

Stone Fruit Management Schedule

A guide to insect, mite, and disease
management in peach, plum, sour cherry
and sweet cherry orchards in Nova Scotia

2011/2012



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Sources of Information on Pesticides

Information Service of the Pest Management Regulatory Agency

Phone: 1-800-267-6315

Web Site: <http://www.hc-sc.gc.ca/cps-spc/pest/index-eng.php>

Pest Management Regulatory Agency –Electronic Labels: Search Tool

Web Site: <http://www.hc-sc.gc.ca/cps-spc/pest/registrant-titulaire/tools-outils/label-etiq-eng.php>

National Pesticide Information Centre

Web Site: <http://npic.orst.edu/>

Chemfinder Webserver

Web Site: <http://chembiofinderbeta.cambridgesoft.com/>

Environmental Emergencies

Pesticide and Chemical spills

Phone: 1-800-565-1633

Organic Agricultural Centre of Canada

Web Site: <http://www.organicagcentre.ca/>

Emergency and First Aid Procedure for Pesticide Poisoning

- Become familiar with the chemicals you are using. Keep a list of common names in case of accidents or emergencies. This information can be found on product labels and cross-referenced in this publication.
- If a pesticide has come in contact with the skin or has been spilled on clothing, remove the clothing and wash the skin thoroughly with soap and warm water.
- If a person suspects poisoning from exposure to a pesticide by swallowing, inhalation or contact with skin or eyes, read the label of the pesticide container and carry out first-aid treatment as suggested.
- Immediately after first aid treatment has been given, wrap the patient in a coat or blanket and rush him/her to the nearest hospital. Take the list of chemical common names with you and identify the one being used.
- If a person is unconscious or lapses into unconsciousness, call **911** immediately.
- Emergency advice on pesticide poisoning is available from the Poison Information Centre, Halifax, NS. Phone 800-565-8161 (NS & PEI).

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Toxicity Table

LD ₅₀ (mg/kg)	Hazard Rating	Relative Toxicity Rating
Above 500	Very Low Hazard	1
101-500	Low Hazard	2
21-100	Moderate Hazard	3
11-20	Very High Hazard	4
10 and less	Extremely Hazardous	5

Pesticide Formulation Abbreviations

DF	dry flowable	SG	Soluble Granules
DP	dispersible powder	SN	solution
DU	dust	SP	soluble powder
EC	emulsifiable concentrate	SU	suspension
F or FLO	flowable solution	SURF	surfactant
GR or G	granular	W or WP	wettable powder
OD	oil dispersible	WSP	water soluble pouch
SC	spray concentrate	WDG or DG	water dispersible granules

Warning

Please note that we make no warranty or guarantee of any kind, expressed or implied, concerning the use of products listed in this publication. The user assumes all risks, whether recommendations are followed or not. This publication is intended as a guide only.

For specific product information always refer to and follow directions on the label.

PESTICIDES LISTED IN THIS SCHEDULE

This listing includes all the registered pesticides (excluding herbicides) detailed in the Stone Fruit Management Schedule. Some of the secondary insects and diseases referred to on the pesticide labels are also listed, but caution must be used in interpreting the effects on these secondary pests. The Schedule recommends the timing of application based on the target pest which is often not the appropriate time for control of the secondary pests.

Active Ingredient	Product	Chemical Family	GROUP	PEACH	PLUM	SWEET CHERRY	SOUR CHERRY	DAYS TO HARVEST	RE-ENTRY-INTERVAL	Pests Controlled
FUNGICIDES										
boscalid	Lance	Anilide	7	√	√	√	√	1	4 hrs	Blossom blight/brown rot
boscalid + pyraclostrobin	Pristine	Anilide + Strobilurin	7 11	√	√	√	√	0	24 hrs 10 Days	Blossom blight/brown rot, anthracnose, leaf spot
captan	Captan Maestro	Phthalimide	M	√	√	√	√	7	48 hrs	Blossom blight/brown rot, black knot
chlorothalonil	Bravo	Chloronitrile	M	√		√	√	40-60	48 hrs	Blossom blight/brown rot, peach leaf curl, cherry leaf spot, black Knot
cyprodinil	Vanguard	Anilinopyrimidine	9	√	√			2	72 hrs	Blossom blight/brown rot
dodine	Equal Syllit	Guanidine	M7			√	√	7	48 hrs	Cherry leaf spot.
fenbuconazole	Indar	Triazole	3	√	√	√	√	1	12hrs	Blossom blight/brown rot, black knot
fenhexamid	Elevate	Hydroxyaniline	17	√		√	√	1	4hrs	Blossom blight/brown rot
ferbam	Ferbam	Dithiocarbamate	M	√	√	√	√	4-21	48hrs	Peach leaf curl, cherry leaf spot, brown rot
iprodione	Rovral	Dicarboximide	2	√	√	√	√	1	12hrs	Blossom blight/brown rot
myclobutanil	Nova	Triazole	3	√		√	√	1	dry	Blossom blight/brown rot, powdery mildew, leaf spot
propiconazole	Topas/Mission/ Propiconazole	Triazole	3	√	√	√	√	3	3 days	Blossom blight/brown rot, black knot, cherry leaf spot

