

# Backyard Orchard: Stone Fruits

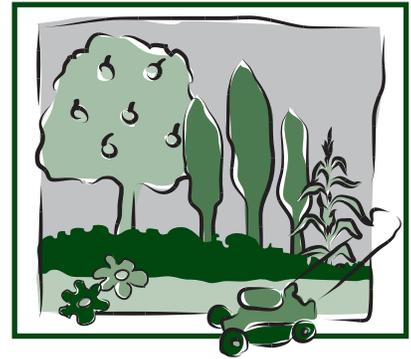
Fact Sheet No. 2.804

Gardening Series | Fruits and Vegetables

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Peaches, plums, cherries and apricots are all stone fruits that can be grown in the lower altitudes of Colorado. Insects and diseases that affect stone fruits vary with location, year and fruit type. Peaches, cherries and plums require a dormant oil spray to control aphids wherever they are grown, and cherries require treatments for western cherry fruit fly where it is present. All stone fruits require treatment for peachtree borer. Cytospora canker is a serious and widespread disease of stone fruits. Other foliar diseases can appear when environmental conditions are right for infection.

process that identifies and reduces risks from pests and pest management related strategies. IPM coordinates the use of pest biology, environmental information, and available technology to prevent unacceptable levels of pest damage by the most economical means, while minimizing risk to people, property, resources, and the environment. IPM provides an effective strategy for managing pests in all arenas from developed agricultural, residential, and public lands to natural and wilderness areas. IPM provides an effective, all encompassing, low-risk approach to protect resources and people from pests."



**Table 1. Insect and diseases that commonly affect Colorado stone fruits.**

	Peach/ Nectarine	Plum	Cherry	Apricot	
Green peach aphid	X	X			Common and very damaging
Black cherry aphid			X		Can be very damaging
Peach twig borer	X		X		Most common in Western CO
Oriental fruit moth	X		X		Palisade area only
Peachtree borer	X	X	X	X	Common and widespread
Western cherry fruit fly			X		Present across much of the state
Pear slug			X		More common in some years
Cytospora canker	X	X	X	X	Widespread and damaging
Coryneum blight	X	X	X	X	A threat with extended wet

## Integrated Pest Management (IPM)

When dealing with any pest, it is always best to practice integrated pest management. This is defined by the USDA as: "...A science-based, decision-making

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## Spraying Tree Fruit

Pesticides for use on backyard fruit trees are typically available at garden centers and are sold under many trade names and formulations. Label use instructions are constantly changing. For that reason, products are referred to by active ingredient. Not all products containing a given active ingredient may be labeled for use on all crops. Always read and follow label directions when using any pesticide.

Pesticides should be applied to the entire tree including upper and lower surface of the leaves unless otherwise specified. It is important to keep trees properly pruned to a size that is appropriate

## Quick Facts

- Peaches, plums, cherries and apricots are all stone fruits that can be grown in the lower altitudes of Colorado. Insects and diseases that affect stone fruits vary with location, year and fruit type.
- Cytospora canker is a fungal disease that damages bark and underlying wood tissue and results in an amber- to brown-colored gum on trunk of branches.
- Peach twig borer and Oriental fruit moth can cause severe twig dieback and damage to fruit if not controlled.
- When dealing with any pest, it is always best to practice integrated pest management (IPM). IPM is a science-based, decision-making process that identifies and reduces risks from pests and pest management related strategies.

- It is important to time spraying when bees and other pollinators will not be actively visiting flowers to collect pollen and nectar.

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for the spray equipment that is used. Peaches and nectarines need to be thinned so the fruits do not touch each other to allow complete spray coverage.

## Aphid Control with Dormant Oils

Dormant sprays should be applied in early spring as close to leaf bud break as possible. They can be applied as late as when there is ¼" green showing from leaf buds. Oils work by smothering aphid eggs and immature and adult insects, so complete spray coverage is essential.

Green peach aphid attacks peaches and plums, while black cherry aphid attacks cherries in the early spring. These aphids spend the winter as eggs laid at the base of leaf buds. If allowed to hatch and reproduce, aphid feeding can distort and weaken new growth causing production problems the following year. Once aphids become established and are allowed to distort leaf growth, control is difficult. Dormant oil sprays also help with control of peach twig borer and oriental fruit moth which spend the winter as larvae in protected spots on the bark. Dormant oils can be tank mixed with malathion, permethrin or other labeled residual contact insecticides to improve performance.

## Western Cherry Fruit Fly Management

Western cherry fruit fly (WCFF) is now present in most areas of Colorado where cherries are grown. Left uncontrolled, fruit will be infested with maggots, which has a major impact on quality and storage life. WCFF control is typically done with a series of contact residual insecticide applications aimed at adult flies as they land to lay eggs. This requires sprays on a 7-10 day schedule beginning when flies become active, usually as early maturing cherries begin to show color. Yellow sticky traps are often used to determine when adult WCFF begin flying. The spray schedule should begin 7-10 days after the first flies are captured.

Commercial growers have had excellent control with a spinosad- based bait (GF-120, DowAgrosciences). It can be applied to spots on the trunk of the

tree where adult flies are attracted and killed. Unfortunately, it is available in only in gallon or larger quantities, but it is the best option for western cherry fruit fly control for those gardeners for whom it is available.

