# TOP CROP MANAGER

#### Seed of success

As a new era of farming emerges, one of the key technologies supporting progress is seed treatment.

Today's top options have become a critical part in making sure crops are protected from early season threats and stresses to reach maximum potential throughout the crop year. Treated crops can emerge faster, stronger and more evenly than untreated crops, particularly in conditions that are less than ideal. As a result, plants appear healthier and much better equipped to achieve their full potential – overcoming whatever challenges emerge.

Today's leading seed treatment products and equipment make planning your seed treatment application one of the straightforward and high ROI decisions you can make. The leading options, key developments and how to find the best fit for your farm are what fill the pages ahead – providing the information you need to lock-in your seed's – and your crop's – full potential.

The Bayer SeedGrowth® team is here to help with all your seed and seed treatment inquiries, including treating equipment, application tips and product selection. Great seed that's well protected, puts your crop – and your farm's profitability – on the pathway to ultimate performance that pays off in the bin.

Let's work together to make 2022 your best crop year yet!

The Bayer SeedGrowth Team



ABOVE: Wheat trial showing untreated seed on the left and treated seed on the right in a high fusarium seed lot (2017).

## SEED TREATMENT GUIDE 2022

The number of seed treatments and options for Canadian crop producers is constantly changing. Each year, products are reviewed and phased out, new products are launched, and recommendations are updated from year to year. This can come with frustration and uncertainty – but as you'll see in this year's Seed Treatment Guide, there are still plenty of

Continued on page 3



Raxil PRO

As a farmer, you face many challenges throughout the growing season. Protecting your seed's potential from the start means your crops can emerge healthier and stronger. That's why more farmers trust Raxil® PRO, the #1 selling cereal seed treatment brand for over ten years running1. When your seeds emerge stronger, so do you.

#### · EMERGE STRONGER

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#AskBayerCrop

<sup>1</sup>2021 BPI Report - Cereal Seed Treatments

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Maximize your savings on the Bayer seed treatment brands you trust, and everything else you need for a breakthrough season. See how the rewards add up at GrowerPrograms.ca



#### **Seed Treatment Guide 2022**

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Top Crop Manager would like to thank Bayer for sponsoring this year's Seed Treatment Guide. Through their support we are able to publish this information quide to assist our readers.

We are grateful to the numerous weed and pest management specialists for their assistance and helpful suggestions contained in Top Crop Manager's Seed Treatment Guide.



#### **Reader Service**

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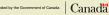
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options when it comes to protecting crops.

Like always, all stakeholders must be accountable when it comes to making smart and mindful decisions when it comes to choosing which tools to use each growing season. That's why Top Crop Manager is pleased to publish the 2022 Seed Treatment Guide, our annual reference tool listing products registered (at publication time) for cereal, corn, soybean, pulse and canola crops. We hope this guide assists you in choosing some of the right products for your upcoming growing season.

As always, we strive to make the tables in this guide as accurate and userfriendly as possible. With that said, however, this guide is adapted and compiled from crop protection resources and companies, and is not a definitive text. Growers should always doublecheck provincial guides and product labels, and consult a professional, to avoid errors.





