

A Guide To FRUIT TREE SPRAYS For the Home Garden

Introduction

Revised September 2006

As an owner of backyard fruit trees, you should make every effort to control the insect pests and diseases listed in this guide to reduce risks to your neighbours and especially to nearby commercial orchards. Use gardening practices that discourage or prevent development of pest problems. Consult local nurseries, garden centres, Master Gardeners, or the *Home & Garden Pest Management Guide for BC* for information on fruit tree pests and management practices that prevent pest problems and improve fruit quality and quantity.

This guide provides cultural practices and recommended pesticides to control common diseases and insect pests of fruit trees in the home garden. Only use pesticides when all other efforts to protect the fruit and trees have failed.

Select disease-resistant varieties when planting. Prune trees in dormant season or summer to open up canopy to improve exposure of fruit to sun, air circulation and spray coverage of leaves and fruit. Remove all fruit from the trees at harvest

and destroy any insect-infested or disease-infected fruit to reduce the risk of problems the following year.

The following tables list only the common names of pesticides (e.g. carbaryl, ferbam) that may appear on the labels of products with different trade names. The common name appears in the guarantee statement on the front of the product label.

Always read the pesticide label or enclosure for proper application rates, mixing instructions, and safety precautions. After spraying trees, wash spray residues off vegetation beneath and around the trees. Be careful not to spray nearby vegetables, especially when close to harvest. Contact with treated foliage should be avoided for two days after spraying.

Commercial pest control companies with licensed pesticide applicators have access to newer and more effective agricultural pest control products that are not available to the home gardener.

Pre-harvest Intervals (Days required between pesticide application and fruit harvest)

Pesticide		Apple	Apricot	Cherry	Peach	Pear	Plum
<i>Bacillus thuringiensis</i> *	(I)	0	0	0	0	0	0
captan ¹	(F)	7	7	7	7	7	7
carbaryl	(I)	7	7	7	7	7	7
copper oxychloride*	(F)	N/R	1	1 (sour)	1	1	N/R
copper sulphate*	(F)	1	N/R	N/R	1	N/R	N/R
dicofol	(M)	7	14	7	14	7	7
dimethoate ³	(I)	28	N/R	21	N/R	14	N/R
endosulfan	(I)	N/R	N/R	N/R	15	N/R	15
ferbam ²	(F)	7	N/R	7	21	7	14
folpet	(F)	1	N/R	N/R	N/R	N/R	N/R
lime sulphur*	(F)			dormant spray only			
malathion	(I)	7	7	7	7	7	7
permethrin	(I)	7	N/R	N/R	7	7	7
phosalone ²	(I)	7	N/R	7	21	7	14
insecticidal soap*	(I)	0	0	0	0	0	0
sulphur*	(F)	1	N/R	1	1	1	1

F = Fungicide, I = Insecticide, M = Miticide, N/R = Not Registered, *Organic

¹ Only available in mixtures of captan + carbaryl or captan + malathion + carbaryl

² Only available in mixtures of ferbam + phosalone

³ Dimethoate can only be applied to backyard fruit trees by licensed pesticide applicators.

Pesticide Regulations

Gardeners can only use those pesticide products that include the word **DOMESTIC** on the label.

Always keep pesticides in lockable, cool, ventilated, dry storage. Keep powders and dusts dry and cool and do not freeze liquid products.

Poison symbols on the label indicate the toxicity in diminishing order:

DANGER



POISON

WARNING



POISON

CAUTION



POISON

Apples

Timing	Pests/Comments	Suggested Chemicals	Special Instructions/ Cultural practices
Late Dormant to 1/2" Green	Aphids, Mites & Scale Insects (lime sulphur can harm beneficial mites)	Dormant Oil or Lime Sulphur	Do not apply below 4°C or if freezing temperatures forecast before the spray is dry. Thorough coverage is necessary.
Pink bud to Petal Fall, Summer	Leafrollers	<i>Bacillus thuringiensis</i> (Bt) or Carbaryl or Malathion	Apply Bt during bloom and/or petal fall; apply later in day and no threat of rain within 24 hours after use. Thin fruit to singles to reduce damage.
Pink bud and/or Petal Fall	Powdery Mildew	Sulphur	Prune branch tips with white powdery appearance.
Pink bud and/or Petal Fall	Apple Scab	Captan¹ or Folpet or Sulphur	Rake up and remove fallen leaves in the fall or spring.
10 Days after Petal Fall to September	Codling Moth	Malathion or Phosalone² or Carbaryl	Apply when codling moth damage first appears (stings) and at intervals specified on the labels. Destroy all infested fruit. Thin fruit to singles to reduce damage.
10 Days after Petal Fall	Powdery Mildew	Sulphur	
10 Days after Petal Fall	Apple Scab	Captan¹ or Folpet or Sulphur	Wet years only. See cultural practice above.
Summer	Aphids	Insecticidal Soap or Malathion or Phosalone²	Spray only if fruit/leaves become sticky with honeydew and if ladybugs or other predatory insects are not present.
Summer	Apple Maggot	Carbaryl or Phosalone + ferbam or Permethrin	Also treat crabapples and hawthorn trees. Destroy infested fruit before maggot leaves fruit (before harvest).