Active Ingredient	Product	Chemical Family	GRAPPE	PEACH	PLUM	SWEET CHERRY	SOUR CHERRY	DAYS TO HARVEST	RE-ENTRY-INTERVAL	Pests Controlled
FUNGICIDES										
sulphur	Kumulus Microscopic Sulphur	Inorganic	M	√	√	√	√	1	-	Powdery mildew, brown rot, black knot, leaf spot
thiram	Thiram	Dithiocarbamate	M		√			-	-	Plum pockets
triforine	Funginex	Piperazine	3	√	√	√	√	-	48 hrs	Blossom blight
INSECTICIDES										
azinphos-methyl	Sniper Guthion	Organophosphate	1B	√	√	√	√	15-21	14-15 days	Plum curculio, plant bugs, cherry fruit fly
bacillus thuringiensis	Dipel 2XDF Bioprotec 3P	Bt Microbial	11	√	√	√	√	1	-	Feeding caterpillars
clothianidin	Clutch	Neonicotinoid	4A	√	√	√	√	7	12 hrs	Plum curculio, aphids, leafhopper
carbaryl	Sevin	Carbamate	1A	√	√	√	√	1-2	-	Cherry fruit fly
cyhalothrin-lambda	Matador/Warrior	Pyrethroid	3	√	√	√	√	7	24 hrs	Cherry fruit fly, plant bugs, plum curculio
cypermethrin	Ripcord	Pyrethroid	3	√				7	-	Plant bugs
endosulfan	Thiodan Endosulfan	Chlorinated Cyclodine	2A	√	√	√	√	15	-	Aphids
<i>flonicamid</i>	Beleaf	Pyridinecarboxamide	9C	√	√	√	√	14	48 hrs	Aphids
imidacloprid	Admire/Alias/ Grapple	Neonicotinoid	4	√	-	-	-	7	24 hrs	Aphids
malathion	Malathion	Organophosphate	1B	√	√	√	√	3-7	-	Aphids, plum curculio
permethrin	Pounce/Ambush	Pyrethroid	3	√	√			7	-	Plum curculio, plant bugs
phosalone	Zolone	Organophosphate	1B	√		√	√	14-30	24 hrs	Plum curculio, cherry fruit fly

Active Ingredient	Product	Chemical Family	Group	Peach	PLUM	Sweet Cherry	Sour Cherry	Days to Harvest	RE-ENTRY INTERVAL	Pests Controlled
INSECTICIDES										
phosmet	Imidan	Organophosphate	1B	√	√	√	√	7-14	3-7 days	Plum curculio, plant bug.
spirotetramat	Movento	Tetronic Acid	23	√	√	√	√	14	12 hrs	Aphids
MITICIDES										
clofentezine	Apollo	Tetrazine	10	√				21	12 hrs	European red mite, two spotted spider mite
dicofol	Kelthane	Diphenylethane	3	√	√		√	7-14	-	European red mite, two spotted spider mite
formetanate	Carzol	Carbamate	1A	√				21	-	European red mite, two spotted spider mite
petroleum oil	Superior oil		-	√	√			-	-	European red mite, lecanium scale,
pyridaben	Nexter/Pyramite	Pyridazinone	21			√	√	7	24 hrs	All mites
spirodiclofen	Envidor	Tetronic Acid	23	√	√	√	√	7	12 hrs	All mites
OTHER										
diphacinone	Ramik Brown	Indandione	-	√	√	√	√	-	-	Mice
chlorophacinone	Rozol Groundforce	Indandione	-	√	√	√	√	1	-	Mice
zinc phosphide	Waxed Mouse Bait	Inorganic Phosphide	-	√	√	√	√	-	-	Mice

Peach Orchard Management Schedule for Nova Scotia 2009/2010

A guide to insect, mite and disease management in peach orchards

-All rates are per hectare of mature ("standard") trees or full dilute volume of about 3370 litres of water /ha. To adjust for smaller trees and higher density plantings, refer to Tree Row Volume factsheet TF 92002 or Integrated Fruit Production Guide.

-All rates are based on label rates. In some cases, reduced rates can be used based on factors other than tree size. Please refer to specific notes or your agricultural advisor for details.

-Always read the label before using any pesticide. Where differences between the label and this schedule occur, label information prevails.

Disease and Insects	Products	Formulation	Rate per ha	Notes
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DORMANT

Peach Leaf Curl If leaf curl was not severe the previous season, a spring fungicide application may not be needed where a fall spray was applied. Spring fungicide applications need to be applied just before the buds begin to swell (early to mid-April). Delaying the treatment to after bud swell can result in poor control.

- | | | | | |
|---|--------|--------|---------|---|
| ▶ | Bravo | 500 | 7.00 L | Do not apply within 10 days of an oil application, to prevent burning of flowers and leaf tissue. |
| ▶ | Ferbam | 76 WDG | 6.75 kg | If applying with "70 Sec" Oil check label with regard to mixing. |

PREBLOOM (half-inch Green to Pink)

**European Red Mite
Scale Insects**

- | | | | | |
|---|--------------|------|------|---|
| ▶ | Superior Oil | "70" | 65 L | Good coverage is essential; use a minimum of 1000 L of water per hectare. Do not apply during freezing temperatures or just following a frost (48 hrs). |
|---|--------------|------|------|---|

PINK through BLOOM

Brown Rot (blossom blight stage) Wet weather above 16°C promotes blossom blight, especially when large numbers of mummies (dried infected fruit) are present in the tree. Apply first spray when first blossoms are opening (late pink). Repeat applications every 4 to 5 days if weather is wet. To avoid resistance, alternate between fungicides.

