



WE ARE

All In
on cereals



ADAMA

CEREALS GROWTH STAGES

- HERBICIDE BROADLEAF
- HERBICIDE GRASSES
- INSECTICIDE
- FUNGICIDE



Timing based on using the product alone. Please refer to tank-mix partners label for crop timing. † Dependent on PHI



DECISION MATRIXES – PRE-SEED/POST HARVEST

Growing Cereals; Wheat, Oats, Barley

Pre-Seed/Post Harvest

Pre-seed applied 24 hours before seeding

Pre-Seed/Pre-Emergence



PRIORITY® Group 2

- Best for fall application for control of winter annuals and flush of volunteer canola in the spring
- Pre-seed in the spring is also an option
- Effective against volunteer canola including Roundup Ready®, wild buckwheat, dandelion & narrow-leaved hawk's beard



EMPHASIS™ Group 6 & 14

- 2 modes of action, when mixed with glyphosate third mode is added to fight Group 2 & 9 resistant weeds
- For best results spray in the heat of the day with adequate water
- Fast knockdown, multicrop flexibility and non-residual contact herbicide
- Effective against volunteer canola, kochia and cleavers



INVOLVE® 50 WDG Group 2

- Effective against volunteer canola including Roundup Ready®, wild buckwheat, dandelion & narrow-leaved hawk's beard
 - Can be tank mixed with glyphosate or 2,4-D. Adjuvant required when mixing with glyphosate
 - In Crop – 3 leaf stage to just before flag leaf
 - 24 hours after application – Wheat (S,D,W), spring barley, oats, perennial grasses
- *Can be applied pre-seed in the spring/fall



BROMOTRIL® Group 6

- When tank mixed with glyphosate BROMOTRIL® provides outstanding burn-off control of tough weeds like kochia, buckwheat, cow cockle and Russian thistle
- BROMOTRIL® controls Group 2 & 9 (glyphosate) resistant biotypes
- Non-residual contact herbicide
- Tank mix with glyphosate for pre-seed burndown, adjuvant required



2,4-D ESTER 700 Group 4

- Pre-seed and pre-emergence timing flexibility
 - Multicrop flexibility
 - Flexible tank-mix options
 - No residue, no crop rotation restrictions
 - Effective against large list of hard to kill weeds including volunteer canola, kochia, narrow-leaved hawk's beard and dandelion
 - In Crop – 4 – early flag BBCH: 14 – 39
- *Not for use on oats
*Can be applied pre-seed in the spring/fall



Always read and follow label directions.



HERBICIDE DECISION MATRIX – BROADLEAF

Cereals: Winter wheat, Spring wheat, Durum wheat, Oats

IN CROP 2 – 5 LEAF STAGE

Group 5 Metribuzin

- Flexible applications for broad spectrum weed control
 - Registered for grassy and broadleaf weed control
- *Not for use on winter wheat, durum wheat, oats



SQUADRON® II

IN CROP 2 – 6 LEAF STAGE

Group 2 & 4 Florasulam and MCPA ESTER 600

- Excellent control on wild buckwheat, cleavers, and chickweed
- *Not for use on winter wheat



TOPLINE®

Group 2 & 4 Florasulam, Fluroxypyr, and MCPA ESTER 600

- Controls Group 2 & 9 resistant kochia
 - Provides resistance management and high performance
- *Not for use on winter wheat or oats



OUTSHINE®

IN CROP 2 – EARLY FLAG LEAF STAGE

Group 4 & 6 Fluroxypyr, Bromoxynil and MCPA ESTER 600

- Herbicide resistant weed control
 - Strong on buckwheat and nightflowering catchfly
- *Not for use on winter wheat or oats



FORCEFIGHTER® M

Group 4 & 6 Bromoxynil and MCPA ESTER 600

- Multi crop flexibility
- Application flexibility (registered for ground or air application)
- Gentle on crop



BADGE®

Group 6 Bromoxynil

- Can also be used pre-seed
- Controls Group 2 & 9 resistant biotypes
- Application flexibility (registered for ground or air application for wheat and barley)



