, seed, popcorn)

For northern corn leaf blight begin applications prior to disease development and continue on a 7 to 14 day interval. Use higher rate and shorter interval when disease pressure is high.

For optimal disease control, apply at full tassel (VT) to milk stage (R3) corn.

Crop Rotation

Any crop the following year.

Pre-harvest interval

- The PHI in corn is 7 days, grazing, forage is 0 days.
- The PHI in soybeans is 14 days.

¹Suppression

FUNGICIDE
POST-EMERGENCEGROUP
11GROUP
27MULTI
MODE
OF ACTION

TANOS™ APPLICATION GUIDELINES

Tanos™

FUNGICIDE

It works. Rain or shine.

WHY USE TANOS™ FUNGICIDE?

- **Resistant to wash-off.** A portion of the product remains on the leaf surface and within the waxy cuticle, making it resistant to wash-off and providing excellent control of early blight.
- **Control.** Rapidly penetrates the leaf surface to provide both post infection and locally systemic control of late blight.
- **Resistance management.** Tanos combines both Group 11 and 27 fungicides making it an effective resistance management tool.

DISEASES CONTROLLED

Potatoes

- Early blight
- Late blight



CROPS

Potatoes

RATES AND ACRES TREATED

- **Potatoes:** 226–340 g/ac
- **Acres treated:** 10–15 ac/bag

PACKAGING

- 4 x 3.4 kg bag/case

Water volume:

- Ground: minimum 26 US gal/ac
- Aerial: minimum 5 US gal/ac

WHEN TO APPLY

- **Potatoes:** Initial applications should start when local conditions indicate that late blight is imminent. A minimum 12 day application interval must pass between the 1st and 2nd application of Tanos fungicide. A minimum 24 days application interval must pass between the 2nd and 3rd application of Tanos. Apply Tanos fungicide in a preventative program.

Mixing instructions

1. Fill spray tank 1/4 to 1/3 full of water.
2. While agitating, add the required amount of Tanos fungicide.
3. Continue agitation until the Tanos fungicide is fully dispersed, at least 5 minutes.
4. Once the Tanos fungicide is fully dispersed, maintain agitation and continue filling tank with water. Tanos fungicide should be thoroughly mixed with water before adding any other product.
5. If the mixture is not continuously agitated, settling will occur. If settling occurs, thoroughly reagitrate before using.
6. Apply spray mixture within 12 hours of mixing to avoid product degradation.

Crop rotation:

Any crop the following year.

Pre-harvest interval

The PHI for potatoes is 14 days.

FUNGICIDE
POST-EMERGENCEGROUP
11GROUP
3MULTI
MODE
OF ACTION

VIATUDE™ APPLICATION GUIDELINES

NEW

Viatude™

Onmira™ active

FUNGICIDE

Unleash best-in-class white mould protection for stronger, more vigorous and higher-yielding soybeans.



Soybeans

WHY USE VIATUDE™ FUNGICIDE?

- Delivers best-in-class white mould protection from two of the strongest white mould actives
- Provides multiple effective modes of action with a unique combination of two highly effective active ingredients that both provide excellent coverage and powerful protection against white mould in soybeans
- Viatude™ fungicide with Onmira™ active protects plants inside and out against white mould, providing a healthy yield advantage

DISEASES CONTROLLED**Soybeans**

- White mould

CROPS

Canola

Soybeans

RATES AND ACRES TREATED

- Soybeans: 0.30L/ac
- Acres treated: 30 ac/jug (60 ac/case)
320 ac/drum

PACKAGING

Case: 2 x 8.91L Jugs
Drum: 95.04L

Water volume:

- 15-20 US gal/ac

WHEN TO APPLY

- Apply prior to disease development.
- from early flower to mid-pod development (R1 to R3)

TANK MIXES

Follow the label recommendations from both product labels of tank mix partners.

Mixing instructions

1. Shake well before use.
2. Fill clean spray tank 1/4 - 1/2 full of water.
3. While agitating, add the required amount of Viatude Fungicide, continuing agitation until the product is completely dispersed.
4. Continue filling the tank with agitation

Crop rotation:

Any crop can be planted 30 days following last application of Viatude fungicide.

Pre-harvest interval

The PHI for soybeans is 20 days.

insecticides

BY CROP

Corn



Closer™	35
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Soybeans



Delegate™	36
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Wheat



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Potatoes



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Dried Beans



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INSECTICIDE
POST-EMERGENCEGROUP
4C

CLOSER APPLICATION GUIDELINES

Closer™
Isoclast™ active**INSECTICIDE**

Exceptional speed and control of aphids and scale in vegetable, fruit and field crops.