- | | | | | |
|---|--------------------------|-----------------|--------------|--|
| ▶ | Bravo | 500 | 7.00 L | Do not apply within 10 days of an oil application, to prevent burning of flowers and leaf tissue. |
| ▶ | Funginex | 190 EC | 2.50 L | Apply first application at early bloom followed by a second at 50 to 75% bloom. |
| ▶ | Indar | 75 WSP | 140 g | Avoid consecutive sprays. Rotate with fungicides in a different class grouping than G 3. |
| ▶ | Lance | WDG | 370 g | Do not make more than 2 consecutive applications. Rotate with fungicides in a different class grouping than G 7. Do not apply more than 5 times per season. |
| ▶ | Elevate | WDG | 1.70 kg | Do not make more than 2 consecutive applications. Rotate with fungicides in a different class grouping than G 17. Do not apply more than 4 times per season. |
| ▶ | Pristine | WG | 0.74-1.00 kg | Rotate with other fungicides, maximum of 5 applications per year. |
| ▶ | Supra Captan/
Maestro | 80 WDG
80 DF | 4.50 kg | Do not apply within 10 days of an oil application, to prevent burning of flowers and leaf tissue. |
| ▶ | Nova | 40 W | 340 g | Apply when first blossoms are opening; rotate with other fungicides in a different class grouping than G 3, maximum of 6 applications per season. |
| ▶ | Rovral | 50 WP | 1.50 kg | Do not use more than two applications per season for resistance management. |
| ▶ | Topas/
Propiconazole | 250 E | 500 mL | Apply first application at early bloom followed by a second at 50 to 75% bloom. |
| ▶ | Mission | 418 EC | 300 mL | Apply first application at early bloom followed by a second at 50 to 75% bloom. |
| ▶ | Vanguard | 75 WG | 370 g | Do not use more than two applications per season for resistance management. May also be tank mixed with Nova or Rovral. |

Disease and insects	Products	Formulation	Rate per ha	Notes
PETAL FALL to SHUCK SPLIT				
Brown Rot				
	▶ Bravo	500	7.00 L	
	▶ Indar	75 WSP	140 g	Avoid consecutive sprays. Rotate with fungicides in a different class grouping than G 3.
	▶ Lance	WDG	370 g	Do not make more than 2 consecutive applications. Rotate with fungicides in a different class grouping than G 7. Do not apply more than 5 times per season.
	▶ Elevate	WDG	1.70 kg	Do not make more than 2 consecutive applications. Rotate with fungicides in a different class grouping than G 17. Do not apply more than 4 times per season.
	▶ Pristine	WG	0.74-1.0 kg	Rotate with other fungicides, maximum of 5 applications per year.
	▶ Supra Captan/ Maestro	80 WDG 80 DF	4.50 kg	
	▶ Nova	40 W	340 g	Rotate with fungicides in a different class grouping than G3, maximum of 6 applications per season.
	▶ Rovral	50 WP	1.50 kg	Do not use more than two applications per season for resistance management.
	▶ Topas/ Propiconazole	250 E	500 mL	Apply first application at early bloom followed by a second at 50 to 75% bloom. Maximum of 5 applications per season.
	▶ Mission	418 EC	300 mL	Apply first application at early bloom followed by a second at 50 to 75% bloom.
	▶ Vangard	75 WG	370 g	Do not use more than two applications per season for resistance management. May also be tank mixed with Nova or Rovral.
Plum Curculio	Sporadic pest of peaches which may not require control. Border spraying of the first 4-6 rows may provide adequate control. Check developing fruit for new damage 7-10 days after treatment and apply a second treatment if new damage is found.			
	▶ Clutch	50 WDG	210 g	Do not apply more than 2 applications per season and do not exceed 420 g/ha/season. This product is toxic to bees exposed to direct treatment or residues on blooming crops. Do not apply during bloom or when bees are present.
	▶ Guthion / Sniper	50 WP	2.00-4.00 kg	See label for changes in use pattern. If temperatures are high apply when shucks have split.
	▶ Imidan	50 WP	3.75 kg	If temperatures are high apply when shucks have split.
	▶ Zolone	FLO	2.00 L	
	▶ Pounce	384 EC	520 mL	Avoid applying synthetic pyrethroids when temperatures rise above 20°C as their activity is reduced.
	▶ Ambush	500 EC	400 mL	Avoid applying synthetic pyrethroids when temperatures rise above 20°C as their activity is reduced.
European Red Mite				
	▶ Apollo	500 SC	300 mL	One application per season. Works best when applied to eggs or young nymphal stages.
	▶ Kelthane	50 WP	3.25 kg	
	▶ Envidor	240 SC	0.75 L	Post bloom application only. One application per year. Active on eggs, nymphal stages and female adults. Evaluate effectiveness of application 7 to 10 days after treatment.
Green Peach Aphid				
	▶ Admire/Alias/Grapple	240	230 mL	Thorough uniform coverage with a minimum of 500 L of water per ha is necessary. Post bloom, once bees are no longer present.
	▶ Movento	240 SC	365-435 ml	Maximum amount of product that can be applied per growing season is 1.83 L/ha. Apply with a minimum water volume of 500 L/ha. Use high rate for moderate to high pest pressure.