BROMOTRIL®

IN CROP 3 – EARLY FLAG LEAF STAGE

Group 4 Fluroxypyr, MCPA ESTER 600 and Clopyralid

- Provides targeted control of tough broadleaf weeds: dandelion, cleavers, kochia, Canada thistle, wild buckwheat, lamb's quarters, sow thistle
 - Application flexibility (registered for ground or air application)
- *Not for use on winter wheat or oats



ESTEEM®

IN CROP 4 – EARLY FLAG LEAF STAGE

Group 4 Fluroxypyr and 2,4-D ESTER 700

- Flexible recropping and can use at later stages of the crop
 - Control on weeds like kochia, cleavers and wild buckwheat (including Group 2 resistant biotypes), tank-mix flexibility
- *Not for use on winter wheat or oats



RUSH® 24

Group 4 & 6 Bromoxynil and 2,4-D ESTER 700

- Control on tough broadleaf weeds including Group 2 resistant kochia
 - Application flexibility (registered for ground or air application)
- *Not for use on winter wheat or oats



THRASHER®



HERBICIDE DECISION MATRIX – GRASSY

Cereals: Winter wheat, Spring wheat, Durum wheat, Barley

**IN CROP
1 – 6 LEAF STAGE**

**Group 1
Clodinafop-propargyl**

- Built-in surfactant, no additional surfactant required
- Tank-mix flexibility
- Application flexibility (registered for ground or air application)

* Not for use on winter wheat or barley



LADDER ALL IN®

**IN CROP 1 LEAF –
FLAG LEAF STAGE**

**Group 1
Tralkoxydim**

- Wide window of application
- Excellent control of persian darnel and wild oats
- Application flexibility (registered for ground or air application)



BISON® 400 L

**IN CROP 1 LEAF –
FLAG LEAF STAGE**

**Group 1
Pinoxaden**

- Works quickly on grassy weeds removing the competition fast
- Multiple tank-mix options for one-pass weed control
- Provides control of wild oats, green foxtail, yellow foxtail, persian darnel, volunteer oats, volunteer canary seed and proso millet

* Not for use on winter wheat and durum wheat



BRAZEN™ II

CEREALS GROWTH STAGES

WINTER WHEAT

WHEAT

BARLEY

CORN

OATS

RYE



Germination

Tillering

Stem Elongation

Heading

Ripening

BBCH GROWTH STAGE

0 5 9 10-13 21 25 29 30 31 32 37 39 45 49-51 61 70-92

• • • • • •	<p>BUMPER® 432 EC (3) Septoria, Tan spot Fungicide application with herbicide. Half rate at herbicide application timing is low cost insurance especially if weather conditions are conducive for disease development.</p>	21 - 29
• • •	<p>CUSTODIA® (3 & 11) Leaf rust, Stripe rust, Tan spot, Septoria spot blotch Fungicide application if weather conditions are favourable for leaf disease development. Goal is to protect the flag leaf.</p>	30 - 45
• • • •	<p>ORIOUS® 430 SC (3) Fusarium head blight, Leaf rust, Stripe rust, Tan spot, Septoria spot blotch Fusarium head blight application at heading</p>	49 - 51
• • •	<p>SORADUO™ (3) Fusarium head blight Fusarium head blight application at heading</p>	49 - 51
• • • • • •	<p>SORATEL™ (3) Crown rust, Fusarium head blight, Leaf rust, Glume blotch, Scald, Spot blotch, Speckled leaf blotch, Tan spot Fungicide application if weather conditions are favourable for leaf disease development. Goal is to protect the flag leaf.</p>	30 - 61
• • • •	<p>TOPNOTCH™ (3 & 11) Barley leaf rust, Barley net blotches, Barley scald, Septoria leaf spot, Stripe rust, Tan spot, Wheat leaf rust, Crown rust Fungicide application if weather conditions are favourable for leaf disease development. Goal is to protect the flag leaf.</p>	30 - 45

FUNGICIDE

GROUP 3

BUMPER® 432 EC

Broad-spectrum systemic fungicide widely used at herbicide timing in cereals for economical early protection.