## Peach Twig Borer/Oriental Fruit Moth

Peach twig borer (PTB) and oriental fruit moth (OFM) have similar life histories and management is the same for both. OFM is limited in distribution to the area around Palisade, while PTB is found statewide. These insects overwinter as larvae in a silken cocoon on protected areas on the trunk of stone fruit trees. Dormant oils combined with a contact insecticide are effective in controlling this stage. First generation PTB/OFM larvae bore into new twig growth, causing them to wilt and die, referred to as shoot strikes. Larvae of succeeding generations may move to fruit where they chew a small entry hole near the stem end, especially on peaches. If shoot strikes are present in a tree during shoot growth a foliar insecticide may be necessary to control first generation larvae. Monitor developing fruit for injury from second generation and apply an insecticide to the entire tree if it is found.

Dates indicated are approximate. They vary with elevation, exposure and variety. Stage of bud development (i.e., pink stage) is a more dependable way to schedule needed sprays.

## Peachtree Borer

Peachtree borer, also known as crown borer, life history and control is covered in detail in Extension Fact Sheet 5.566: Peach Tree Borer. Preventative treatments should be with a residual insecticide such as permethrin, or carbaryl aimed at the base of the tree. Two or three treatments are necessary, late June at lower altitude, then again in three weeks until early August. Check stone fruit trees for the peachtree borer as soon as the soil thaws in the spring if the July and August treatments were not made the preceding year.

## Pear Slugs

Pear or cherry slugs, actually the larvae of a sawfly which resemble slugs, can defoliate cherries (sweet and tart varieties) in mid to late summer. Repeated annual mid-summer defoliation can weaken trees and larvae should be controlled if present in high numbers. Their biology and management is covered in Fact Sheet 5.560: Pear Slugs.

**Table 2. Spray timing for common stone fruit pests.**

Dormant	Peach, plum, cherry	Aphids, PTB/OFM	Oil, may be mixed with contact residual insecticide.
First color on fruit, exact timing determined by trapping	Cherry	WCFF	Residual contact insecticide, spinosad bait.
Post bloom, as determined by inspection	Peach, apricot	PTB/OFM	Residual contact insecticide.
Late June/early July	All stone fruits, including ornamental <i>Prunus</i>	PB	Basal drench with residual contact insecticide.
Post harvest, as needed		Pear slug	Residual contact insecticide.
* PTB (peach twig borer); OFM (oriental fruit moth); WCFF (western cherry fruit fly); PB (peach-tree borer)			

<sup>1</sup>Oriental fruit moth is limited mainly to the Palisade and East Orchard Mesa areas of Mesa County.

## Cytospora Canker

Cytospora canker is a fungal disease that damages bark and underlying wood tissue and results in an amber- to brown-colored gum on trunk or branches. It can be an important disease in backyard stone fruit production. Management to reduce stress, sanitation and timely pruning are important in minimizing the impact of Cytospora. The biology and management of this disease are covered in detail in Fact Sheet 2.953: Cytospora Canker in Tree Fruit Crops.

## Protecting Pollinators and Crops

It is important to time spraying when bees and other pollinators will not be actively visiting flowers to collect pollen and nectar. These insects are generally active during the day so spraying early in the morning or in the evening when they are not present will help mitigate any unintended exposure to other non-target species.

Table 3. Insecticides for use on stone fruits, listed by active ingredient. Many of these products are found only at specialty garden centers. Always read and follow label directions.			
Common Name	Chemical class	Target pests	Comments
acetamiprid	Neonicotinoid	Aphids, WCFF	Do not use before petal fall. 12 day minimum between sprays.
carbaryl	Carbamate	WCFF, PTB/OFM, PB	Use during 4 - 6 weeks after bloom can thin fruit; avoid using more than once in mid-season as use can lead to spider mite problems.
malathion	Organophosphate	Aphids, WCFF	REI: when dry. Maximum one week residual.
permethrin	Pyrethroid	WCFF, PTB/OFM, PB	Do not use after petal fall on apple or after delayed dormant on pear.
petroleum or mineral oil	Hydrocarbon	Aphids, PTB	Can cause plant injury if applied at concentrations higher than 2%.
Potassium salt of fatty acid	Soap	Aphids, pear slug	Contact insecticide, no residual. Many products certified organic.
pyrethrum	Botanical	Aphids	Contact insecticide with no residual. Some formulations are certified organic.
spinosad	Heterocyclic	WCFF, PTB/OFM, pear slug	Some formulations approved for organic use. Maximum seven day residual.
* REI (restricted entry interval); PTB (peach twig borer); OFM (oriental fruit moth); WCFF (western cherry fruit fly); PB (peachtree borer)			

*This fact sheet contains up-to-date information for homeowner control of insect and disease problems on tree fruits. Insect and disease controls have been combined in an easy-to-follow format. Recommended chemicals usually are readily available to homeowners. In some cases, the concentration of the product listed and what is available locally may differ.*

*Always read the label directions. Labels often are updated yearly or more often. If there is a conflict between recommendations in this fact sheet and the product label, **always follow the product label.***

## References

For additional information, see the following fact sheets:

- 2.800, Backyard Orchard: Apples and Pears
- 2.953, Cytospora Canker in Tree Fruit Crops
- 5.560, Pear Slugs
- 5.566, Peach Tree Borer

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