Disease and Insects	Products	Formulation	Rate per ha	Notes
SHUCK FALL				
Green Peach Aphid				
	▶ Thiodan / Endosulfan	50 WP 50 W	3.25 Kg	May be applied up to husk (shuck) fall.
Plant Bugs				
Treatment period from early green fruit stage to pit hardening. If plant bug population is high and significant damage is detected repeat treatment in 5-7 days.				
	▶ Guthion /Sniper	50 WP	2.00-4.00 kg	See label for changes in use pattern.
	▶ Imidan	50 WP	3.75 kg	
	▶ Matador/Warrior	120 EC	104 mL	Avoid applying synthetic pyrethroids when temperatures rise above 20°C as their activity is reduced.
	▶ Ripcord	400 EC	175 mL	Do not apply more than 2 times per year.
	▶ Ambush	500 EC	400 mL	Avoid applying synthetic pyrethroids when temperatures rise above 20°C as their activity is reduced.
FIRST COVER (12 days after Shuck Fall)				
Brown Rot				
Use one of the fungicides listed under PETAL FALL to SHUCK SPLIT.				
Plant Bugs				
Use one of the insecticides listed under SHUCK FALL.				
Plum Curculio				
Use one of the insecticides listed under PETAL FALL to SHUCK SPLIT.				
SECOND COVER (12 days after First Cover)				
Brown Rot				
Use a fungicide listed under PETAL FALL to SHUCK SPLIT. Fruit becomes more susceptible to brown rot as it ripens. During wet weather application intervals should be shortened. Check intervals to harvest prior to applying a fungicide.				
SUMMER SPRAY				
European Red Mite Twospotted Spider Mite				
	▶ Envidor	240 SC	0.75 L	Post bloom application only. One application per year. Active on eggs, nymphal stages and female adults. Evaluate effectiveness of application 7 to 10 days after treatment.
	▶ Nexter/Pyramite	75 WP	300 -600 g	Use higher rate for high populations of two-spotted spider mite. Effective against immature stages but not eggs. Apply with a minimum of 1000L of water per hectare. When possible limit use to one application per season for resistance management.
	▶ Kelthane	50 W	3.25 kg	Some NS orchards have mite populations that are resistant to Kelthane.
	▶ Carzol	92 SP	1.10 kg	Hydrolyzes in alkaline solution. Harsh on beneficial insects.
PREHARVEST				
Brown Rot				
Use a fungicide listed under PETAL FALL to SHUCKSPLIT. Check label rate for pre-harvest interval. A spray just prior to harvesting may be required to control brown rot if weather conditions are wet and humid.				
POST HARVEST FRUIT TREATMENT				
Blue Mould, Grey Mould, Brown Rot, Rhizopus Rot				
	▶ Scholar	50 WP	600g/1000 L	Apply as a dip or drench. Reduces storage rots particularly during wet harvest seasons.

Disease and Insects	Products	Formulation	Rate per ha	Notes
FALL SPRAY				
Peach Leaf Curl	Apply after leaf fall when temperatures are above freezing and conditions favour rapid drying			
	▶ Bravo	500	7.00 L	
	▶ Ferbam	76 WDG	6.75 kg	

Peach Canker: The following practices can aid in the prevention and control of canker. Delay canker and dead wood removal until June or July when re-growth and healing of the tree can take place rapidly. Conduct surgery to remove cankers when 3 to 5 days of dry weather are forecast. Surgery involves the removal of all diseased bark from around the canker, removing at least 1.25 cm of healthy tissue from around the ends and side of the canker. The resulting wound when finished should have a smooth margin and be slightly rounded above and below to favour rapid wound closure. It is felt these wounds will heal better if left uncovered. Some pruning paints actually seal in moisture thereby providing an environment for re-infection

Plum Orchard Management Schedule for Nova Scotia 2009/2010

A guide to insect, mite and disease management in plum orchards

-All rates are per hectare of mature ("standard") trees or full dilute volume of about 3370 litres of water /ha. To adjust for smaller trees and higher density plantings, refer to Tree Row Volume factsheet TF 92002 or Integrated Fruit Production Guide.

-All rates are based on label rates. In some cases, reduced rates can be used based on factors other than tree size. Please refer to specific notes or your agricultural advisor for details.

-Always read the label before using any pesticide. Where differences between the label and this schedule occur, label information prevails.

Disease and Insects	Products	Formulation	Rate per ha	Notes
DORMANT				
Plum Pockets	Only Japanese cultivars (such as Burbank, Shiro, Early Golden etc.) are infected by this fungus and need to be treated.			
▶	Thiram	75 WP	6.75 kg	Apply just before buds begin to swell (early to mid-April). Fungicide application following bud swell may provide unsatisfactory control.
GREEN TIP (Just as Buds are Bursting)				
European Red Mite				
Scale Insects				
▶	Superior Oil	"70"	65 L	Good coverage is essential; use a minimum of 1000 L of water per hectare. Do not apply during freezing temperatures or just following a frost (48 hrs).
PREBLOOM (When Blossoms Show White)				
Brown Rot (stem rot and blossom blight stages)	Blossom blight infection is favoured by wet weather (above 16°C), especially when large numbers of mummies (dried infected fruit) are present in the tree. Apply first spray just before blossoms open, followed by two additional sprays during the bloom period if weather remains favorable for blight.			
▶	Funginex	190 EC	2.50 L	Prebloom sprays only.
▶	Indar	75 WSP	140 g	Avoid consecutive sprays. Rotate with fungicides in a different class grouping than G 3. Will also suppress black knot.
▶	Lance	WDG	370 g	Do not make more than 2 consecutive applications. Rotate with fungicides in a different class grouping than G 7. Do not apply more than 5 times per season.
▶	Pristine	WG	0.74-1.0 kg	Rotate with other fungicides, maximum of 5 applications per year.
▶	Supra Captan	80 WDG	4.50 kg	May cause injury under some circumstances. Will also suppress black knot.
▶	Maestro	80 DF	4.50 kg	May cause injury under some circumstances. Will also suppress black knot.
▶	Rovral	50 WP	1.50 kg	Do not use more than two applications per season for resistance management.
▶	Topas/ Propiconazole	250 E	500 mL	Apply first application at early bloom followed by a second at 50 to 75% bloom. Maximum of 5 applications per season. Will also suppress black knot.
▶	Mission	418 EC	300 mL	Apply first application at early bloom followed by a second at 50 to 75% bloom.
▶	Vanguard	75 WG	370 g	Do not use more than two applications per season for resistance management.
Black Knot	Apply fungicide protectant sprays from the popcorn stage of bud development until 1 st cover. Treat every 3-5 days during periods of wet weather.			
▶	Indar	75 WSP	140 g	Will also control brown rot.

