

For further information, contact your county Extension agent.

¹Due to variation in the concentration of pesticides in different products, refer to the label for the specific rate per 1-gallon spray solution.

WP = wettable powder

EC = emulsifiable concentrate

DF = dry flowable

Table. 1 Homeowner's spray schedule for pecans.

Timing	Pest	Pesticide	Rate/ 1 gal. water ¹	Remarks
Dormant season (winter)	Insects <i>Scale insects,</i> <i>phylloxera</i>	97% oil emulsion	1/4 - 1/3 pt.	Spray tree trunks and branches thoroughly.
Budbreak (just as the buds begin to split and show green color)--terminal bud growth should be 2 inches in length.	Nutritional Rosette	Zinc sulfate WP or Zinc nitrate (NZN) liquid	2 tsp.	Zinc sprays are essential for early applications will give best response. Elemental zinc is toxic to most plants other than pecans and possibility, do not use zinc sulfate near peaches, plums, nectarines, apricots or other zinc-sensitive plants.
	Insects <i>Phylloxera</i>	Malathion 50% EC (several formulations)	2 tsp.	Do not use any zinc product at higher than labeled rates since foliage burn can result. When applying more than one zinc spray in 2 weeks, reduce rate by one-half. Never spray young trees that are not actively growing. If dormant oil was not used, then treat trees where a history of phylloxera damage indicates a need for control.
Budbreak	Diseases <i>Scab and</i> <i>other foliage</i> <i>and nut</i> <i>diseases</i>	Benomyl (Benlate 50% WP) or Thiophanate- methyl (Topsin-	1/2 - 1 Tbs. 1/2 - 1 Tbs.	

M[®] 70% WP)

Pre-pollination (when leaves are one-third grown and before pollen is shed)--mid-April

Nutritional

Rosette

Same as for
budbreak

Diseases

*Scab and
other foliage
and nut
diseases*

Same as for
budbreak

Insects

Fall webworm

*Bacillus
thuringiensis*
(several
formulations)

Refer to
label.

Repeat sprays as pest problem recurs.

*Walnut
caterpillar*

or
Malathion[®] 50%
EC (several
formulations)

2 tsp.

or
Carbaryl
(Sevin[®] liquid,
several
formulations)

Refer to
label.

Pollination (when case-bearer eggs appear on tips of nutlets)--May

Nutritional

Rosette

Same as for
budbreak

Insects

*Pecan nut
casebearer*

Same as for
pre-pollination

Apply during egg hatch. (Consult your
county Extension agent for precise
local timing.)

Diseases

*Scab and
other foliage
and nut*

Same as for
budbreak

October 15 to December 1

Diseases

***Peach leaf
curl***

Copper
hydroxide
(several
formulations)

Refer to
label.

Spray to run-off. Apply during
dormant season.

or

Chlorothalonil
(several
formulations)

Refer to
label.

Organic Disease Management

Peaches, Plums, Nectarines, and Apricots - Use sulfur fungicides throughout the spray program. Decrease application interval to shortest interval allowed. Shortened intervals are important during the late bloom, shuck split and first cover period and again during the preharvest period. These are periods when fruit diseases are most damaging.

Pecans - Copper sulfate is considered an organic fungicide and some formulations are approved for use on pecans to control pecan scab and other foliage diseases. Copper sulfate is highly toxic to fruit trees such as peaches, plums, apricots and nectarines, and to some ornamental plants. Be careful when using this product around sensitive plants if there is a possibility of drift.

General Considerations - Most plant diseases require that the leaf, fruit or nut remain wet for a certain length of time for infection to occur. The following precautions should be taken to reduce the length of time the plant is wet following dew or rainfall: (1) prune trees to allow sunlight to penetrate the leaf canopy; (2) space trees to allow for air circulation; (3) plant trees in an area that will receive early morning sun and where air circulation will not be blocked by buildings or other plants; and (4) avoid wetting the tree during irrigation.

Select varieties that have natural resistance to the major diseases of your area. Resistance does not mean immunity to infections, but fungicide applications are usually more effective on plants with some resistance.

diseases

Second generation
casebearer (42 days after
first casebearer spray)

Insects
Pecan nut
casebearer
Aphids

Same as for
pre-pollination

or
Malathion®
50% EC
(several
formulations)

2 tsp.

or
Cygon® 2 EC

Refer to
label.

