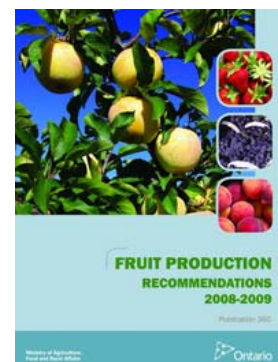


Fruit Production Recommendations 2008-2009

Ontario Ministry of Agriculture, Food and Rural Affairs



Chapter 8: Tree Nuts

Filbert/Hazelnut Calendar

Read the label and follow all safety precautions.

Diseases and Insects	Materials	Amount	Comments
Dormant			
Eastern filbert blight	<ul style="list-style-type: none"> • Guardsman Copper Oxychloride 50 or Copper Spray 	3.00 kg/ha 3.00 kg/ha	Apply during the spring at bud swell and repeat at 10–14 day intervals for a maximum of three applications per year. Use 3.0 kg/ha on small trees and up to 9.0 kg/ha on large trees. May be applied up to one day before harvest.
Prebloom			
Leafrollers	<ul style="list-style-type: none"> • Dipel 2X DF 	1.12 kg/ha	Apply when small larvae are present. Apply in 600–800 L/ha using an orchard air-blast sprayer. Repeat in 7–10 days or after bloom if populations are large. Although Dipel is not toxic to bees, avoid application during bloom. Use 1.6 kg/ha for large or mature trees.
Summer			
Aphids	<ul style="list-style-type: none"> • Lagon 480 E • Malathion 500 EC 	5.00 L/ha 2.50 L/1,000L	Apply primarily on younger trees when aphids appear. Use reduced rate for smaller, immature trees. Do not apply within 45 days of harvest. One application per year. Malathion: Use on non-bearing trees only. Apply when aphid colonies are still young, with enough water to thoroughly wet the leaves, throughout the canopy.
Postharvest			
Bacterial blight	<ul style="list-style-type: none"> • Guardsman Copper Oxychloride 50 or Copper Spray 	3.00 kg/ha 3.00 kg/ha	Apply the first spray in late August or early September before the start of the fall rains and nut drop. Repeat after harvest at leaf fall. Repeat in early spring just before leaf bud break. Use 3.0 kg/ha on small trees, and up to

9.0 kg/ha on large trees in proportionately more water.

TABLE 8-1. Products Used on Nut Crops

Use this table as a guide but refer to product label for specific information.

The **preharvest interval** is the number of days between the last spray and first harvest.

The **maximum number of applications** is the labelled maximum number for the growing season and may be higher than what is recommended for resistance management or for the preservation of beneficial insects.

Product name	Common name	Group	Preharvest interval (days)	Maximum # of applications per season
Copper Spray ^{1, 2}	copper from copper oxychloride	inorganic	40	3
Dipel 2X DF ^{1, 2, 3}	<i>Bacillus thuringiensis</i>	B.t. microbial	1	
Guardsman Copper Oxychloride 50 ²	copper from copper oxychloride	inorganic	1	3
Lagon 480 E ²	dimethoate	organophosphate	45	1
Malathion 500 EC ^{1, 2, 3}	malathion	organophosphate	for use on non-bearing only	
Surround WP ¹	kaolin		0	
¹ Walnut ² Filbert/hazelnut ³ Pecan and sweet chestnut				