Disease and insects	Products	Formulation	Rate per ha	Notes
Black Knot	▶ Maestro/ Supra Captan	80 DF 80 WDG	4.50 kg	Will also control brown rot.
	▶ Mission	418 EC	300 mL	Suppression only. Will also control brown rot.
	▶ Topas/ Propiconazole	250 E	500 mL	Suppression only. Will also control brown rot.

BLOOM

Brown Rot and Black Knot Use one of the fungicides listed under Prebloom. Apply a fungicide twice during the bloom period if the weather is wet. Note that Nova and Topas are absorbed by flower parts, and therefore are more rain fast than other protectant fungicides.

Insects Do not apply insecticides during the bloom period.

PETAL-FALL

Feeding Caterpillars

- | | | |
|----------|-------|--------------|
| ▶ Imidan | 50 WP | 3.75 kg |
| ▶ Dipel | 2X DF | 1.13-1.68 kg |

SHUCK FALL

Brown Rot

- | | | | |
|---------------------------|--------|-------------|---|
| ▶ Indar | 75 WSP | 140 g | Avoid consecutive sprays. Rotate with fungicides in a different class grouping than G 3. |
| ▶ Lance | WDG | 370 g | Do not make more than 2 consecutive applications. Rotate with fungicides in a different class grouping than G 7. Do not apply more than 5 times per season. |
| ▶ Pristine | WG | 0.74-1.3 kg | Rotate with other fungicides, maximum of 5 applications per year. |
| ▶ Microscopic Sulphur | 92 WP | 19.5 kg | |
| ▶ Supra Captan | 80 WDG | 4.50 kg | May cause injury under some circumstances. |
| ▶ Maestro | 80 DF | 4.50 kg | May cause injury under some circumstances. |
| ▶ Rovral | 50 WP | 1.50 kg | Do not use more than two applications per season for resistance management. |
| ▶ Topas/
Propiconazole | 250 E | 500 mL | Maximum of 5 applications per season. Will also suppress black knot. |
| ▶ Mission | 418 EC | 300 mL | Will also suppress black knot. |
| ▶ Vanguard | 75 WG | 370 g | Do not use more than two applications per season for resistance management. |

Black Knot

- | | | | |
|----------------|--------|---------|------------------------------|
| ▶ Indar | 75 WSP | 140 g | Will also control brown rot. |
| ▶ Supra Captan | 80 WDG | 4.50 kg | Will also control brown rot. |
| ▶ Maestro | 80 DF | 4.50 kg | Will also control brown rot. |

Disease and insects	Products	Formulation	Rate per ha	Notes
Black Knot	▶ Mission	418 EC	300 mL	Suppression only. Will also control brown rot.
	▶ Topas/ Propiconazole	250 E	500 ml	Suppression only. Will also control brown rot.
Plum Curculio				
	▶ Guthion Solupak/Sniper	50 WP	2.0-4.0 kg	See label for changes in use pattern. If temperatures are high apply when shucks have split.
	▶ Imidan	50 WP	3.75 kg	If temperatures are high apply when shucks have split.
	▶ Zolone	FLO	2.00 L	
	▶ Ambush	500 EC	400 mL	Avoid applying synthetic pyrethroids when temperatures rise above 20°C as their activity is reduced.
	▶ Matador/Warrior	120 EC	104 mL	Avoid applying synthetic pyrethroids when temperatures rise above 20°C as their activity is reduced.
	▶ Pounce		520 mL	Avoid applying synthetic pyrethroids when temperatures rise above 20°C as their activity is reduced.
European Red Mite				
	▶ Kelthane	50 WP	3.25 kg	
FIRST COVER (12 days after Shuck Fall)				
Brown Rot	Use one of the fungicides listed under Shuck Fall			
Black Knot	Use one of the fungicides listed under Shuck Fall.			
Plum Curculio	Use one of the fungicides listed under Shuck Fall.			
SECOND COVER (12 days after First Cover)				
Brown Rot	Fruit becomes more susceptible to brown rot as it ripens. During wet weather application intervals should be shortened. Check intervals to harvest prior to applying fungicide.			
	▶ Indar	75 WSP	140 g	Avoid consecutive sprays. Rotate with fungicides in a different class grouping than G 3.
	▶ Lance	WDG	370 g	Do not make more than 2 consecutive applications. Rotate with fungicides in a different class grouping than G 7. Do not apply more than 5 times per season.
	▶ Pristine	WG	0.74-1.3 kg	Rotate with other fungicides, maximum of 5 applications per year.
	▶ Microscopic Sulphur	92 WP	19.5 kg	
	▶ Supra Captan/ Maestro	80 WDG 80 DF	4.50 kg	
	▶ Rovral	50 WP	1.50 kg	Do not use more than two applications per season for resistance management.
	▶ Topas	250 E	500 mL	Apply no more than 2 applications of Topas in the 3 weeks prior to harvest. Maximum of 5 applications per season.
	▶ Mission	418 EC	300 mL	
	▶ Vangard	75 WG	370 g	Do not use more than two applications per season for resistance management.