CEREALS			
Products	Manufacturers	Fungicide active ingredient (chemical group)	Insecticide active ingredient (chemical group)
Cover 2	Loveland Products Canada	ipconazole (3), metalaxyl (4)	
Cruiser Vibrance Quattro	Syngenta	difenoconazole (3), sedaxane (7), metalaxyl-M (4), fludioxonil (12)	thiamethoxam (4A)
Dividend Extreme	Syngenta	difenoconazole (3), metalaxyl-M and S-isomer (4)	
Insure Cereal FX4	BASF	triticonazole (3), fluxapyroxad (7), pyraclostrobin (11), metalaxyl (4)	
Interest Forte	Sharda	difeconazole (3), metalaxyl-M (and S-isomer) (4)	
Lixar Pro	Sharda	prothioconazole (3), tebuconazole (3), metalaxyl (4)	
Lumivia CPL	Corteva Agriscience		chlorantraniliprole (28)
NipsIt INSIDE	Nufarm		clothianidin (4A)
Nipslt SUITE	Nufarm	metalaxyl (4), metconazole (3)	clothianidin (4A)
Rancona Trio	UPL Canada	ipconazole (3), carbathiin (7), metalaxyl (4)	
Raxil PRO	Bayer	prothioconazole (3), tebuconazole (3), metalaxyl (4)	
Raxil PRO Shield	Bayer	prothioconazole (3), tebuconazole (3), metalaxyl (4)	imidacloprid (4A)
Sharda Meteb 11 ST Fungicide	Sharda	tebuconazole (3), metalaxyl (4)	
Sombrero 600 FS	ADAMA Canada		imidacloprid (4A)
Stamina F3	BASF	pyraclostrobin (11) triticonazole (3) metalaxyl (4)	
Stress Shield	Bayer		imidacloprid (4A)
Telex	Sharda	metalaxyl-M (and S-isomer) (4)	
Teraxxa F4	BASF	triticonazole(3), fluxapyroxad (7), pyraclostrobin(11), metalaxyl (4)	broflanilide (30)
Vibrance Quattro	Syngenta	difenoconazole (3), sedaxane (7), metalaxyl-M (and S-isomer) (4), fludioxonil (12)	
Vitaflo 280	UPL Canada	carbathiin (7), thiram (M)	
Zeltera	Valent Canada	inpyrfluxam (7)	

		CROPS		
Wheat (W)	Barley (B)	Oat (0)	Rye (R)	Triticale (T)
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<sup>\*\*</sup> Suppression only.

t Available to commercial seed treaters only.

<sup>&</sup>lt;sup>1</sup> Includes seed rots and blights caused by Fusarium species

				D	ISEASI	S				
Seed and seed- ling rots/blights <sup>(1)</sup>	Cochliobolus sativus	Smuts	Seed-borne septoria	Seed-borne dwarf bunt	Soil-borne dwarf bunt	Common bunt	Common root rot	Pythium damping- off	Take-all	Barley leaf stripe
•	•	W, B, 0				W	W**, B**, 0**	•		В
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•	•**	•	•	W, R	W, R	W, R	•**	•	•**	
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•	•**	•	•	W, R	W, R	W, R	•**	•	•**	
W, B, O, R, T	W, B, O, R, T	W, B, O, R, T				W, O, R, T	W**, B**, O**, R**, T**	W, B, O, R, T		В
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•	•	W,B,0				W	•**			В
W, B, O, R, T	W, B, O, R, T	W, B, O, R, T				W, O, R, T	W**, B**, O**, R**,	W, B, O, R, T		В
W, B, 0	W, B, 0	W, B, 0				W, 0	W**, B**, 0**	W, B, 0		В
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•	W ,B, R,T	W, B, 0	W	W		W	W, B, 0, R**			В
•		W, B								

IN	SEC	TS
Wireworms	Cutworms	Armyworms
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Α,	SEC	13		
	Cutworms	Armyworms		NOTES
			S	suppresses crown and foot rot caused by <i>Fusarium</i> spp. in wheat, barley, oats, rye, and triticale.
				For control of wireworms, plus seedborne and soilborne diseases.
			P	enicillium three-leaf dieback is labelled for minor use.
				Supresses seedling blight and root rot caused by ochliobolus sativus and crown and foot rot caused by Fusarium spp.
				uppresses seed rot, pre-emergent damping off and of rot caused by <i>Rhizoctonia solani</i> in wheat, barley, oats, rye and triticale.
	•	•	wo	For control of wireworms, cutworms and army- rms. Compatible with all fungicide seed treatment products.
			Sı	uppresses common root rot caused by <i>Cochliobolus</i> sativus.
			S	suppresses crown and foot rot caused by <i>Fusarium</i> spp. in wheat, barley, oat, rye and triticale.
				uppresses seed rot, pre-emergent damping off and of rot caused by <i>Rhizoctonia solani</i> in wheat, barley, oats, rye and triticale.
			Su	uppresses seed rot, pre-emergent damping off and ot rot caused by <i>Rhizoctonia solani</i> in wheat, barley and oats.
			roo	uppresses seed rot, pre-emergent damping off and ot rot caused by <i>Rhizoctonia solani</i> in wheat, barley, oats, rye and triticale. Ready-to-use formualtion.
				Compatible with most fungicide seed treatment products.
				Supresses seedling blight and root rot caused by ochliobolus sativus and crown and foot rot caused by Fusarium spp.