Low VOC

FORMULATION TECHNOLOGY

ACTIVE INGREDIENT:

Propiconazole 432 g/L = EC

APPLICATION RATES AND ACRES TREATED:

- Rate: 60–120 ml/ac
- Acres Treated: 40–80 ac/jug

PACKAGING:

- Case: 2 × 4.8 L jugs

REGISTERED AND SUPPORTED CROPS:

- Barley
- Oats
- Wheat (spring, winter, durum)
- Corn

KEY DISEASES CONTROLLED IN CEREALS:

- Net and spot blotches
- Scalds
- Tan spots
- Powdery mildew
- Septoria spots and blotches
- Rusts

HOW IT WORKS:

Broad-spectrum, systemic activity with excellent leaf surface protection and translocation within the plant for additional disease prevention.

WATER VOLUME:

- Ground: Minimum 80 L/ac (20 US gal/ac)
- Aerial: 16–20 L/ac (4–5 US gal/ac)

CROP ROTATIONS:

No restrictions.

APPLICATION TIMING AND CROP STAGING:

Crop	Diseases	Timing
½ rate at 60 ml/ac		
Barley	Net blotch	Early: Growth stage 12–23, as early as the 2-leaf stage.
Wheat	Septoria leaf spot, Tan spot	
Full rate at 120 ml/ac		
Barley	Leaf and stem rust, Septoria leaf spot, Net blotch, Powdery mildew, Scald, Spot blotch	Early: Growth stage 29–37, at the first sign of disease, usually at the beginning of stem elongation.
Oats	Crown rust, Septoria leaf blotch	Later: Growth stage 49–55, before head is ½ emerged.
Wheat	Leaf and stem rust, Powdery mildew, Septoria glume blotch, Septoria leaf spot, Stripe rust, Tan spot	
Corn	Eye spot, Grey leaf spot, Helminthosporium leaf spot, Northern corn leaf blight, Rusts, Southern corn leaf blight	When disease first appears.



Always read and follow label directions.

CUSTODIA®

A multi-mode of action fungicide offering preventative and curative protection of the flag leaf against all major leaf diseases in wheat, barley and oats.



ACTIVE INGREDIENTS:

Tebuconazole 200 g/L and Azoxystrobin 120 g/L = SC

APPLICATION RATES AND ACRES TREATED:

- Rate: 190 – 250 ml/ac
- Acres Treated: 40 – 53 ac/jug

PACKAGING:

- Case: 2 x 10.08 L jugs

REGISTERED AND SUPPORTED CROPS:

- Barley
- Oats
- Wheat (spring, durum, winter)

KEY DISEASES CONTROLLED IN CEREALS:

- Leaf rust
- Stem rust
- Stripe rust
- Septoria leaf blotch
- Tan spot
- Net blotch
- Spot blotch

HOW IT WORKS:

CUSTODIA® is a broad-spectrum, preventative fungicide with systemic and curative properties recommended for the control of many important plant diseases. CUSTODIA® may be applied as a foliar spray in spray programs or in tank mixes with other crop protection products. All applications must be made according to the use directions that follow.

WATER VOLUME:

- Ground: 40 L/ac or 10 gal/ac
- Aerial: 20 L/ac or 5 gal/ac

CROP ROTATIONS:

No restrictions.

APPLICATION TIMING AND CROP STAGING:

Crop	Diseases	Application Timing	Rate
Barley	Net blotch, Spot blotch, Leaf rust, Stem rust, Stripe rust, Septoria leaf blotch, Tan spot	Apply CUSTODIA® to leaf foliage at the first sign or very early stage of disease, up to the beginning of heading. Use of the higher rate should be considered when weather conditions are conducive to heavy disease development.	190 – 250 ml/ac
Oats	Crown rust, Stem rust, Septoria leaf blotch	Apply CUSTODIA® foliar fungicide at the very early stages of disease development.	190 ml/ac
Wheat (spring, winter, durum)	Leaf rust, Stem rust, Stripe rust, Septoria leaf blotch, Tan spot	Apply CUSTODIA® to leaf foliage at the first sign or very early stage of disease, up to the beginning of heading. Use of the higher rate should be considered when weather conditions are conducive to heavy disease development.	190 – 250 ml/ac

ORIOUS® 430 SC

Economical fusarium and leaf disease protection in cereals.



