

2011 Guide to Crop Protection Addendum

Herbicides

Corrections:

Dichlorprop/2,4-D (page 126): At an application rate of 0.5 L per acre the 'Acres per container' rate of *Estaprop XT* should be 19.4 acres per container and *Dichlorprop-DX* should be 20 acres per container.

Fenoxaprop (page 146): Under the 'Weeds Rates and Staging' section note that the 'Acres per jug' rate listed is for a 6.2 L jug. Since the *WildCat* container size is 12.4 L, the acres per jug rates will be double that of the values listed.

Imazethapyr (page 182): The asterisk on *MultiStar* and the footnote it refers to is no longer relevant and should be ignored.

Quizalofop (page 228): Note that the tank mix of *Assure II* plus *Muster* is registered for all types (condiment and oilseed types) of *Brassica juncea* (Oriental) mustard. Neither *Assure II* nor *Muster* is registered for use in yellow mustard as injury will result.

Additions and other changes:

Attain (page 79): Add new product from Nufarm called *Flurox 2,4* that is a box mix containing *Nufarm Fluroxypyr 180* (PCP#30028) and *2,4-D Ester 700* (PCP#27820), and is similar to *Attain* and registered on the same crops to control the same weeds.

Authority (page 81): *Authority* may now be applied prior to the seeding of flax, field pea and sunflower or up to 3 days after seeding prior to emergence.

Barricade (page 90): Add control of volunteer flax up to 12 cm.

Clodinafop (page 115): Add *Nufarm Clodinafop* (PCP#299962) as a new product. *Nufarm Clodinafop* is packaged with *Enhance* adjuvant (PCP#29952). Same crops and weeds controlled and rates as other *clodinafop 240EC* formulations.

Enhance adjuvant is used at 0.25 L per 100 L of spray solution.

Fenoxaprop (page 146): Add tank mix options *Refine SG* (12 g/acre), *Refine SG* (12 g/acre) + *MCPA Ester* (0.34 L/acre), *Refine SG* (4 g/acre) + *Buctril M* (label rate) or *Triton C* (label rate) for use with *Puma Advance* only in wheat (spring and durum) and barley.

Puma Advance has new reduced rates for control of green foxtail (0.206 L/acre or 40 acres per 8.25 L jug) and for light wild oat infestations (0.36 L/acre or 23 acres per 8.25 L jug). The light wild oat rate is not for use in perennial ryegrass seedlings.

Glyphosate (page 159): Add *Crush'r Plus* (PCP#29995) as a new product from AgWest Inc.: 360 g ae/L as an IPA salt. Uses and weeds controlled are similar to other glyphosate products. This product is not registered for aerial applications in cropland situations.

Add *Matrix* (PCP#29775) as a new product from IPCO: 480 g ae/L as a DMA salt. Uses and weeds controlled are similar to other glyphosate products. DO NOT apply by aircraft.

Consult the labels of both products for details.

Imazethapyr (page 182): Add a new product *Phantom* (PCP#30017) from MANA Canada

Infinity (page 184): Add a recropping interval of 10 months after application for potatoes, tomatoes and sunflowers. Note that recropping intervals for corn and soybean only apply to Manitoba.

Odyssey (page 207): Add Clearfield sunflowers as a registered crop from the 2 to 8 leaf stage. Leave 60 days between application and harvest.

Quizalofop (page 228): Add camelina as a new crop for use at all labelled rates. Leave 64 days between application and harvest of camelina. The *Assure II* registration for foxtail barley suppression is now increased to control.

Tandem (new product): *Tandem* from Dow AgroSciences is the equivalent of a co-package of *Simplicity* (*Tandem A* – PCP#29985, page 246) plus *Starane* (*Tandem B* – PCP#29965, ‘Component A’ of the *Attain*, *Trophy*, *Prestige* packages and contains 180 g/L fluroxypyr). *Tandem* is for use in wheat (spring and durum) and controls the weeds controlled by *Simplicity* plus volunteer flax, and Group 2 herbicide resistant kochia. Registered mixes of *Tandem* with a) *2,4-D Ester*, b) *MCPA Ester* or c) *Curtail M*, would be the equivalent of

tank mixes of *Simplicity* with a) *Attain*, b) *Trophy* or c) *Prestige*.

Thifensulfuron/tribenuron (page 253): Add *Simplicity* as a registered tank mix. Use 0.25% non-ionic surfactant rate as per *Simplicity* recommendations.

Tundra (page 279): Add a recropping interval of 10 months after application for potatoes, tomatoes and sunflowers.

Velocity (page 283): Add a recropping interval of 10 months after application for sunflowers.

Foliar Fungicides

Corrections:

Astound (page 300): Please note *Astound* is registered for **canola** only, for control of sclerotinia stem rot caused by *Sclerotinia sclerotiorum*.