CANOLA			
Products	Manufacturers	Fungicide active ingredient (chemical group)	Insecticide active ingredient (chemical group)
BUTEO start	Bayer		flupyradifurone (4D)
Fortenza Advanced	Syngenta		sulfoxaflor (4A), cyantraniliprole (28)
INTEGO Solo	Nufarm	ethaboxam (22)	
Helix Vibrance	Syngenta	difenoconazole (3), metalaxyl-M (4), fludioxonil (12), sedaxane (7)	thiamethoxam (4A)
Helix Vibrance Fortenza	Syngenta	difenoconazole (3), metalaxyl (4), fludioxonil (12), sedaxane (7)	thiamethoxam (4A), cyantraniliprole (4C)
Lumiderm + Helix Vibrance	Corteva Agriscience, Syngenta	difenoconazole (3), metalaxyl (4), fludioxonil (12), sedaxane (7)	thiamethoxam (4A), cyantraniliprole (28)
Lumiderm + Prosper EverGol	Corteva Agriscience, Bayer		clothianidin (4A), cyantraniliprole (28)
Prosper EverGol	Bayer	penflufen (7), trifloxystrobin (11), metalaxyl (4)	clothianidin (4A)
Prosper EverGol + BUTEO start	Bayer	penflufen (7), trifloxystrobin (11), metalaxyl (4)	clothianidin(4A), flupyradifurone (4D)
Rancona V RS	UPL Canada	ipconazole(3), carbathiin(7)	
Sombrero 600 FS (t)	ADAMA Canada		imidacloprid(4A)
Telex	Sharda	metalaxyl-M (and S-isomer) (4)	
Vercoras	BASF	metalaxyl (4), fluxapyroxad (7), pyraclostrobin (11), fluopyram (7)	clothianidin (4A)
Visivio	Syngenta	difenoconazole (3), metalaxyl (4),   fludioxonil (12), sedaxane (7)	thiamethoxam(4A), sulfoxaflor(4C)
Zeltera	Valent Canada	inpyrfluxam (7)	

PULSE CROPS				
Products	Manufacturers	Fungicide active ingredient (chemical group)	Insecticide active ingredient (chemical group)	
Apron Advance	Syngenta	thiabendazole (1), fludioxonil(12), metalaxyl (4)		
Cruiser Maxx Vibrance Beans	Syngenta	fludioxonil (12), metalaxyl (4), sedaxane (7)	thiamethoxam (4A)	
Cruiser Maxx Vibrance Pulses	Syngenta	fludioxonil (12), metalaxyl (4), sedaxane (7)	thiamethoxam (4A)	
Insure Pulse	BASF	metalaxyl (4), fluxapyroxad (7), pyraclostrobin (11)		
INTEGO Solo	Nufarm	ethaboxam (22)		
Lumivia CPL	Corteva Agriscience		chlorantraniliprole (28)	
Rancona Trio	UPL Canada	ipconazole (3), carbathiin (7), metalaxyl (4)		
Stress Shield	Bayer		imidacloprid (4A)	
Telex	Sharda	metalaxyl-M (and S-isomer) (4)		
Trilex EverGol	Bayer	penflufen (7), trifloxystrobin (11), metalaxyl (4)		
Trilex EverGol SHIELD	Bayer	penflufen (7), trifloxystrobin (11), metalaxyl (4)	imidacloprid (4A)	

	C	ROPS		
Chickpeas (CP)	Dry beans (D)	Faba beans (F)	Lentils (L)	Peas (P)
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<sup>\*\*</sup> Suppression only.

t Available to commercial seed treaters only.

