

GROWING **Opportunities**

VGAM Update

Minor Use Registrations & Projects

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Minor Use Registrations 2009 – 2011 (March)

Root Vegetables



Pest	Crop	Product	Active
White mould (PH)	carrot	ER: Scholar December 31, 2010	fludioxonil
<i>Rhizoctonia</i>	crop group	Dynasty Import only	azoxystrobin

Resistance Management:

Dynasty and Quadris (azoxystrobin) are both registered for use in certain root vegetables.

If you import seed treated with Dynasty, avoid using Quadris in-crop (Quadris label restricts use to 1 application per season in many crops, including certain root vegetables). Please refer to the labels.

Root Vegetables

Pest	Crop	Product	Active
<i>Botrytis</i>	crop group 1B*	Switch**	cyprodinil + fludioxonil

*CG 1B includes beet, carrot, parsnip, rutabaga, etc.

**Switch is currently not marketed in western Canada.

Root Vegetables

Pest	Crop	Product	Active
Labelled weeds	carrot	Dual II Magnum	s- metolachlor
Labelled weeds	beet	Upbeet	trifensulfuron

NB – velvetleaf is the only weed listed on the Upbeet label. The registrant indicated that Upbeet is best used as a tank mix with Betamix – which is still not registered, but hopefully will be soon...

Root Vegetables

Pest	Crop	Product	Active
Silver scurf (PH), suppression	potato	ER: Confine December 31, 2010	phosphorous acid
Late blight, pink rot (foliar), suppression	potato	ER: Confine December 31, 2010	phosphorous acid

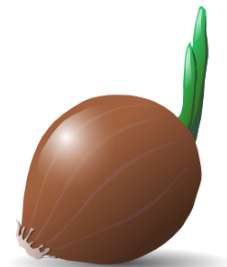
Did you know:

Data generated here in MB (led by Peak, assisted by MAFRI) was used to support the emergency use registration for suppression of silver scurf in potatoes other than russet and/or processing types.

Bulb Vegetables

Pest	Crop	Product	Active
<i>Rhizoctonia</i>	crop group	Dynasty Import only	azoxystrobin
Onion thrips	onion	ER: Carzol October 31, 2010	formetanate

Emergency use registration of Carzol going on to 4th year in Canada.
Emergency use requests for Carzol in the US were denied last year (likely due to product chemistry and non-target exposure concerns).
Many new 'softer' chemistries in the works for onion thrips in onion.



Brassicas

Pest	Crop	Product	Active
Clubroot	crop group	Allegro	fluazinam
<i>Botrytis</i> , downy mildew	crop group	Pristine	boscalid + pyraclostrobin
downy mildew	crop group	Reason	fenamidone
<i>Rhizoctonia</i>	crop group	Dynasty Import only	azoxystrobin

2009/2010 survey of ~150 Canola fields and 2 vegetable fields in Manitoba tested negative for clubroot (MAFRI Oilseed Specialist).

Cucurbits

Pest	Crop	Product	Active
Downy mildew	crop group	Tattoo C	propamocarb + chlorothalonil
<i>Rhizoctonia</i>	crop group	Dynasty Import only	azoxystrobin

Other Vegetables

Pest	Crop	Product	Active
Labelled weeds	Field peppers	Dual II Magnum	s- metolachlor
corn borer	Field peppers	Rimon	novaluron
corn borer	Field peppers	Coragen	chlorantraniliprole

Emergency Use for 2011?

- Onion thrips in onion
 - Likely pursue product other than Carzol (using Carzol 4 years in a row is not the best strategy to deal with a resistance issue 😊)
 - Other possibilities: Success/Entrust (spinosad), Delegate (spinetoram), Movento (spirotetramat), Cyazapyr (cyantraniliprole)
- White mould in stored carrot
 - Scholar
- Silver scurf in stored potato (suppression)
 - Confine

Emergency Use for 2011?

- Root maggot in rutabaga
 - No solution at this time
 - Emergency use registration of Clutch (clothianidin) seed treatment did not work in BC in 2009
 - Ongoing trials

Minor Use Submissions

(up to March 2011)

Root Vegetables: CG 1B

Crop group 1B: Carrot, radish, rutabaga, parsnip, etc.