Stratego 250 EC (page 340): Please note that the rate for *Stratego 250 EC* on soybean, is 202 mL/acre (NOT 500mL/acre).

Additions and Other Changes:

Chlorothalonil (page 302): For control of late blight on potato, *Bravo 500* can be tank-mixed with the new product *Presidio* (PCP #30051).

New formulation: for potato late blight and early blight control, *Bravo Zn* (PCP #28900). *Bravo Zn* is only for use in potato for the diseases controlled by *Bravo 500* at the same rates as *Bravo 500*.

Inspire (new product): *Inspire* (PCP #30004) from Syngenta is registered for control of early blight (*Alternaria solani*) on potato. See mock-up product page below.

Presidio (new product): *Presidio* (PCP #30051), from Valent, is registered for control of late blight (*Phytophthora infestans*) on potato. *Presidio* MUST be tank-mixed with *Bravo 500* or any other fungicides registered for control of late blight in potatoes. See mock-up product page below.

Proline 480 SC (page 320): Add suppression of *Fusarium* and *Gibberella* ear rots, and control of rusts, eyespot, grey leaf spot and northern blight in corn (application rate of 168 mL/acre). Add control of crown rust in oats (application rate of 126 mL/acre). Apply with a non-ionic surfactant, *AgSurf* or *Agral 90* at 0.125% v/v. Add control of Asian soybean rust and frogeye leaf spot in soybeans (application rate of 84 mL/acre). Ground application only.

Revus Top (new co-pack): *Revus Top* is a co-pack of *Inspire* and *Revus* for the control of early blight (*Alternaria solani*) and late blight (*Phytophthora infestans*) on potato.

Seed Treatments

Corrections:

Cruiser Maxx Pulses (page 354): *Cruiser Maxx Pulses* is a co-pack of *Cruiser 5FS Seed Treatment* (page 353) and *Apron Maxx RTA* or *Apron Maxx RFC* (page 350).

Maxim Liquid PSP, Maxim PSP, Maxim MZ PSP (pages 343-345 and 369): Please note that *Maxim* products are only registered for use on potatoes, and should not appear in Tables 6-9 for cereal, oilseed, pulse, forage, and special crops.

Insecticides

Additions and other changes:

Actara 240 SC (page 432): *Actara 240SC* is now registered for **foliar** use on potatoes for control of Colorado potato beetle, aphids and potato leafhopper.

Actara 240SC is applied at a rate of 44.1 mL/acre in a minimum of 40 L of water per acre, by ground equipment only. DO NOT make more than 2 applications of thiamethoxam (either *Actara 240 SC* or *Actara 25 WG*) or one in-furrow application of *Actara 240 SC* per season.

Assail (PCP#27128) (page 433): Add alfalfa (seed production only) as a new crop for control of alfalfa plant bug, suppression of tarnished plant bug.

CROP	INSECT	RATE * /ACRE	NOTES
Seed alfalfa	Tarnished Plant Bug (Suppression only) Alfalfa Plant Bug	35.2 to 68.8 g	Apply prior to bloom up to the time when 50% of seed pods are ripe. Begin when adults and/or 4-5 th instar nymphs have reached economic threshold levels for your area.

* Use the higher rate for heavier infestations.
Thorough coverage is essential for optimum control.

Restrictions and Precautions: Seed Alfalfa

- MAXIMUM 3 applications per season.
- DO NOT apply more than once every 7 days.
- DO NOT apply within 1 day before harvest.
- DO NOT exceed a total of 144.5 g active ingredient (206.4 g product) per acre per season.
- DO NOT cut treated fields for hay/forage or graze treated fields

Inspire (fungicide)

Fungicide Group – 3
(Refer to page 293)

Company:

Syngenta (PCP #30004)

Formulation:

250 g/L difenoconazole formulated as an emulsifiable concentrate.

Crops and Diseases:

Control of early blight caused by *Alternaria solani* on potato.

Rates and Timing:

Apply at 118 to 207 mL per acre.

Begin applications at first sign of disease or when conditions are conducive for disease development. If needed, continue applications on a 7-14 day schedule with a maximum of 2 consecutive applications before rotating to fungicides with another mode of action that are registered for these diseases. If disease pressure is high, use the highest rate and shortest interval.

DO NOT apply *Inspire* or other products containing difenoconazole more than one year out of two.

Application Information:

Water Volume: Minimum of 60 L per acre. Use higher volumes if disease pressure is high.

Nozzles and Pressure: For optimal disease control use a combination of nozzles and pressure designed to deliver thorough, even coverage using nozzles designed to deliver droplets that are a minimum of *ASAE fine classification*. DO NOT apply this product through any type of irrigation system.

How it Works:

The active ingredient difenoconazole is a triazole fungicide with broad spectrum, systemic and curative properties.

Tank Mixes:

Herbicides: None registered.

Fertilizer: None registered.