ACTIVE INGREDIENT:

Tebuconazole 430 g/L = SC

APPLICATION RATES AND ACRES TREATED:

- Rate: 89 – 118 ml/ac
- Acres Treated: 80 – 100 ac/jug

PACKAGING:

- Case: 2 x 9.44 L jugs

REGISTERED AND SUPPORTED CROPS:

- Barley
- Oats
- Wheat (spring, winter, durum)

KEY DISEASES CONTROLLED IN CEREALS:

- Fusarium head blight (suppression)
- Net blotch
- Powdery mildew
- Rusts (leaf, stem, stripe)
- Scald
- Septoria leaf blotch
- Septoria glume blotch
- Spot blotch
- Tan spot

HOW IT WORKS:

ORIOUS® 430 SC Foliar Fungicide can be applied as a post-emergent treatment in wheat (spring, winter, durum), barley and oats for the suppression of fusarium head blight and control of foliar diseases.

WATER VOLUME:

- Ground: Minimum 40 L/ac (10 gal/ac)
- Aerial: Minimum 20 L/ac (5 gal/ac)

CROP ROTATIONS:

No restrictions.

APPLICATION TIMING AND CROP STAGING:

Crop	Diseases	Application Timing	Rate
Wheat (spring, winter, durum)	For suppression of Fusarium head blight, for control of Septoria glume blotch	For optimum suppression of fusarium head blight and control of septoria glume blotch, apply ORIOUS® 430 SC Foliar Fungicide within the time period from when at least 75% of the wheat heads on the main stem are fully emerged to when 50% of the heads on the main stem are in flower. Spray coverage is essential: Ensure thorough coverage of all wheat heads.	118 ml/ac
	Rusts (leaf, stem, stripe), Septoria (leaf blotch), Tan spot	Apply ORIOUS® 430 SC Foliar Fungicide to leaf foliage at the first sign or very early stage of disease, especially if weather conditions are conducive to disease development, up to the end of the flowering stage. Considered using the higher rate when weather conditions are conducive to heavy disease development.	89 – 118 ml/ac
	Powdery mildew		118 ml/ac
Barley	Net blotch, Spot blotch, Scald, Rusts (leaf, stem and stripe), Septoria leaf blotch, Powdery mildew	Apply ORIOUS® 430 SC Foliar Fungicide at the very early stages of disease development. Consider using the higher rate when weather conditions are conducive to heavy disease development.	89 – 118 ml/ac
Oats	Stem rust, Crown rust	Apply ORIOUS® 430 SC Foliar Fungicide at the very early stages of disease development.	89 ml/ac



Always read and follow label directions.

SORATEL™

Advanced disease protection powered by Asorbital® Formulation Technology. Offering a flexible application window, SORATEL™ is proven to protect a wide variety of crops from disease.



POWERED BY
Asorbital®
FORMULATION TECHNOLOGY

ACTIVE INGREDIENT:

Prothioconazole 250 g/L = EC

APPLICATION RATES AND ACRES TREATED:

- Rate: 160 – 320 ml/ac; standard rate: 240 ml/ac
- Acres Treated: 60 – 120 ac/case; standard rate: 80 ac/case

PACKAGING:

- Case: 2 x 9.6 L jugs

REGISTERED CROPS:

- Barley
- Corn
- Oats
- Wheat (spring, durum & winter)

HOW IT WORKS:

SORATEL™ is a triazolothione broad-spectrum systemic fungicide with Asorbital™ Formulation Technology. Asorbital® Formulation Technology enhances penetration and includes a built-in-adjutant.