<sup>1</sup> Includes seed rots and blights caused by Fusarium species

	[	DISEASES	5	
Alternaria - seedborne	Blackleg - seedborne	Fusarium spp.	Pythium spp.	Rhizoctonia spp.
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ı	NSECTS	
Crucifer flea beetle	Striped flea beetle	cutworm
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cutworm	NOTES
	Rapid uptake and systemic translocation for effective protection against early striped and crucifer flea beetle pressure.
•	Early season control of flea beetles and cutworms.
	Controls a broad spectrum of seed-borne and soilborne diseases, as well as early season control of flea beetles.
•	Controls a broad spectrum of seed-borne and soilborne diseases, as well as early season control of flea beetles and cutworms.
•	Provides enhanced protection from striped and crucifer flea beetles and early season control of cutworm feeding damage.
	Provides enhanced protection from striped and crucifer flea beetles and early season control of cutworm feeding damage.
	Protects young canola plants from damaging seedborne and soilborne diseases, as well as early season control of flea beetles.
	Provides enhanced protection from striped and crucifer flea beetles.
	Provides enhanced protection from striped and crucifer flea beetles.
	A frontline insecticide, along with four fungicide active ingredients, delivering broad- spectrum protection against both flea beetles and key diseases, including seed- and air-borne Blackleg.
	Suppression of Blackleg.

DISEASES						
Anthracnose (colletotri- chum)	Aphanomyces root rot	Ascochyta	Botrytis spp.	Fusarium spp.	Pythium spp.	Rhizoctonia spp.
D		CP, L, P	CP, L			
D				D	D	D
		CP, L, P	CP, L	CP, L, P	CP, L, P	CP, L, P
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	D**, L**, P**, CP**				•	
	L**, P**	CP, L		•	CP, L, P	•
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	INSECTS					
Pea leaf weevil	Seed corn maggot	Cutworms	Army worms	Wireworms		
	D			D		
CP, L, P				CP, L, P		
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Р				•		
P, F				•		

	NOTES
	Registered for use with lupins.
Po	otato leaf hopper and Anthracnose specific to dry beans.
	sses Aphanomyces root rot and early season root rot caused by hora sojae. Compatible with rhizobium-based inoculants. Check with inoculant manufactuers for details prior to use.
(	Compatible with all fungicide seed treatment products.
Suppresses	seedling root rot caused by <i>Fusarium spp</i> . in chickpeas, dry beans lentils, and peas.

PULSE CROPS					
Products	Manufacturers	Fungicide active ingredient (chemical group)	Insecticide active ingredient (chemical group)		
Vibrance Maxx RFC/RTA	Syngenta	fludioxonil (12), metalaxyl-M (and S-isomer) (4), sedaxane (7)			
Vibrance Maxx with Intego	Syngenta	fludioxonil (12), metalaxyl-M (and S-isomer) (4), sedaxane (7), ethaboxam (22)			
Vitaflo 280	UPL Canada	carbathiin (7), thiram (m)			
Zeltera	Valent Canada	inpyrfluxam (7)			
Zeltera Pulse	Valent Canada	ethaboxam (22), madestrobin (11), metalaxyl (4), inpyrfluxam (7)			

	C	ROPS		
Chickpeas (CP)	Dry beans (D)	Faba beans (F)	Lentils (L)	Peas (P)
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SOYBEANS					
Products	Manufacturers	Fungicide active ingredient (chemical group)	Insecticide active ingredient (chemical group)		
Acceleron Basic	Bayer	metalaxyl (4), penflufen (7), prothioconazole (3)			
Acceleron Standard	Bayer	metalaxyl (4), penflufen (7), prothioconazole (3)	imidacloprid (4A)		
Allegiance	Bayer	metalaxyl (4)			
Apron Maxx RTA	Syngenta	metalaxyl-M and S-isomer (4)			
Apron XL	Syngenta	metalaxyl (4)			
Belmont (t)	UPL Canada	metalaxyl (4)			
Cruiser Maxx Vibrance Beans	Syngenta	fludioxonil (12), metalaxyl-M and S-isomer (4), sedaxane (7)	thiamethoxam (4A)		
EverGol Energy	Bayer	metalaxyl (4), penflufen (7), prothioconazole (3)			
Insure Pulse	BASF	metalaxyl (4), fluxapyroxad (7), pyraclostrobin (11)			
INTEGO Solo	Nufarm	ethaboxam (22)			
Lumiderm	Corteva Agriscience		cyantraniliprole (28)		
Lumisena	Corteva Agriscience	oxathiapiprolin (49)			
Rancona Trio	UPL Canada	ipconazole (3), carbathiin (7), metalaxyl (4)			
Sombrero 600 FS	ADAMA Canada		imidacloprid (4A)		
Stress Shield	Bayer		imidacloprid (4A)		
Telex	Sharda	metalaxyl-M (and S-isomer) (4)			
Vibrance Maxx RFC	Syngenta	fludioxonil (12), metalaxyl-M (and S-isomer) (4), sedaxane (7)			
Vitaflo 280	UPL Canada	carbathiin (7), thiram (M)			
Zeltera	Valent Canada	inpyrfluxam (7)			
Zeltera Pulse	Valent Canada	ethaboxam (22), madestrobin (11), metalaxyl (4), inpyrfluxam (7)			