Disease and insects	Products	Formulation	Rate per ha	Notes
SUMMER SPRAY				
European Red Mite				
	▶ Kelthane	50 WP	3.25 kg	
	▶ Envidor	240 SC	0.75 L	Post bloom application only. One application per year. Active on eggs, nymphal stages and female adults. Evaluate effectiveness of application 7 to 10 days after treatment.
Aphids	It is seldom, if ever, necessary to apply a spray for aphids early in the season. Later in the season, if mealy plum aphid or other aphids threaten to become a problem, apply one of the listed insecticides.			
	▶ Thiodan	50 WP	3.25 kg	
	▶ Malathion	25 WP	8.25 kg	
	▶ Movento	240 SC	365-435 ml	Maximum of 1.12 L/ha per season.
Postharvest Fruit Treatment				
Blue Mould, Grey Mould, Brown Rot, Rhizopus Rot				
	▶ Scholar	50 WP	600g/1000 L	Apply as a dip or drench. Reduces storage rots particularly during wet harvest seasons

Sour Cherry Orchard Management Schedule for Nova Scotia 2009/2010

A guide to insect, mite and disease management in sour cherry orchards

-All rates are per hectare of mature ("standard") trees or full dilute volume of about 3370 litres of water /ha. To adjust for smaller trees and higher density plantings, refer to Tree Row Volume factsheet TF 92002 or Integrated Fruit Production Guide.

-All rates are based on label rates. In some cases, reduced rates can be used based on factors other than tree size. Please refer to specific notes or your agricultural advisor for details.

-Always read the label before using any pesticide. Where differences between the label and this schedule occur, label information prevails.

Disease and Insects	Products	Formulation	Rate per ha	Notes
PREBLOOM (When Blossoms Show White)				
Brown Rot (stem rot and blossom blight stages)	Blossom blight is favoured by wet weather (above 16°C), especially when large numbers of mummies (dried infected fruit) are present in the tree. Apply first spray just before blossoms open, followed by two additional sprays during the bloom period if weather remains favorable for blossom blight.			
	▶ Bravo	500	7.00 L	
	▶ Funginex	190 EC	2.50 L	Prebloom sprays only.
	▶ Elevate	50 WDG	1.70 kg	Do not make more than 2 consecutive applications. Rotate with fungicides in a different class grouping than G 17. Do not apply more than 4 times per season.
	▶ Indar	75 WSP	140 g	Avoid consecutive sprays. Rotate with fungicides in a different class grouping than G 3.
	▶ Lance	WDG	370 g	Do not make more than 2 consecutive applications. Rotate with fungicides in a different class grouping than G 7. Do not apply more than 5 times per season.
	▶ Pristine	WG	0.74-1.00 kg	Will also control leaf spot and suppress powdery mildew. Rotate with other fungicides, maximum of 5 applications per year.
	▶ Supra Captan/ Maestro	80 WDG 80 DF	4.50 kg	May cause injury under some circumstances. Do not apply within 14 days of a Superior Oil treatment.
	▶ Rovral	50 WP	1.50 kg	Do not use more than two applications per season for resistance management.
	▶ Nova	40 W	340 g	Apply when first blossoms are opening; rotate with other fungicides, maximum of 6 applications per season.
	▶ Mission	418 EC	300 mL	Apply first application at early bloom followed by a second at 50 to 75% bloom Will also suppress black knot.
	▶ Topas/ Propiconazole	250 E	500 mL	Apply first application at early bloom followed by a second at 50 to 75% bloom. Will also suppress black knot.

BLOOM

Do not apply insecticides during the bloom period in order to prevent bee poisoning.

Brown Rot (stem rot and blossom blight stages) Use one of the fungicides listed for Prebloom. If weather is wet two spray applications may be required during this stage of development.

PETAL FALL

Black Knot	Only apply a fungicide where there is a history of black knot infections. Black knot should be pruned out prior to bud break. Burn pruned out black knots.			
	▶ Bravo	500	7.00 L	Will also control brown rot.
	▶ Indar	75 WSP	140 g	Will also control brown rot. Avoid consecutive sprays. Rotate with fungicides in a different class grouping than G 3.