KEY DISEASE CONTROLLED IN CEREALS:

- Crown rust
- Fusarium head blight
- Glume blotch
- Leaf rust
- Net blotch
- Scald
- Speckled leaf blotch
- Spot blotch
- Tan spot

WATER VOLUME:

- Ground: Minimum 40 L/ac (10 US gal/ac)
- Air: Minimum 20 L/ac (5 US gal/ac)

REGISTERED AND SUPPORTED TANK MIXES:

Insecticides:

- Coragen®
- Decis®
- SILENCER® 120 EC
- ZIVATA™

MIXING INSTRUCTIONS:

1. Add ½ of the required amount of water to the spray or mixing tank and start agitation.
2. Add the required quantity of SORATEL™ to the water and complete filling with water to the required total volume.
3. Maintain agitation throughout mixing and spraying.

CROP STAGING:

Crop	Diseases	Application Timing	Rate
Barley	Fusarium head blight ¹	70 – 100% head emergence	240 – 320 ml/ac
	Net blotch, Scald, Spot blotch	First sign of disease	160 – 240 ml/ac
Corn (field, sweet and popcorn, including seed production)	Eyespot, Fusarium ¹ , Gibberella ear rot ¹ , Grey leaf spot, Northern blight, Rust	First sign of disease Apply from the development stage of corn between the tip of stigmata visible (silking, BBCH 63) to the stigmata drying (silk browning, BBCH 67)	323 ml/ac
Oats	Crown rust	First sign of disease	240 ml/ac
Wheat (spring, durum, winter)	Fusarium head blight ¹ , Glume blotch	75% head emergence – 50% main stem flower	240 – 320 ml/ac
	Leaf rust, Speckled leaf blotch, Tan spot	First sign of disease	240 ml/ac

¹Suppression

CROP ROTATIONS:

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

PRE-HARVEST INTERVAL:

30 days

STORAGE:

Do not freeze.

FUNGICIDE

NEW

GROUP 3

SORADUO™

Advanced disease protection powered by Asorbital® Formulation Technology. SORADUO™ provides proven fusarium protection in wheat and barley.



POWERED BY

Asorbital®

FORMULATION TECHNOLOGY

ACTIVE INGREDIENTS:

Prothioconazole 250 g/L = EC and Tebuconazole 430 g/L = SC

APPLICATION RATES AND ACRES TREATED:

- Rate: 162 ml/ac SORADUO™ A + 94 ml/ac SORADUO™ B
- Acres Treated: 60 ac/case

PACKAGING:

- Co-pack: 1 x 9.71 L SORADUO™ A + 1 x 5.65 L SORADUO™ B

REGISTERED AND CROPS:

- Barley
- Wheat (durum, spring, winter)

HOW IT WORKS:

SORADUO™ is a combination of a triazole fungicide that features Asorbital® Formulation Technology and broad-spectrum system activity plus long-lasting foliar protection.

WATER VOLUME:

- Ground: 40 – 80 L/ac (10 – 20 US gal/ac)
- Aerial: 10 L/ac (3 US gal/ac)

RAINFASTNESS:

Avoid applying when rain is forecast.

CROP ROTATIONS:

No restrictions.

CROP STAGING:

Crop	Disease	Application Timing	Rate
Barley	For suppression of fusarium head blight (fusarium spp.)	70 – 100% head emergence to 3 days after full head emergence	162 ml/ac SORADUO™ A + 94 ml/ac SORADUO™ B
Wheat (durum, spring, winter)		75% head emergence – 50% main stem flower	

Maximum 1 application per year.

REGISTERED AND SUPPORTED TANK MIXES:

Optional: Non-ionic surfactant (NIS) at 0.125% v/v.

MIXING INSTRUCTIONS:

1. ½ fill the tank with clean water.
2. Add required amount of SORADUO™ B.
3. Add required amount of SORADUO™ A.
4. Add optional non-ionic surfactant (NIS) at 0.125% v/v.
5. Fill the tank and agitate again before use.

PRE-HARVEST INTERVAL:

36 days

GRAZING RESTRICTIONS:

6 days

STORAGE:

Do not freeze.



Always read and follow label directions.

SILENCER[®] 120 EC

Silencer[®] 120 EC controls a wide range of insects in cereal crops.



