Apricots, cherries, peaches, and plums are collectively known as stone fruits. Stone fruits can grow in many areas of Wisconsin, but they are often short-lived due to their sensitivity to cold winter temperatures. They are also susceptible to many disease and insect pests. These pests must be managed to produce quality crops and to ensure survival of the trees. This bulletin is a companion to Extension publication Growing Apricots, Cherries, Peaches, and Plums in Wisconsin (A3639), which describes pests and cultural practices in greater detail.

Chemical pesticides are frequently a part of a well-managed orchard. However, they are only one tool in the overall management scheme. Other management practices such as pruning, fertilizing, irrigating, and choosing appropriate plant materials are equally important to the health of the orchard. Pesticides won’t compensate for poor management practices or inappropriate species or cultivars.

**Disease management**

**Cherry leaf spot** can cause severe early defoliation of sweet and tart cherry and some other stone fruits. Removing and destroying fallen leaves in the autumn or early spring will help reduce the population of the fungal pathogen. The fungus infects through stomates (breathing pores) of leaves, so fungicide treatment should start as the leaves are unfolding in the spring. This usually coincides with petal fall.

**Peach leaf curl** of peach and nectarine causes puckered, discolored leaves. A related disease on plum, **plum pockets**, causes swollen bladder-like fruit. These diseases can be controlled by a single spray after leaf fall in the autumn or before bud swell in early spring. Sprays applied later in the spring or summer will be ineffective.

**Black knot** causes dark brown or black swellings on the branches of plum and cherry trees. By April 1, prune all infected branches and burn or remove them; spraying alone will not control the disease.

The fungus that causes **brown rot** overwinters in infected fruit, or “mummies,” on the ground or in the tree. Remove mummies and destroy them by burning, burying, or composting. If the disease has been a problem in previous years, and the weather is warm and rainy, apply a fungicide at early bloom. Later, if conditions are warm, wet, and humid, additional applications may be needed at 10- to 14-day intervals beginning about 3 weeks before harvest.

Diseases caused by **viruses** can be prevented by planting certified virus-free trees from a reputable nursery.

**Insect management**

**Aphids** may be prevalent if trees were not treated with a dormant spray. Use an insecticidal soap when aphids first appear.

**Japanese beetles** feed on the fruit and foliage of all stone fruits and can cause substantial injury, especially in the 2–3 weeks before harvest. The small (¼ inch) metallic green and reddish beetles feed from late June through early August. Insecticides will kill the adults present, but others may rapidly invade. Traps are available; place them at least 50 feet away from plants you wish to protect as they attract beetles. If you have just a few small fruit trees, you can protect them by placing floating row covers over the trees just after blossoms have fallen to allow pollination.

Reduce **peachtree borers** and **lesser peachtree borers** by spraying or painting the trunks and lower limbs with a product containing permethrin, esfenvalerate, or endosulfan. Follow label directions on timing, rates, and limitations. Use an asphalt-based tree wound paint to reduce borer problems. Carefully clean any existing wounds—such as winter cracks, lawn mower injury or borer sites—down to sound wood and then thoroughly paint them with tree wound dressing as soon as weather conditions allow. Treat fresh wounds as soon as they occur.

**Weed management**

Weeds or other vegetation may reduce yields and fruit quality by competing for light, water, and nutrients. They may also harbor insect pests or diseases. Keep a vegetation-free area of 2–3 feet in radius around each tree. This also protects tender tree trunks from damage caused by mowers and string trimmers.

Vegetation may be controlled either mechanically or chemically. Mechanical methods include shallow (1–2 inches deep) cultivation every few weeks with a sharp hoe or shovel, being careful not to damage the trunk or roots. A mulch of shredded bark, wood chips, sawdust, straw, or other
organic materials that will stop weeds may also be used. Do not mound mulches up around the trunk. Apply them in a “donut” fashion around the trunk. Mulches need to be renewed each year or two to remain effective.

