

# Backyard Peach & Stone Fruit Disease Management Using Cultural Practices

(with Low Spray, No Spray & Organic Options)

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## INTRODUCTION

Backyard stone fruit (peach, nectarine, plum, and cherry) production requires a proactive approach to disease management. Preventative practices are recommended to minimize inputs. This guide focuses on preventative cultural practices with options of low-input fungicide applications. Refer to the homeowner fruit spray guide (ID-21) for a more complete pesticide spray schedule.

## CULTURAL PRACTICES

Cultural practices should always be considered when planning, planting, and maintaining a backyard orchard. Some practices keep plants healthy and assure the lowest risk for disease outbreaks. Other practices eliminate and eradicate sources for fungal and bacterial pathogens, thereby reducing risk for disease. Combine cultural practices with a fungicide preventative program or use them alone for a no-spray alternative.

- A well-drained site located in full sun is required.
- Maintain plant vigor by watering during drought, mulching to regulate soil moisture and temperature, and amending soil nutrients according to soil tests.
- Minimize insect and wildlife damage.
- Prune to open canopy and increase air circulation.
- Utilize specific cultural practices listed in the table to eliminate disease-causing pathogens and reduce risks for infections.
- Bagging peaches and nectarines when they are 3/4 inch in size is an effective way of managing pests without spraying. Use the method outlined in EntFacts-218 (bagging apples); however, bags can be left on fruit until harvest.

## RESISTANCE

A healthy orchard begins with planning. Disease-resistant cultivars can reduce the need for many fungicide and bactericide applications. Growers should focus on cultivars that are resistant to bacterial spot. Brown rot and peach scab are often the most challenging peach and stone fruit diseases in Kentucky. Refer to *Peach Cultivar Performance* (HO-6) for information regarding cultivar selection.

## USING THE TABLE

The following table focuses on cultural practices as a means for eliminating or reducing risk for tree and fruit disease. Cultural practices should be considered for each plant growth stage, regardless of fungicide program; target diseases are listed for each practice. Fungicides are listed in the right-hand column; organic fungicides (OMRI-approved) are marked with an asterisk (\*). Organic fungicides are generally less effective for managing diseases than synthetic products. It is very difficult to produce a peach or nectarine crop in Kentucky without bagging or using pesticides, particularly in wet seasons.

## RESOURCES

- Plant Pathology Extension Publications  
<http://www2.ca.uky.edu/agcollege/plantpathology/extension/pubs.html>
- Disease and Insect Control Program for Homegrown Fruit in Kentucky (ID-21)  
<http://www.ca.uky.edu/agc/pubs/id/id21/id21.pdf>
- Bagging Apples: Alternative Pest Management for Hobbyists (EntFacts-218)  
<http://www.ca.uky.edu/entomology/entfacts/entfactpdf/ef218.pdf>
- Fruit, Orchard, and Vineyard Sanitation (PPFS-FR-T-05)  
[http://www2.ca.uky.edu/agcollege/plantpathology/ext\\_files/PPFShtml/PPFS-GEN-05.pdf](http://www2.ca.uky.edu/agcollege/plantpathology/ext_files/PPFShtml/PPFS-GEN-05.pdf)
- Homeowner's Guide to Fungicides (PPFS-GEN-07)  
[http://www2.ca.uky.edu/agcollege/plantpathology/ext\\_files/PPFShtml/PPFS-GEN-07.pdf](http://www2.ca.uky.edu/agcollege/plantpathology/ext_files/PPFShtml/PPFS-GEN-07.pdf)
- Peach Cultivar Performance (HO-6)  
<http://www2.ca.uky.edu/agc/pubs/ho/ho6/ho6.pdf>

Time of Year <sup>1</sup>	Growth Stage	Target Disease	Cultural Management	Target Disease	Chemical Management <sup>2</sup>
February/ Early March	Dormant (before buds swell)	Black knot	Prune cankers and dead, dying and diseased wood; Prune to allow for increased air movement.	Black knot	Chlorothalonil
		Brown rot		Peach leaf curl	Chlorothalonil or Copper* or Lime sulfur*
Mid/Late March	Bud swell			Brown rot	Lime sulfur*
Late March/ Mid-April	Pink (just before blooms open)	Brown rot	Remove fruit mummies, Remove wild <i>Prunus</i> species.	Black knot plum	Captan or Chlorothalonil
				Brown rot	Captan or Sulfur*
Mid-April/ May	After petals fall	Brown rot Cherry leaf spot	Remove infected leaves and diseased fruit.	Brown rot	Captan or Sulfur*
				Cherry leaf spot	Captan or Chlorothalonil
				Scab	Captan or Chlorothalonil or Sulfur*
Late May	Shuck split (whorl of dried petal bases splits and falls off)	Brown rot Cherry leaf spot	Bag developing peach and nectarine fruit when 3/4 inch in size; Remove infected leaves and diseased fruit.	Brown rot	Captan or Sulfur*
				Black knot plum	Captan or Chlorothalonil
				Cherry leaf spot	Captan or Chlorothalonil
				Scab	Captan or Chlorothalonil or Sulfur*
June-July	Summer growth	Brown rot Cherry leaf spot Scab	Remove infected leaves and diseased fruit.	Brown rot	Captan or Sulfur*
				Cherry leaf spot	Captan or Copper*
August - September	Late summer/ fall growth	Brown rot Cherry leaf spot Scab	Remove infected leaves and diseased fruit.		
October- November	After harvest	Black knot Brown rot Cherry leaf spot Scab	Prune cankers and dead, dying and diseased wood; Remove all fruit from tree and clean up all fallen fruit; Remove mummies; Rake fallen leaves and destroy.		

<sup>1</sup>The growth stage indicated typically occurs during this time of year; however, this may vary from year to year depending on environmental conditions.

<sup>2</sup>Products noted with an \* indicate those that may be used in organic production. For a list of products approved by Organic Materials Review Institute (OMRI) please see University of Kentucky publication *Homeowner's Guide to Fungicides* (PPFS-GEN-07).

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**Photo credit:** John Strang, University of Kentucky