ACTIVE INGREDIENT:

Lambda-cyhalothrin 120 g/L = EC

APPLICATION RATES AND ACRES TREATED:

- Rate: 17 – 51 ml/ac; standard rate: 34 ml/ac
- Acres Treated: 74 – 220 ac/jug; standard rate: 110 ac/jug
- Standard rate is applicable for most pests, refer to label for more information.

PACKAGING:

- Case: 4 x 3.785 L jug/case

REGISTERED CEREAL CROPS:

- Barley
- Corn
- Oats
- Wheat

HOW IT WORKS:

Fast-acting stomach and contact insecticide.

APPLICATION TIMING AND CROP STAGING:

The need and timing of an application should be based on the presence of pests at vulnerable developmental stages and significant populations, as determined by local monitoring. Consult the label for specific crop and insect timing.

WATER VOLUME:

- Ground: 40 – 80 L/ac (10 – 20 US gal/ac)
- Aerial: 4 – 16 L/ac (1 – 4 US gal/ac)

RAINFASTNESS:

1 hour

 Always read and follow label directions.

PESTS CONTROLLED:

Crop	Insect	Rate
Barley, Oats, Wheat	Armyworm	34 ml/ac ground or aerial application. Spray no later than when first feeding damage is seen on foliage.
	Grasshopper	25 – 34 ml/ac ground or aerial application. Apply at the low rate when they are in the 3rd nymphal stage (1 cm in length) or when numbers are low. Apply at the high rate when they are larger up to but not including winged adults (2.5 cm in length) or when the numbers are high.
Corn (field, sweet)	Armyworm	34 ml/ac ground or aerial application
Corn (field, sweet, pop, seed)	Corn earworm, European corn borer	75 ml/ac ground or aerial application
Corn (field, pop, sweet, crops grown for seed production)	Corn earworm, Cutworms, European corn borer, Fall armyworm	34 ml/ac ground or aerial application

MIXING INSTRUCTIONS:

Confirm compatibility in advance by premixing small proportional quantities of water with SILENCER[®] 120 EC and the tank-mix partner.

GRAZING RESTRICTIONS:

DO NOT cut treated fields for silage/forage. DO NOT graze treated fields. DO NOT feed treated crops to livestock. For grasses/non-grasses grown for seed production only, DO NOT feed seed screenings and aftermath to livestock.

STORAGE:

Do not freeze.

SOMBRERO® 600 FS

This seed treatment gives you long-lasting, early season control of tough insect pests – including wireworms in cereals.



ACTIVE INGREDIENT:

Imidacloprid 600 g/L = SC

APPLICATION RATES AND ACRES TREATED:

- Rate: Please refer to the label for application rates or the table below as these vary based on seed type.
- Acres Treated: Varies

PACKAGING:

- Case: 8 x 1.54 L jugs

REGISTERED CEREAL CROPS:

- Barley
- Corn¹
- Oats
- Wheat (durum, spring, winter)

¹Registered for use on this seed in commercial seed treatment facilities only.

KEY INSECTS CONTROLLED:

- Wireworms

HOW IT WORKS:

SOMBRERO® 600 FS contains a proven, highly effective seed treatment insecticide that gives you broad-spectrum control of above and below ground pests. Once treated seed is planted, the active ingredient in SOMBRERO® 600 FS is released and forms a protective barrier around the seed. As the plant grows, systemic action transports SOMBRERO® 600 FS throughout the developing stem and leaves, ensuring lasting insect control and giving the crop the defense to grow to its potential.

WATER VOLUME:

Dilute in sufficient liquid to achieve uniform coverage on the seed.

APPLICATION RATES:

A colourant **MUST** be added in accordance with the PCP Act and the Seeds Act Regulations.

Crop	Insect	Rate	Application Information
Corn, Field corn for seed production	Wireworms	21.3 ml/ 80,000 seeds	Dilute in sufficient water to achieve uniform coverage on the seed. Ensure seed is adequately coloured. Other polymers and coating materials may be required.
Field corn for seed production	Corn flea beetle	80 ml/ 80,000 seeds	
Barley, Oats, Wheat (durum, spring, winter)	Wireworms	17 – 50 ml/ 100 kg seed	Dilute in sufficient liquid to achieve uniform coverage on the seed.