Disease and Insects	Products	Formulation	Rate per ha	Notes
SHUCK FALL				
Brown Rot	To avoid resistance development to fungicides alternate between fungicide families.			
	▶ Elevate	50 WDG	1.70 kg	Do not make more than 2 consecutive applications. Rotate with fungicides in a different class grouping than G 17. Do not apply more than 4 times per season.
	▶ Lance	WDG	370 g	Do not make more than 2 consecutive applications. Rotate with fungicides in a different class grouping than G 7. Do not apply more than 5 times per season.
	▶ Pristine	WG	0.74-1.3 kg	Will also control leaf spot and suppress powdery mildew. Rotate with other fungicides, maximum of 5 applications per year.
	▶ Supra Captan/ Maestro	80 WDG 80 DF	4.50 kg	May cause injury under some circumstances. Do not apply within 14 days of a Superior Oil treatment.
	▶ Rovral	50 WP	1.50 kg	Do not use more than two applications per season for resistance management.
	▶ Mission	418 EC	300 mL	Will also suppress black knot.
	▶ Topas/ Propiconazole	250 E	500 mL	Apply no more than 2 applications of Topas in the 3 weeks prior to harvest. Maximum of 5 applications per season.
Plum Curculio				
	▶ Clutch	50 WDG	210 g	Do not apply more than 2 applications per season and do not exceed 420 g/ha/season. This product is toxic to bees exposed to direct treatment or residues on blooming crops. Do not apply during bloom or when bees are present.
	▶ Guthion Solupak/Sniper	50 WP	2.0-4.0 kg	See label for changes in use pattern. If temperatures are high apply when shucks have split.
	▶ Imidan	50 WP	3.75 kg	If temperatures are high apply when shucks have split.
	▶ Zolone	FLO	2.00 L	
	▶ Matador/Warrior	120 EC	104 ml	Avoid applying synthetic pyrethroids when temperatures rise above 20°C as their activity is reduced.
FIRST COVER (12 days after shuck fall)				
Brown Rot	Use one of the fungicides listed under Shuck Fall.			
Plum curculio	Use one of the insecticides listed under Shuck Fall.			
SECOND COVER (12 days after first cover)				
Brown Rot	Use one of the fungicides listed under Shuck Fall.			
Cherry Fruit Fly				
Plum Curculio				
	▶ Guthion Solupak/Sniper	50 WP	2.0-4.0 kg	See label for changes in use pattern.
	▶ Zolone	FLO	2.00 L	
	▶ Imidan	50 WP	3.75 kg	

Disease and Insects	Products	Formulation	Rate per ha	Notes
THIRD COVER				
Brown Rot	Use one of the fungicides listed under Shuck Fall.			
Cherry Fruit Fly				
	▶ Imidan	50 WP	3.75 kg	
	▶ Sevin	XLR Plus	6.25 L	
	▶ Zolone	FLO	2.00 L	
PREHARVEST				
Brown Rot	Check days to harvest intervals before applying a fungicide.			
	▶ Elevate	50 WDG	1.70 kg	Do not make more than 2 consecutive applications. Rotate with fungicides in a different class grouping than G 17. Do not apply more than 4 times per season.
	▶ Indar	75 WSP	140 g	Avoid consecutive sprays. Rotate with fungicides in a different class grouping than G 3.
	▶ Lance	WDG	370 g	Do not make more than 2 consecutive applications. Rotate with fungicides in a different class grouping than G 7. Do not apply more than 5 times per season.
	▶ Pristine	WG	0.74-1.00 kg	Will also control leaf spot and suppress powdery mildew. Rotate with other fungicides, maximum of 5 applications per year.
	▶ Supra Captan/ Maestro	80 WDG 80 DF	4.50 kg	
	▶ Rovral	50 WP	1.50 kg	Do not use more than two applications per season for resistance management.
POSTHARVEST				
Leaf Spot	Only necessary where leaf spot is a problem.			
	▶ Bravo	500	7.00 L	
	▶ Equal	65 WP	2.25 kg	
	▶ Ferbam	76 WDG	6.0 kg	
	▶ Supra Captan/ Maestro	80 WDG 80 DF	4.50 kg	
	▶ Nova	40 W	340 g	Do not apply more than 4 times per season.
	▶ Pristine	WG	0.74-1.00 kg	Rotate with other fungicides, maximum of 5 applications per year.

Sweet Cherry Orchard Management Schedule for Nova Scotia 2009/2010

A guide to insect, mite and disease management in sweet cherry orchards

-All rates are per hectare of mature ("standard") trees or full dilute volume of about 3370 litres of water /ha. To adjust for smaller trees and higher density plantings, refer to Tree Row Volume factsheet TF 92002 or Integrated Fruit Production Guide.

-All rates are based on label rates. In some cases, reduced rates can be used based on factors other than tree size. Please refer to specific notes or your agricultural advisor for details.

-Always read the label before using any pesticide. Where differences between the label and this schedule occur, label information prevails.

Disease and Insects	Products	Formulation	Rate per ha	Notes
PREBLOOM (When Blossoms Show White)				
Brown Rot (stem rot and blossom blight stages)	Blossom blight is favoured by wet weather (above 16°C), especially when large numbers of mummies (dried infected fruit) are present in the tree. Apply first spray just before blossoms open, followed by two additional sprays during the bloom period if weather remains favorable for blight.			
	▶ Funginex	190 EC	2.50 L	Prebloom sprays only.
	▶ Elevate	50 WDG	1.70 kg	Do not make more than 2 consecutive applications. Rotate with fungicides in a different class grouping than G 17. Do not apply more than 4 times per season.
	▶ Indar	75 WSP	140 g	Avoid consecutive sprays. Rotate with fungicides in a different class grouping than G 3.
	▶ Lance	WDG	370 g	Do not make more than 2 consecutive applications. Rotate with fungicides in a different class grouping than G 7. Do not apply more than 5 times per season.
	▶ Pristine	WG	0.74-1.3 kg	Will also control leaf spot and suppress powdery mildew. Rotate with other fungicides, maximum of 5 applications per year.
	▶ Supra Captan/ Maestro	80 WDG 80 DF	4.50 kg	May cause injury under some circumstances. Do not apply within 14 days of a Superior Oil treatment.
	▶ Rovral	50 WP	1.50 kg	Do not use more than two applications per season for resistance management.
	▶ Nova	40 W	340 g	Apply when first blossoms are opening, rotate with other fungicides, maximum of 6 applications per season.
	▶ Mission	418 EC	300 mL	Will also suppress black knot.
	▶ Topas/ Propiconazole	250 E	500 ml	Apply first application at early bloom followed by a second at 50 to 75% bloom. Will also suppress black knot.