Corn



Potatoes

WHY USE CLOSER™ INSECTICIDE?

- **Fast-acting with residual control.** Apply Closer™ insecticide with Isoclast™ active for quick targeted control of sap feeding insects such as aphids, scales and leafhoppers when outbreaks occur
- **Moves throughout the plant.** Excellent systemic and translaminar activity
- **Valuable rotational partner.** A unique sub-class of insecticides, Isoclast™ active is effective against both resistant and non-resistant pests
- **Virus reduction.** Closer's rapid results decrease the chance of virus transmission in seed potato production
- **Selective.** Can be used safely around beneficial populations when used according to the product label

INSECTS CONTROLLED**Corn**

- Aphids

Potatoes

- Aphids
- Leafhoppers
- Tarnished plant bugs

CROPS

Field corn

Popcorn

Seed corn

Sweet corn

Potatoes

RATES AND ACRES TREATED**Potatoes**

- Aphids: 20 – 61 mL/ac
- Leafhoppers: 121 mL/ac
- Tarnished plant bugs: 121 mL/ac

Corn (field, sweet, seed and popping)

- Aphids: 30 – 61 mL/ac

Acres treated: depends on the pest**Water volume:**

- Ground: minimum 11 US gal/ac
- Aerial: minimum 3.5 US gal/ac

PACKAGING

– 12 x 1 L jug

INSECTICIDE TANK MIXES

- No registered tank mixes.

Application instructions:

Ground application: boom height must be 60 cm or less above the crop or ground, use a minimum of 11 US gal/ac of water to ensure thorough coverage of plant foliage.

Aerial application: use a minimum spray volume of 3.5 US gal/ac. Refer to the section of the label titled Aerial Application for detailed use instructions.

Pre-harvest interval:

- The PHI for sweet corn, forage and potatoes is 7 days.
- The PHI for grain corn and stover harvest is 14 days.

INSECTICIDE
POST-EMERGENCEGROUP
5

DELEGATE APPLICATION GUIDELINES

Delegate™

Jemvelva™ active



Corn



Soybeans



Potatoes



Wheat

INSECTICIDE

Stay one step ahead of Western bean cutworm and European corn borer in corn.

WHY USE DELEGATE™ INSECTICIDE?

- **Performance.** Delegate™ insecticide with Jemvelva™ active (spinetoram) provides quick and effective control of foliage feeding insects including Western bean cutworm and European corn borer
- **Resistance management.** Delegate contains a unique Group 5 active ingredient, Jemvelva active, making it an excellent Integrated Pest Management tool
- **Ease of use.** Low use rates delivered through a convenient dry formulation

INSECTS CONTROLLED

Corn

- European corn borer
- Western bean cutworm

Wheat

- Armyworm

Soybeans

- Armyworm

Potatoes

- Colorado potato beetle
- European corn borer

CROPS

Field corn

Popcorn

Seed corn

Soybeans

Wheat

Potatoes

RATES AND ACRES TREATED

• Corn:

- Western bean cutworm: 50 - 85 g/ac
- European corn borer: 50 - 85 g/ac

• Wheat and soybeans:

- Armyworm: 40 - 80 g/ac

• Potatoes:

- Colorado potato beetle: 65 - 97 g/ac
- European corn borer: 65 g/ac

Acres treated: depends on the pest

Water volume:

- Ground: minimum 20 US gal/ac
- Aerial (corn and potatoes only): minimum 3.5 US gal/ac

PACKAGING

Case:

- 6 x 840 g bottles

WHEN TO APPLY

- Western bean cutworm and European corn borer: time the application at egg hatch or to small larvae.
- Armyworm: time the application at peak egg hatch and/or small larvae stage.
- Colorado potato beetle: time the application at egg hatch or small larvae.

Use the higher rate for higher pest pressure or for larger larvae. Ensure sufficient water volume for complete coverage of the plant foliage.

RAINFAST

- 2 hours

INSECTICIDE TANK MIXES

- Delegate can be mixed with fungicides and micro-nutrients. Consult your Corteva Agriscience representative if you are tank mixing Delegate.

Application information

Ground application: use spray equipment capable of thorough coverage of the crop, ensuring uniform coverage of the target pest.

Aerial application (for potatoes and corn only): apply only by fixed wing or rotary aircraft equipment. Use a minimum spray volume of 3.5 US gal/ac.

A spray solution pH between 5 and 9 is preferred for optimal performance.