Pears

Timing	Pests/Comments	Suggested Chemicals	Special Instructions/ Cultural practices
Full Dormant	Blister Mites, Rust Mites, Psylla, Scale, Aphids	Dormant Oil Dormant Oil plus Lime Sulphur	See instructions under apples. Good coverage essential.
Pink to Petal Fall, Summer	Leafrollers	<i>Bacillus thuringiensis</i> (Bt) or Carbaryl or Malathion	See special instructions under apples.
When present	Pear Slug	Insecticidal Soap	
Summer	Codling Moth	Carbaryl or Phosalone²	See instructions under apples.
When present	Mites	Insecticidal Soap or Dicofol or Malathion or Sulphur	

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² Only available to home gardeners in mixtures of ferbam + phosalone.

Apricots

Timing	Pests/Comments	Suggested Chemicals	Special Instructions/ Cultural practices
Petal Fall	Peach Twig Borer		Check for and destroy infested shoots (flagging). Leafroller sprays will help control twig borer.
Pink	Brown Rot Blossom and Shoot Blight	Captan¹	Remove and destroy mummified fruit from previous year before bloom. Fungicide/insecticide mixtures should not be used at bloom to protect bees.
Petal Fall, Summer	Leafrollers	<i>Bacillus thuringiensis</i> or Carbaryl or Malathion	See special instructions under apple.
Husk Fall	Coryneum Blight	Ferbam²	Treatment at husk fall helps to prevent fruit infection.
Husk Fall	Peach Twig Borer		Check for and destroy infested shoots (flagging). Leafroller sprays will help to control twig borer.
Husk Fall	Earwigs	Tangle Foot	Apply in narrow band around trunk at waist level when earwigs first noticed. Maintain to harvest. Trap earwigs in rolled newspaper or cardboard and destroy.
Ripening fruit	Brown Rot (wet years only)	Captan¹	Collect and destroy rotten fruit from the tree and the ground. Observe pre-harvest intervals.
Early July and Mid July	Peach Tree Borer		Examine crown area for larvae under bark and destroy (look for masses of sap or pitch).
September	Coryneum Blight	Fixed Copper	Fall copper treatments help to prevent twig cankers. Prune out infected twigs during the dormant season.

Cherries

Timing	Pests/Comments	Suggested Chemicals	Special Instructions/ Cultural practices
Petal Fall to Harvest	Leafrollers	<i>Bacillus thuringiensis</i> or Carbaryl or Malathion	See special instructions under apples. Observe pre-harvest intervals.
When present	Aphids	Insecticidal Soap or Phosalone² or Malathion	Sprays for fruit fly will control aphids and pear slugs. See instructions under apple.
Yellow to Pink Colour Change to Harvest	Cherry Fruit Fly	Dimethoate³ or Carbaryl or Phosalone²	Dimethoate can burn some varieties of cherry. Apply dimethoate first as fruit changes color, then apply another product to protect fruit until harvest. Alternatively, apply other products at intervals specified on the labels, in rotation, beginning as described above. Observe pre-harvest intervals. Remove all fruit at harvest.
Ripening fruit	Brown Rot (wet years only)	Captan¹ or Ferbam²	Collect and destroy rotten fruit from the tree and the ground. Observe pre-harvest intervals.

¹ Only available to home gardeners in mixtures of captan + carbaryl or captan + malathion + carbaryl

² Only available to home gardeners in mixtures of ferbam + phosalone

³ Dimethoate can only be applied to backyard fruit trees by licensed pesticide applicators.

Peaches and Nectarines

Timing	Pests/Comments	Suggested Chemicals	Special Instructions/ Cultural practices
Dormant	Mites, Scale, Aphid	Dormant Oil	See instructions under apples. Lime sulphur should be applied just before bud break for Leaf Curl control.
	Leaf Curl, Mites, Scale, Aphid	Dormant Oil plus Lime Sulphur	
Pink Stage	Peach Twig Borer		Check for and destroy infested shoots (flagging).
Pink	Brown Rot Blossom Blight	Captan ¹	Remove and destroy mummified fruit from previous year before bloom. Fungicide/insecticide mixtures should not be used at bloom to protect bees.
Petal Fall	Peach Twig Borer		Check for and destroy infested shoots (flagging).
Husk Fall	Coryneum Blight	Ferbam ²	Treatment at husk fall helps to prevent fruit infection.
When first noticed	Earwigs	Tangle Foot	Apply in narrow band around trunk at waist level and maintain until harvest.
Early July and mid July	Peach Tree Borer	Endosulfan	Spray trunk and lower limbs at 2 week interval. Examine crown area for larvae under bark and destroy (look for masses of sap or pitch).
Ripening fruit	Brown Rot (wet years only)	Captan ¹	Collect and destroy rotten fruit from the tree and the ground. Observe pre-harvest intervals.
September	Coryneum Blight, Leaf Curl	Fixed Copper or Copper Sulphate	Prune out infected twigs during the dormant season.

Prunes and Plums

Timing	Pests/Comments	Suggested Chemicals	Special Instructions/ Cultural practices
In some years no sprays are required on prunes and plums.			
Petal Fall to Harvest	Leafrollers	<i>Bacillus thuringiensis</i> or Malathion or Carbaryl	See special instructions under apples. Observe pre-harvest intervals.
Early July and mid July	Peach Tree Borer	Endosulfan	Spray trunk and lower limbs at 2 week interval. Examine crown area for larvae under bark and destroy (look for masses of sap or pitch).
Ripening fruit	Brown Rot (wet years only)	Captan ¹ or Ferbam ²	Collect and destroy rotten fruit from the tree and the ground. Observe pre-harvest intervals.

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