

GUIDE TO PEST MANAGEMENT IN GINSENG

Nova Scotia Vegetable Crop Guide to Pest Management 2011
[GIN1-11]

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IMPORTANT

This publication was compiled by representatives from AgraPoint using information from the Pest Management Regulatory Agency of Health Canada, specific pesticide labels, previous Atlantic Provinces Vegetable Pest Guides and manufacturer's information. **This information is continuously changing and therefore it can cease to be current and accurate. Pesticide labels are the best source of information and should always be consulted prior to using a product.** The label is the best source of information on: registered crop uses, rates, days to harvest, compatibility with other pesticides, toxicity and other special information on its effective and safe use

By printing this publication, AgraPoint does not offer any warranty or guarantee, nor do they assume any liability for any crop loss, animal loss, health, safety or environmental hazard caused by the use of a pesticide mentioned in this publication.

WARNINGS

This publication is meant to be used as a reference for possible pest control options. Where there are multiple brand names of a specific active ingredient registered in Canada, AgraPoint has only listed a couple for reference purposes and as such does not endorse one brand over another. If you have purchased a generic product not specifically in this guide but has your crop and pest on the label, always follow that product label.

If any information in this or any other publication conflicts with the information on the label, always use the label recommendation. If you have an old label, your pesticide supplier should be able to give you the newest label. You are legally responsible for the safe use of pesticides you purchase. This means the safe transport and storage of these materials, the label rates used on crops, and the safe disposal of containers.

Pest	Pesticide Common Name	Pesticide Product Name	Rate	Days to Harvest	Remarks
WEEDS:					
Preplant <i>Perennial weeds including quackgrass</i>	glyphosate	Roundup 356 Sn	1.25-2.5 L/ha	7	Apply in the fall or spring prior to planting. Annual weed control programs will be necessary to control weeds germinating after planting. For quackgrass control, apply to actively growing quackgrass when at least 4 new leaves are present. The low rate (2.5 L/ha) will provide a minimum of one season control, while higher rates (4.75 to 7 L/ha) will provide longer term control. The low rate of Roundup should be applied in 50 to 100 L/ha water. If higher water volumes are used add a suitable surfactant. Wait 72 hours before plowing under. Best control of quackgrass is obtained when these herbicides are applied in the fall.
		Roundup WeatherMAX	1.67-8.0 L/ha	7	
		Touchdown 480	2.5-7.0 L/ha	7	
	carfentrazone-ethyl	Aim EC	36.5-117 mL/ha	1	Apply in minimum spray volume of 100 L/ha. Refer to label for target weeds, buffer zones and rates. Use high flow rate nozzles to apply the highest spray volume.
Postemergence <i>Grasses</i>	fluazifop-p-butyl	Venture L	0.8-2.0 L/ha	-	Do not apply in the year of harvest. Apply post up to three times per year on actively growing grasses.
DISEASES:					
Root Rot	azoxystrobin	Quadris	1.12 L/ha	24 months	Apply in 4000 L of water/ha. Max 2 applications, one in the fall of the first

					growing year, prior to straw mulching; second application in the following spring applied over the straw mulch.
	metalaxyl-m and s-isomer	Ridomil Gold 480 EC	0.65 L/ha	9	Apply in the spring just prior to the emergence of the ginseng. Apply in a minimum of 2500L of water/ha. Max 1 application/yr.
		Ridomil Gold 1 G	31.25 kg/ha	9	Make one application just prior to plant emergence and a second 6 weeks later. Do not make more than 3 applications/yr.
	fosetyl Al	Aliette 80 WDG	5.5 kg/ha	31	Max 5 applications/yr.
Botrytis	chlorothalonil	Bravo 500	2.4-4.8 L/ha	14	Max 6 applications/yr. at 7-10 day intervals.
	fenhexamid	Elevate 50 WDG	1.7 kg/ha	0	Max 4 applications/yr applied at 10-14 day intervals.
Alternaria	iprodione	Rovral	1.1 kg/ha	30	Max 3 applications/yr. Apply in at least 2000L of water/ha.
	chlorothalonil	Bravo 500	2.4-4.8 L/ha	14	
	mancozeb	Dithane DG Rainshield	4.4 kg/ha	30	Avoid applications when temperatures are over 30 C.
		Manzate Pro-Stick	4.4 kg/ha	30	
White mould	<i>Bacillus subtilis</i>	Serenade MAX	2.0-4.0 Kg/ha	0	Serenade Max and Serenade ASO are biopesticides that will only suppress the indicated diseases. Begin applications soon after emergence and when conditions become conducive for disease development. Repeat as necessary on a 7-10 day interval.
		Serenade ASO	8.0-15.0 L/ha	0	

Use the following web link to search for any pesticide label mentioned in this guide, or any other pesticide registered in Canada:

http://pr-rp.pmra-arla.gc.ca/portal/page?_pageid=34,17551&_dad=portal&_schema=PORTAL

PESTICIDE EMERGENCY CONTACT INFORMATION

Poison Control Centres		
Nova Scotia	800.565.8161 or 902.428.8161	IWK, Halifax, NS
New Brunswick	911	Ask for Poison Information
Prince Edward Island	800.565.8161 or 902.428.8161	IWK, Halifax, NS
Newfoundland	709.722.1110	Dr. Charles A. Janeway Child Health Care Centre, St. John's, NF

Environmental Emergencies (Pesticide Spills)	
Transport Canada Regional Operations Centre (24 hours)	
Nova Scotia	800.565.1633
New Brunswick	800.565.1633
Prince Edward Island	800.565.1633
Newfoundland	800.563.9089

ABBREVIATIONS & CONVERSIONS

Formulation and Measurement Abbreviations			
FORMULATIONS		MEASUREMENTS	
DF	Dry flowable	mL	millilitre
DG	Dry granule	kPa	kilopascal
G	Granule	kg	kilogram
L	Liquid	g	gram
Sn	Solution	L	litre
WDG	Wettable dry granule	BIU	Billions of International Units
		ppm	parts per million (1000 ppb)
		ppb	parts per billion (1/1000 ppm)

Helpful Conversions¹	
kPa X 0.14 = pounds per square inch (psi)	millilitres X 0.035 = fluid ounces
hectares X 2.47 = acres	litres X 35 = fluid ounces
kilograms X 2.2 = pounds	litres X 0.22 = imperial gallons
kilograms per hectare X 0.89 = pounds per acre	litres per hectare X 14.17 = fluid ounces per acre
kilograms per hectare X 0.40 = kilograms per acre	litres per hectare X 0.40 = litres per acre
	degree-days C X 1.8 = degree-days F

¹ **Pesticide Units of Measurement**

It is not recommended to convert label rates to imperial units because there is a high probability of mathematical and rounding errors. Present day pesticides are formulated to be more effective in smaller amounts. Therefore, even small conversion errors can lead to the use of incorrect rates (either too high or too low). Use metric – you will be glad you did!