Crop rotation

- No rotational restrictions

Pre-harvest interval

- The PHI for sweet corn and seed corn is 1 day.
- The PHI for forage and potatoes is 7 days.
- The PHI for wheat is 21 days.
- The PHI for field corn, popcorn, stover harvest and soybeans is 28 days.

Intrepid™

INSECTICIDE

Performance and peace of mind. With Intrepid™ insecticide, there's no need to choose.



WHY USE INTREPID™ INSECTICIDE?

- **Two-pronged attack on pests.** Intrepid has both ovicidal and larvicidal activity. Ingestion is the main source of activity on pests, causing the larvae to cease feeding within 24 hours
- **Ideal for Integrated Pest Management programs.** Intrepid controls lepidopterous pests without adversely affecting beneficial insects such as bees when used according to the product label

INSECTS CONTROLLED

Corn

- European corn borer
- Western bean cutworm

Dried beans

- Western bean cutworm

CROPS

Corn

Dried beans

RATES AND ACRES TREATED

Corn:

- European corn borer
• 0.12 - 0.24 L/ac
- Western bean cutworm
• 0.24 L/ac

Dried beans:

- Western bean cutworm
• 0.24 L/ac

Acres treated: depends on the pest

Water volume:

- Ground: minimum 32 US gal/ac

PACKAGING

- 4X4 L jugs

WHEN TO APPLY

- European corn borer: Apply at the first signs of feeding damage. Direct application at the whorl for early season (first generation) infestations. Use the higher rate for heavy infestations, or larger crop canopies.
- Western bean cutworm: Applications should be timed at egg hatch or to small larvae.

INSECTICIDE TANK MIXES

- No registered tank mixes

Mixing instructions

Ground application only; apply in sufficient spray volume to ensure uniform coverage of the treated crop.

Pre-harvest interval

- The PHI for sweet corn is 3 days.
- The PHI for dry beans is 7 days.
- The PHI for field corn and popcorn is 21 days.

biological & nitrogen stabilizer

BY CROP

Corn



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Canola



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Cereals



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Soybeans



Utrisha™ N.....	40
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biologicals

EMBRACE A BALANCED FUTURE

Corteva's new biological products offer cutting-edge, complementary solutions to persistent challenges like resistance management and environmental impact, so you can leverage resources more effectively. By complementing existing practices, biologicals can help you enhance return on investment and profitability and preserve your land for the future.

Corteva is focused on a biological portfolio that is designed to offer proven, predictable performance, work side by side with evolving farming practices, and meet changing market expectations.

WHAT IS A BIOLOGICAL?

Biologicals are crop treatments that are either living or derived from naturally-occurring materials and help protect plants from pests, disease, and environmental stress.

DIFFERENT TYPES OF BIOLOGICAL PRODUCTS

Our pipeline is full of exciting new developments. Expect more biological crop protection solutions from Corteva Agriscience in these categories, coming soon.



Biocontrol blends nature and science for balanced plant protection from insects and diseases. Enhance your control with a natural solution.



With biostimulants, farmers can enhance plant resilience and growth. These crop solutions naturally improve plant vitality and vigour for a healthy harvest.



Discover a class of pheromones that you can use confidently. These products deliver more tailored, flexible application to manage target pests.

WHY CHOOSE BIOLOGICALS FROM CORTEVA AGRISCIENCE?



PROVEN, PREDICTABLE PERFORMANCE

Our biologicals go through years of testing to ensure they consistently deliver, giving you peace of mind about your crop protection and confidence in a strong harvest.



COMPLEMENT EVOLVING FARMING PRACTICES

Biological products offer cutting-edge, complementary solutions to persistent challenges, like resistance management and environmental impact, so you can leverage resources more effectively.



MEET CHANGING MARKET EXPECTATIONS

Look toward the future with products that will help you keep your operation viable, enhance marketability, meet consumer preferences, and boost ROI and profitability on your farm.

NEW with New Formulation**Utrisha™ N****NUTRIENT EFFICIENCY
BIOSTIMULANT**

Utrisha™ N nutrient efficiency biostimulant provides a unique way to enable plants to capture nitrogen throughout the season, helping plants reach their yield potential.



Wheat



Canola



Corn



Soybeans

WHY USE UTRISHA™ N NUTRIENT EFFICIENCY BIOSTIMULANT?

- Utrisha™ N **enhances plant growth and resilience** by improving the nitrogen availability in the plant throughout the growing season
- Maximizes crop potential through improved nitrogen management, offering **proven, predictable performance**
- **Works side by side with evolving farming practices** with simple, flexible storage and application
- Meets changing market expectations by providing a **sustainable source of nitrogen**

What is Utrisha N?