Pest	Product	Active	Comments
Cabbage maggot, swede midge	Rimon	novaluron	

Root Vegetables: Carrot

Pest	Product	Active	Comments
White mould (PH)	Scholar	fludioxonil	2008 project
White mould, <i>Alternaria</i> , <i>Cercospora</i>	Allegro	fluazinam	Joint IR-4
<i>Pythium</i>	Reason	fenamidone	Joint IR-4
Labelled weeds	Sencor	metribuzin	2008 trials

Root Vegetables: Beet

Pest	Product	Active	Comments
Weeds	Select / Centurion	clethodim	
	Betamix*	desmedipham + phenmedipham	2007 project

*Outstanding data requirements for Betamix submitted to the PMRA January 31, 2011. So it is moving forward...

Root Vegetables: Rutabaga

Pest	Product	Active	Comments
Swede midge	Assail	acetamiprid	
Labelled weeds	Muster	ethametsulfuron	

Root Vegetables: Radish

Pest	Product	Active	Comments
<i>Alternaria</i>	Flint	trifloxystrobin	Joint IR-4
Cabbage maggot	Cyazapyr	Cyantraniliprole	
Labelled weeds	Select / Centurion	clethodim	radish & parsnip

Root Vegetables: Potato

2,4-D for colour enhancement in red potatoes may be registered later this season...

Will notify Peak and VGAM when registration is final.

Bulb Vegetables: Onion

Pest	Product	Active	Comments
<i>Botrytis</i>	Elevate	fenhexamid	Joint IR-4 DB, green
White rot	Folicur	tebuconazole	Joint IR-4 DB
Onion maggot	Success	spinosad	DB, green
	Lorsban	chlorpyrifos	green

Bulb Vegetables: Onion

Pest	Product	Active	Comments
Onion thrips	Carzol	formetanate	DB
	Success/ Entrust	spinosad	DB, green
	Movento	spirotetramat	Joint IR-4 DB, green
	Delegate	spinetoram	Joint IR-4 DB, green
	Cyazypyr	cyantraniliprole	DB

Bulb Vegetables: Garlic

Pest	Product	Active	Comments
<i>Fusarium</i>	Scholar	fludioxonil	
White rot	Folicur	tebuconazole	Joint IR-4

Brassicas: Crop Group

Pest	Product	Active	Comments
Downy mildew	Quadris	azoxystrobin	Joint IR-4 Reg'n soon?
	Acrobat	dimethomorph	Joint IR-4
<i>Xanthomonas</i>	Actigard	acibenzolar	cauliflower ONLY

Brassicas: Crop Group

Pest	Product	Active	Comments
Cabbage maggot	Rimon	novaluron	2004 project
	Brigade	bifenthrin	cabbage ONLY
Swede midge	Movento	spirotetramat	
Thrips	Matador	cyhalothrin	
	Success/ Entrust	spinosad	

Brassicas: Crop Group

Pest	Product	Active	Comments
Labelled weeds	Goal	oxyfluorfen	

Fruiting Vegetables: Peppers

Pest	Product	Active	Comments
<i>Phytophthora</i>	Allegro	fluazinam	
	Acrobat	dimethomorph	2005 project
<i>Anthracnose</i>	Switch	fludioxonil + cyprodinil	Joint IR-4
Bacterial diseases	Kasumin	kasugamycin	Joint IR-4

Fruiting Vegetables: Peppers

Pest	Product	Active	Comments
Labelled weeds	Command	clomazone	2004 project
	Chateau	flumioxazin	

Cucurbit Vegetables: Crop Group

Pest	Product	Active	Comments
Downy mildew	Tanos	famoxadone + cymoxanil	
<i>Phytophthora</i> , downy mildew	Acrobat	dimethomorph	
<i>Phytophthora</i>	CP100, Pic- Plus	chlorpicrin	

Cucurbit Vegetables: Crop Group

Pest	Product	Active	Comments
Armyworm, C. looper	Avaunt	indoxacarb	withdrawn
Cucumber beetle	Cruiser	thiomethoxam	Joint IR-4
	Clutch	clothianidin	
	Matador	lambda-cyhalothrin	
Leafhoppers	Applaud	buprofenzin	Joint IR-4

Cucurbit Vegetables: Crop Group

Pest	Product	Active	Comments
Weeds	Dual II Magnum	s-metolachlor	
	Command*	clomazone	FMC supports submission for MB

*Currently registered in eastern Canada

Cucurbit Vegetables: Cucumber

Pest	Product	Active	Comments
<i>Pythium</i>	Ranman	cyazofamid	
Cucumber beetle	Gaucho	imidacloprid	2006 project + squash
	Mycotrol	<i>Beauvaria bassiana</i>	2009 project organic

Asparagus

Pest	Product	Active	Comments
Rust	Folicur	tebuconazole	2004 project
Labelled weeds	Authority	sulfentrazone	Registrant submission

Questions?

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