BLOOM

Do not apply insecticides during the bloom period in order to prevent bee poisoning.

Brown Rot (stem rot and blossom blight stages) Use one of the fungicides listed for Prebloom. If weather is wet two spray applications may be required during this stage of development.

PETAL FALL

Black Cherry Aphid				
	▶ Movento	240 SC	365-435mL	Maximum amount allowed per season is 1.12 L/ha
	▶ Thiodan/ Endosulfan	50 WP 50 W	4.50 kg	
	▶ Zolone	FLO	2.00 L	

Disease and insects	Products	Formulation	Rate per ha	Notes
SHUCK FALL				
Brown Rot	To avoid resistance development to fungicides alternate between fungicide families.			
	▶ Elevate	50 WDG	1.70 kg	Do not make more than 2 consecutive applications. Rotate with fungicides in a different class grouping than G 17. Do not apply more than 4 times per season.
	▶ Indar	75 WSP	140 g	Avoid consecutive sprays. Rotate with fungicides in a different class grouping than G 3.
	▶ Lance	WDG	370 g	Do not make more than 2 consecutive applications. Rotate with fungicides in a different class grouping than G 7. Do not apply more than 5 times per season.
	▶ Pristine	WG	0.74-1.3 kg	Will also control leaf spot and suppress powdery mildew. Rotate with other fungicides, maximum of 5 applications per year.
	▶ Supra Captan/ Maestro	80 WDG 80 DF	4.50 kg	May cause injury under some circumstances. Do not apply within 14 days of a Superior Oil treatment.
	▶ Rovral	50 WP	1.50 kg	Do not use more than two applications per season for resistance management.
	▶ Mission	418 EC	300 mL	Will also suppress black knot.
	▶ Topas/ Propiconazole	250 E	500 ml	Apply no more than 2 applications of Topas in the 3 weeks prior to harvest. Maximum of 5 applications per season.
Plum Curculio				
	▶ Guthion Solupak/Sniper	50 WP	2.00-4.00 kg	See label for changes in use pattern. If temperatures are high apply when shucks have split.
	▶ Zolone	FLO	2.00 L	
	▶ Matador/Warrior	120 EC	104 ml	Avoid applying synthetic pyrethroids when temperatures rise above 20°C as their activity is reduced.
FIRST COVER (12 days after shuck fall)				
Brown Rot	Use one of the fungicides listed under Shuck Fall.			
Plum curculio	Use one of the insecticides listed under Shuck Fall.			
SECOND COVER (12 days after first cover)				
Brown Rot	Use one of the fungicides listed under Shuck Fall			
Cherry Fruit Fly				
Plum Curculio				
	▶ Guthion Solupak/Sniper	50 WP	2.00-4.00 kg	See label for changes in use pattern.
	▶ Zolone	FLO	2.00 L	

Disease and Insects	Products	Formulation	Rate per ha	Notes
THIRD COVER				
Brown Rot	Use one of the fungicides listed under Shuck Fall			
Cherry Fruit Fly				
	▶ Sevin	XLR Plus	6.25 L	
	▶ Zolone	FLO	2.00 L	
PREHARVEST				
Brown Rot	Check days to harvest intervals before applying a fungicide.			
	▶ Elevate	50 WDG	1.70 kg	
	▶ Indar	75 WSP	140 g	Avoid consecutive sprays. Rotate with fungicides in a different class grouping than G 3.
	▶ Lance	WDG	370 g	Do not make more than 2 consecutive applications. Rotate with fungicides in a different class grouping than G 7. Do not apply more than 5 times per season.
	▶ Pristine	WG	0.74-1.0 kg	Will also control leaf spot and suppress powdery mildew. Rotate with other fungicides, maximum of 5 applications per year.
	▶ Supra Captan/ Maestro	80 WDG 80 DF	4.50 kg	
	▶ Rovral	50 WP	1.50 kg	Do not use more than two applications per season for resistance management.
POSTHARVEST FRUIT				
Blue Mould, Grey Mould, Brown Rot, Rhizopus Rot				
	▶ Scholar	50 WP	600g/1000 L	Apply as a dip or drench. Reduce storage rots particularly during wet harvest seasons
POST HARVEST ORCHARD				
Leaf Spot	May only be a problem where sweet cherries are beside sour cherries.			
	▶ Equal	65 WP	2.25 kg	
	▶ Ferbam	76 WDG	5.78-6.60 kg	
	▶ Pristine	WG	0.74-1.00 kg	
	▶ Supra Captan/ Maestro	80 WDG 80 DF	4.50 kg	