Insecticides: None registered.

Fungicides:

Revus (label rates for control of labeled diseases). Do not make more than 4 applications of this tank mix per season.

Bravo 500 (label rates for control of labeled diseases).

Note: The above mixes are those listed on the *Inspire* label only. To check for other possible registered mixes see the blue fold out chart inside the back cover.

Adding ingredients in the correct order is critical for optimum performance. Check labels of products to be mixed for directions. General guidelines can be found on page 13.

Restrictions:

Resistance Management: Refer to page 292.

Rainfall: Avoid application when heavy rain is forecast.

Pre-harvest interval: DO NOT apply within 14 days of harvest.

Re-Entry: DO NOT re-enter treated areas until 12 hours after application.

Carryover/Re-cropping: Difenoconazole is persistent and may carryover. Only registered crops may be seeded within 8 months of application.

Aerial Application: DO NOT apply by air.

Storage: Store in a cool, dry place. DO NOT store food, beverages or tobacco products in storage area.

Environment: This product is toxic to aquatic organisms and certain beneficial insects. Follow buffer restrictions below.

Application method	Buffer Zones* (metres†) Required for the Protection of Aquatic Habitats of Depths	
	Less than 1 m	Greater than 1 m
Ground only*	11	11

See the key to product pages on page 23 for an explanation of the different habitats.

* Buffer zones can be reduced by 70% when using shrouds and by 30% when using cones mounted less than 12 inches from the crop canopy.

† Distance measured as metres from the downwind edge of the spray boom to sensitive habitat.

Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative strip between the treated area and the edge of the water body.

Hazard Rating:



Warning – eye irritant.

Company:

Valent Canada Inc. (PCP #30051)

Formulation:

39.5% fluopicolide formulated as a suspension.

Crops and Diseases:

For late blight control on potatoes.

Rates and Timing:

Apply at 89 to 118 mL per acre.

Begin foliar application when crop and/or environmental conditions favour disease development. Make applications on a 7 to 10 day interval, depending on disease pressure. Under severe disease pressure or if rain is expected, use the higher labelled rate and shortest interval.

DO NOT apply *Presidio* or other products containing fluopicolide more than one year out of two.

Application Information:

Water Volume: For optimal disease control apply *Presidio* in sufficient water to ensure thorough coverage of foliage.

Ground: Minimum of 80 L per acre.

Aerial: Minimum of 20 L per acre.

Nozzles and Pressure: For optimal disease control use a combination of nozzles and pressure designed to deliver thorough, even coverage using a minimum of *ASAE medium classification* droplet size.

How it Works:

The active ingredient fluopicolide is a systemic benzamide fungicide with protective, curative, eradicated, and antispore activity against specified oomycete fungi.

Tank Mixes:

For resistance management, *Presidio* MUST be tank-mixed with *Bravo 500* fungicide, or another registered fungicide for control of late blight on potato.

Restrictions:

Resistance Management: Refer to page 292. *Presidio* must be tank-mixed with another product that is registered for use against the diseases and crops listed on this label but with a different mode of action. Always follow the more restrictive label.

Rainfall: Rainfall within 2 hours may reduce effectiveness.

Pre-harvest interval: DO NOT apply to potato plants later than 7 days before harvest.

Re-Entry: DO NOT re-enter treated areas for 12 hours.

Carryover/Re-cropping: *Presidio* is persistent and may carryover. *Brassica* vegetables (head and stem), bulb vegetables, cucurbit vegetables, fruiting vegetables, leafy vegetables (except *Brassica*), root and tuber vegetables (except carrot and sugar beet) may be grown safely the year following an application.

Aerial Application: May be applied by air.

Storage: Store in a cool, dry, secure place away from feed or food. DO NOT allow to freeze. If the product experiences freezing temperatures, thaw at 10°C or higher and shake gently to unify the product.

Environment: This product is toxic to aquatic organisms and non-target terrestrial plants. The use of this chemical may result in contamination of groundwater particularly in areas where soils are permeable and/or the depth to the water table is shallow.

Application method	Buffer Zones* (metres†)		
	Required for the Protection of:		
	Aquatic Habitats of Depths		Terrestrial habitat
Less than 1 m	Greater than 1 m		
Ground	1	0	1
Fixed or rotary wing aircraft	5	1	15

See the key to product pages on page 23 for an explanation of the different habitats.

* Buffer zones can be reduced by 70% when using shrouds and by 30% when using cones mounted less than 12 inches from the crop canopy.

† Distance measured as metres from the downwind edge of the spray boom to sensitive habitat.

Hazard Rating:



Caution – poison

Warning – eye irritant.

*Group 43 Fungicides are not listed in the 2011 Guide to Crop Protection, Table 1. The mode of action target for this fungicide is “Mitosis and Cell Division”. Refer to the label, and www.frac.info for more information.