Utrisha N is a **nutrient efficiency biostimulant**. The natural bacteria, *methylobacterium symbioticum*, fixes nitrogen from the air and converts it into a usable form for the plant.

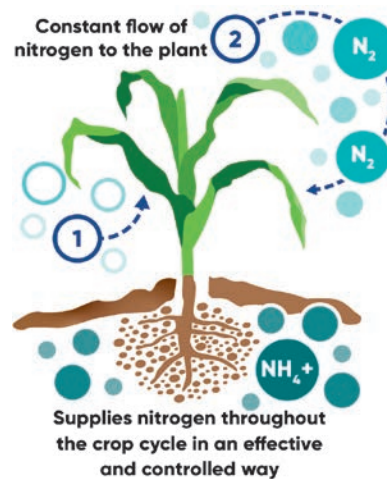
How Utrisha N works

1. Utrisha N enters the plant through the stomata and colonizes in the leaf cells.
2. It then converts N₂ from the air into ammonium, resulting in a constant supply of nitrogen to the plant.

No plant energy is required for this process.

Enhances Nitrogen Use Efficiency

Utrisha N provides a sustainable, alternative source of nitrogen that reduces dependency of nitrogen uptake from the soil and ensures the **plant has access to nitrogen all season long**, without the risk of leaching into water tables or releasing additional greenhouse gases.

**CROPS**

Canola

Cereals

Soybeans

Corn

RATES AND ACRES TREATED

- Rates:**
• 135 g/acre
Acres treated:
• 40 ac/bag
Water volume:
• Between 10–25 GPA

PACKAGING

- Case:**
• 2 x 5.39 kg bags

WHEN TO APPLY

Canola: 4 leaf stage until pre-senescence

Cereals: 4 leaf stage until pre-senescence

Corn: 4 leaf stage until pre-senescence

Soybeans: 3 leaf stage until pre-senescence

Utrisha N is best applied in the early morning, when a greater number of stomata are open.

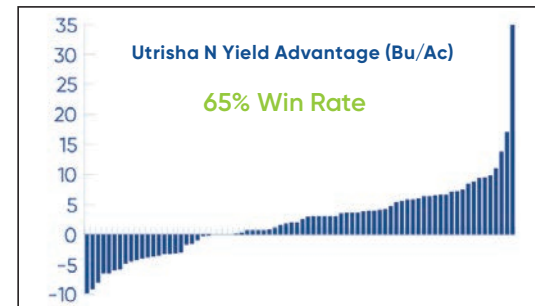
For information on use in horticulture crops, please refer to our Horticulture Crop Protection Guide.

APPLICATION RECOMMENDATIONS

- Apply in healthy crops unaffected by poor nutrition or other biotic/abiotic stresses
- Apply with sufficient plant biomass, when the crop presents good soil coverage
- Use water with a total chlorine content <2ppm
- Use water with a pH between 5 and 8
- Refer to tank-mix partner document for supported Utrisha N tank mixes and application instructions

RAINFAST

- 1 hour

Utrisha™ N Performance Summary: Corn

Utrisha N delivered an **average yield advantage of**

+2.3 BU/AC (N = 78)

65% of the time Utrisha N delivered a positive yield response with an average of

+5.4 BU/AC (N = 51)

vs. untreated check

Source: Grower Field Scale Trials, Eastern & Western Canada, 2021-2022

Utrisha N Performance Summary: Spring & Durum Wheat (Western Canada)

Utrisha N delivered an **average yield advantage of 1.1 bu/ac in wheat (N=18)** vs. untreated check

67% of the time Utrisha N delivered a positive yield response with an average of 2.2 bu/ac (N=12)

Utrisha N Performance Summary: Winter Wheat (Western Canada)

Utrisha N delivered an **average yield advantage of 0.9 BU/AC in wheat (N = 7)** vs. untreated check

71% of the time Utrisha N delivered a positive yield response with an average of 2.1 bu/ac (N=5)

NITROGEN STABILIZERS

eNtrench NXTGEN™

Optinyte™ technology

NITROGEN STABILIZER

Protect your nitrogen for better yields. Nitrogen fertilizer is critical to achieving healthy, high-yielding crops. Protect your fertilizer investment with eNtrench NXTGEN™ nitrogen stabilizer with Optinyte™ technology



Corn



Canola



Wheat

WHY USE ENTRENCH NXTGEN™?• **Optimize opportunity for yield and profit**

- Corteva Agriscience research trials demonstrate an average yield increase of 7% in corn, 6% in wheat and 8% in canola
- Keeps 28% more positive nitrogen available in the root zone

• **Expand your application options**

- Apply up to two weeks earlier in fall before typical anhydrous applications
- Take advantage of reduced cost of fertilizer in the fall

• **Manage time and efficiency**

- Fall application saves time for seeding operations in the spring

• **Reduce environmental impacts**

- Reduces greenhouse gas emissions by 51% on average
- Reduces leaching of nitrates by 16% on average

Nitrogen stabilizers slow the conversion of ammonium to nitrates, reducing leaching and denitrification. They maximize yield potential by ensuring more of your applied nitrogen stays in the root zone in a stable, useable form until your canola, corn and wheat crops need it.