DISEASES					
Fusarium seedling blight	Phomopsis seed mould	Pythium damping-off	Phytopthora	Rhizoctonia damping-off	
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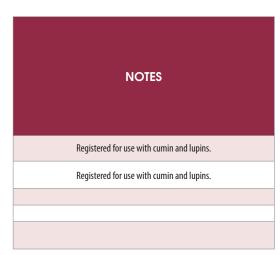
<sup>\*\*</sup> Suppression only.

t Available to commercial seed treaters only.

<sup>1</sup> Includes seed rots and blights caused by Fusarium species

	DISEASES						
Anthracnose (colletotri- chum)	Aphanomyces root rot	Ascochyta	Botrytis spp.	Fusarium spp.	Pythium spp.	Rhizoctonia spp.	
D		CP, L, P	CP, L	•			
D	D**, L**, P**	CP, L, P	CP, L	•	•		
D		Р	L	L, P	L, P	D, L, P	
						•	
**	**	**	**				

INSECTS						
Pea leaf weevil	Seed corn maggot	Curworms	Army worms	Wireworms		



	INSECTS					
Bean leaf beetle	European chafer	Seed corn maggot	Soybean aphid (early season profection)	Wireworms		
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NOTES
Compatible with rhizobium-based inoculants. Please check with inoculant manufacturers for details prior to use.
Suppresses early season root rot caused by Phytophthora sojae. Compatible with rhizobium-based inoculants. Check with inoculant manufactuers for details prior to use.
Submitted for registration on cutworm.
Compatible with most fungicide seed treatment products.
Suppresses sudden death syndrome.
Compatible with most fungicide seed treatment products.
Control of European chafer larvae.

CORN					
Products	Manufacturers	Fungicide active ingredient (chemical group)	Insecticide active ingredient (chemical group)		
Acceleron	Bayer	fluoxastrobin (11), metalaxyl (4), prothioconazole (3)			
Acceleron Standard with Poncho	Bayer, BASF	fluoxastrobin (11), metalaxyl (4), prothioconazole (3)	clothianadin (4A)		
Acceleron Standard with Lumivia	Bayer, Corteva Agriscience	fluoxastrobin (11), metalaxyl (4), prothioconazole (3)	chlorantraniliprole (28)		
Belmont (t)	UPL Canada	metalaxyl (4)			
Interest Forte	Sharda	Difeconazole (3), metalaxyl-M and S-ismomer (4)			
Lumivia	Corteva Agriscience		chlorantraniliprole (28)		
Poncho 600 FS (t)	BASF		clothianidin (4A)		
Sombrero 600 FS (t)	ADAMA Canada		imidacloprid (4A)		
Stamina (t)	BASF	pyraclostrobin (11)			
Telex	Sharda	metalaxyl-M (and S-isomer) (4)			
Vitaflo 280	UPL Canada	carbathiin (7), thiram (M)			
Zeltera	Valent Canada	inpyrfluxam (7)			

DISEASES								
Rhizoctonia damping-off	Pythium damping-off	Aspergillus seed rot	Penicillium seed rot					
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	INSECTS								
Black cutworm	Corn rootworm	Corn flea beetle	European chafer	Seed corn maggot	Wireworms	Cutworms			
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Purchase Trilex EverGol and Delaro® fungicide together for the 2022 season to receive up to 10% savings with the BayerValue™ West Rewards Program.¹

Plus, add additional products for up to 15% savings on Trilex EverGol.





## PROTECT THAT START OF THE SEASON FEELIN' FROM FLEA BEETLES

Introducing BUTEO™ start, a powerful new seed treatment that protects your canola and your start of the season spirit. BUTEO start is specifically engineered to defend your canola against early flea beetle pressure, delivering unparalleled protection right through the three-leaf stage putting you on the path to strong plants and even stronger yields. So make this year one for the record books and start strong with BUTEO start.

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