STORAGE:

- Do not store SOMBRERO® 600 FS at low temperatures.
- Prior to and during application, SOMBRERO® 600 FS must be thoroughly agitated to ensure uniform mixing of the product.
- Due to viscosity of the material, it should be kept at 10° C prior to and during application. Do not apply direct heat to container.

INSECTICIDE

NEW

GROUP 3

ZIVATA™

An innovation in insect control giving you the same trusted results in a more sustainable formulation with a better user experience.



Low VOC

FORMULATION TECHNOLOGY

ACTIVE INGREDIENT:

Lambda-cyhalothrin 120g/L as an EC

APPLICATION RATES AND ACRES TREATED:

- Rate: 17 – 94 ml/ac; standard rate for most pests: 34 ml/ac
- Acres Treated: 45 – 240 ac/jug; standard rate: 120 ac/jug

PACKAGING:

- Case: 2 x 4.08 L jugs

REGISTERED CEREAL CROPS:

- Barley
- Corn
- Oats
- Wheat

HOW IT WORKS:

ZIVATA™ is a synthetic pyrethroid insecticide formulated with an improved, plant-based solvent that offers fast-acting stomach and contact effects against a broad spectrum of insect pests. This renewably sourced formulation has low volatile organic properties and improves the user experience with a reduced drift potential and product volatility.

WATER VOLUME:

- Ground: 40 – 80 L/ac (10 – 20 US gal/ac)
- Aerial: 4 – 16 L/ac (1 – 4 US gal/ac)

RAINFASTNESS:

1 hour

REGISTERED AND SUPPORTED TANK MIXES:

- Fungicides:**
- BUMPER® 432 EC
 - SORATEL™
 - TOPNOTCH™

PESTS CONTROLLED:

Crop	Insect	Rate
Barley, Oats, Wheat	Armyworm	34 ml/ac ground or aerial application. Spray no later than when first feeding damage is seen on foliage.
	Grasshopper	25 – 34 ml/ac ground or aerial application. Apply at the low rate when they are in the 3rd nymphal stage (1 cm in length) or when numbers are low. Apply at the high rate when they are larger up to but not including winged adults (2.5 cm in length) or when the numbers are high.
Corn (field, sweet)	Armyworm	34 ml/ac ground or aerial application
Corn (field, sweet, pop, seed)	Corn earworm, European corn borer	75 ml/ac ground or aerial application
Corn (field, pop, sweet, crops grown for seed production)	Corn earworm, Cutworms, European corn borer, Fall armyworm	34 ml/ac ground or aerial application

MIXING INSTRUCTIONS:

Compatibility should always be confirmed by premixing small proportional quantities of water, ZIVATA™, and the tank-mix partner in advance.

CROP ROTATIONS:

No restrictions.

STORAGE:

Do not freeze.

PRE-HARVEST INTERVALS:

- Corn (field): 21 days
- Wheat, Barley, Oats: 28 days

GRAZING RESTRICTIONS:

DO NOT cut treated fields for silage/forage. DO NOT graze treated fields. DO NOT feed treated crops to livestock. For grasses/non-grasses grown for seed production only, DO NOT feed seed screenings and aftermath to livestock.

Always read and follow label directions.

Where has all the innovation gone?

While many crop protection companies have turned their attention to the development of seed technologies and collecting “big data”, only ADAMA remains unapologetically committed to providing the kind of innovative crop protection solutions Canadian growers need today.



WE ARE

Agile
Innovation

Filling the innovation void with unique mixtures and formulations.



WE ARE

Active
Ingredients

Leveraging the world's largest library of actives to speed up the pace of innovation.



WE ARE

All About
Input

Listening to growers to ensure we're answering their greatest needs.



WE ARE

Agri-Retail
Inclusive

Partnering with retailers to deliver greater value to them and their customers.

WE ARE

All In
on you





How can you inspire more innovation? Simply tell your ADAMA representative what you're looking for or visit ADAMA.COM



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