Chemical herbicides are registered for use on specific crops. Crop information is given on the label. For controlling weeds that are already growing, apply glyphosate. Glyphosate kills actively growing annual and perennial weeds. It is a non-selective, non-residual herbicide and will kill desirable plants as readily as weeds. It is selective only through selective application. Before spraying glyphosate, thoroughly wrap trunks of young trees with plastic wrap or aluminum foil. Remove and discard the wrap shortly after treating. Glyphosate must be used according to label directions.

Spraying tips
- Do not apply the following materials to stone fruits within the specified period before harvest:
  - carbaryl  1 day
  - Imidan  14 days
  - malathion  3 days
  - methoxychlor  14 days
- Mix fungicides and insecticides together and apply at one time. However, if using hydrated lime, apply it separately. Do not use captan in the same spray with either lime or copper materials.
- When spraying, cover plants thoroughly with any of the suggested materials for maximum benefit.

Suggested spray schedule—read the text of this bulletin before deciding to spray

<table>
<thead>
<tr>
<th>When to spray</th>
<th>Pests</th>
<th>Material per gallon water*</th>
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</thead>
<tbody>
<tr>
<td><strong>Dormant</strong>—before growth begins in spring</td>
<td>Diseases  peach leaf curl, plum pockets</td>
<td>1 cup lime sulfur (liquid) or Bordeaux mixture¹ or chlorothalonil (Daconil)¹ or 1 tbsp ferbam</td>
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<tr>
<td></td>
<td>Insects  aphids, mites</td>
<td>1 cup lime sulfur (liquid)</td>
</tr>
<tr>
<td><strong>Early bloom</strong>—10% of blossoms open</td>
<td>Diseases  brown rot</td>
<td>1 tsp Rovral 50WP or 2 tbsp captan² 50% WP</td>
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<tr>
<td></td>
<td>Insects  Do not apply insecticides during bloom. Protect pollinator insects.</td>
<td></td>
</tr>
<tr>
<td><strong>At petal fall</strong>—when 90% of blossoms have fallen</td>
<td>Diseases  cherry leaf spot</td>
<td>2 tbsp captan² 50% WP or chlorothalonil (Daconil)¹</td>
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<tr>
<td></td>
<td>Insects  curculio, destructive prune moth, eyespotted bud moth, fruittree leafroller, redbanded leafroller</td>
<td>2 tbsp carbaryl 50% WP or 2 tbsp methoxychlor 50% WP or 3 tbsp Imidan 12.5% WP</td>
</tr>
<tr>
<td><strong>10 days after petal fall</strong> Spray every 10–14 days until fruit begins to ripen</td>
<td>Diseases  cherry leaf spot</td>
<td>2 tbsp captan² 50% WP</td>
</tr>
<tr>
<td></td>
<td>Insects  cherry fruit flies, cherry fruitworm, curculio, Japanese beetles, leafrollers</td>
<td>2 tbsp carbaryl 50% WP or 3 tbsp Imidan 12.5% WP</td>
</tr>
<tr>
<td><strong>3–21 days before harvest</strong></td>
<td>Diseases  brown rot</td>
<td>same as Early Bloom</td>
</tr>
<tr>
<td><strong>2–3 weeks after harvest</strong></td>
<td>Diseases  cherry leaf spot</td>
<td>2 tbsp captan² 50% WP or chlorothalonil (Daconil)¹</td>
</tr>
</tbody>
</table>

* tbsp = level tablespoon; tsp = level teaspoon; WP = wettable powder.
¹Commercial formulations vary. Use the amount specified on the product label.
²Captan has a 4-day re-entry period. Some all-purpose fruit sprays containing captan may have different restrictions. Follow label directions.

References to pesticide products in this publication are for your convenience and are not an endorsement of one product over other similar products. You are responsible for using pesticides according to the manufacturer’s current label directions. Follow directions exactly to protect the environment and people from chemical exposure. Failure to do so violates the law.