ENTRENCH NXTGEN™ APPLICATION GUIDELINES

CROPS

Corn

Wheat

Canola

RATE AND PACKAGING

- 0.71 L/ac
- Available in 2x9.94 L case | 454.4 L Tote

WHEN TO APPLY

- Spring: Tank mixed with your UAN or liquid manure
- Fall: Tank mixed with your UAN or liquid manure, up to two weeks earlier than you would typically apply

APPLICATION METHOD

- Designed for use with liquid fertilizers, including UAN and liquid manure
- Impregnated on urea
- Can easily be added into the pit prior to liquid manure applications

BENEFITS OF USING NITROGEN STABILIZERS**INCREASED**CORN
YIELD*

7%

CANOLA
YIELD**

8%

WHEAT
YIELD**

6%

NITROGEN
RETENTION

28%

DECREASEDGREENHOUSE
GAS EMISSIONS*

51%

NITROGEN
LEACHING*

16%

* Wolt, J.D. 2004. A meta-analysis of nitrapyrin agronomic and environmental effectiveness with emphasis on corn production in the midwestern USA.

**Based on Corteva Agriscience Canada research trials.

other information

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LEGAL DISCLAIMERS



The unique Clearfield symbol and Clearfield® are registered trademarks of BASF. DO NOT APPLY DICAMBA HERBICIDE IN-CROP TO SOYBEANS WITH Roundup Ready 2 Xtend® technology unless you use a dicamba herbicide product that is specifically labeled for that use in the location where you intend to make the application.

ALWAYS READ AND FOLLOW PESTICIDE LABEL DIRECTIONS. Soybeans with Roundup Ready 2 Xtend® technology contain genes that confer tolerance to glyphosate and dicamba. Glyphosate herbicides will kill crops that are not tolerant to glyphosate. Dicamba will kill crops that are not tolerant to dicamba.



Roundup Ready 2 Xtend® is a registered trademark of Bayer Group used under license.

Components of LumiGEN® seed treatments are applied at a Corteva Agriscience production facility, or by an independent sales representative of Corteva Agriscience or its affiliates. Not all sales representatives offer treatment services, and costs and other charges may vary. See your sales representative for details. Seed applied technologies exclusive to Corteva Agriscience and its affiliates.

PERFORMANCE COMMITMENT

When you purchase a Corteva Agriscience product, you're protected by our Performance Commitment Policy. We stand behind our crop protection products, our recommendations and all labeled uses. Your satisfaction is important to us; if you are not fully satisfied with a product's performance, we want to know.

The Corteva Agriscience performance commitment

Product labels and Corteva Agriscience recommendations have been developed with extensive research. Labels and our recommendations create the foundation for safe and responsible use of our products and we stand behind them. Products must be applied according to the label and Corteva Agriscience recommendations.

We know weather is a significant and powerful variable every season. Corteva Agriscience is not responsible for poor performance or crop injury resulting from adverse weather conditions, resistant weed biotypes or inadequate crop competition.

We're committed to ensuring all customer inquiries are investigated fully. We will provide the most appropriate level of assistance, whether it be advice to help you move forward or replacement product.

The maximum product allowance is limited to the value of the original Corteva Agriscience product purchased and used for the area in question. Application costs will not be covered.

Growers involved in a product inquiry resolution must sign a settlement and release form.

Product cannot be substituted or returned.

Corteva Agriscience reserves the right to verify purchases through product invoices from the retailer.

To ensure appropriate resolutions, we must be notified as soon as possible when you are unsatisfied with a Corteva Agriscience product. We must be notified no later than 21 days after application and prior to July 31st. After July 31st, it's too late to confidently determine cause or remedial action so no good-will product can be provided. Crops must be standing in the field to make an adequate evaluation. Regardless of timing, we will always answer and document your calls.

Questions?

Visit your local crop protection retailer.
Contact us at corteva.ca/contact
follow us  @CortevaCA

Refer to product label for complete use instructions.

Visit us at corteva.ca



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