Treat yellow aphids when an average
of 25 per compound leaf are found
or when excessive honey dew is
produced. Repeated use of insecticides
can result in strains of aphids
that are resistant to insecticides.
This can result in increased losses.

Diseases
Scab and
other foliage
and nut
diseases

Same as for
budbreak

Additional sprays at 10- to 14- day
intervals may be required during
extended periods of rainfall or high
humidity.

Cover sprays

Diseases
Scab

Same as for
budbreak

Number of cover sprays is based
on weather conditions, variety and
presence of scab fungus. Maintain
spray applications as long as weather
conditions favor disease development.

Water stage (when inside
of the nut begins to fill
with liquid)-- mid- to late
July
Half-shell hardening
--mid- to late August

Diseases
Scab and other
foliage and nut
diseases

Same as for
budbreak

Treat where there is a history of
disease or during periods of rainfall
or dew.

Insects
Aphids

Same as for
aphids listed
above

Treat yellow aphids when an average
of 25 per compound leaf are found
or when excessive honeydew is
produced and aphid populations persist

Hickory
shuckworm

Carbaryl
(Sevin® liquid,
several

Refer to
label.

formulations)

Half-shell hardening (continued)	Insects				
	<i>Pecan weevil</i>	Carbaryl (Sevin® liquid, several formulations)	Refer to label.	Treat areas with weevil infestation. One to three treatments at 10- to 14- day intervals are needed for heavy weevil infestations.	a history of pecan
	Diseases				
	<i>Scab and other foliage and nut diseases</i>		Same as for budbreak		

Table 2. Homeowner's spray schedule for peaches and plums.

Timing	Pest	Pesticide	Rate/ 1 gal. water	Remarks
Dormant season	Insects			
	<i>Scale insects</i>	97% dormant oil	1/4 pt.	Apply when temperature is between 40 and 70 degrees F. Use only once. Apply only if scale is observed.
Late dormant	Diseases			
	<i>Peach leaf curl</i>	Chlorothalonil (several formulations)	Refer to label for specific rate.	Apply if fall applications of copper fungicide were not made.
Petal-fall (when flower petals begin to fall)-- 5 days after bloom	Insects			
	<i>Plum curculio</i>	Malathion 50% EC (several formulations) or Carbaryl (Sevin® liquid, several formulations) or	2 1/2 tsp. Refer to label.	Apply when 75 percent of petals have fallen, and there is a history of insect damage.
	<i>Peach twig borer</i>			The peach twig borer usually is a problem only in the West Cross Timbers area.
	<i>Lesser peach tree borer</i>	Endosulfan (Thiodan 9.7%)	2 Tbs.	Make two applications approximately 3 weeks apart. Thoroughly wet tree

		EC)		limbs with spray.
Petal-fall (continued)	Diseases			
	Scab	Captan® 50% WP or Sulfur 97% WP or Benomyl (Benlate® 50% WP) or Thiophanate-methyl (Topsin-M® 70% WP) or Chlorothalonil (same as dormant)	2.66 Tbs. 8 Tbs. 1.5-2.25 Tbs. 1.5-2.25 Tbs.	Treat where there is a history of disease problems.
Shuck split (when the calyx separates from base of newly formed fruit)--14 days after bloom	Insects Catfacing insects, plum curculio Diseases Scab	Same insecticides as for petal fall		Treat where there is a history of catfacing insects and/or plum curculio.
First cover (30 days after bloom)	Insects Catfacing insects, plum curculio Diseases Scab	Same as for petal fall		
		Captan 50% or Sulfur 97% WP	2.7 Tbs. 8 Tbs.	Treat where there is a history of disease problems.
Cover sprays (repeat at 14-day intervals)	Insects Catfacing insects	Same insecticides as		

for petal fall

Diseases

Brown rot

Captan 50% 2.7 Tbs.

WP

or

Sulfur 97% WP 8 Tbs.

Pre-harvest

(For early-maturing varieties and during periods of frequent rain or dew--spray 3 weeks, 2 weeks and 3 days prior to picking. For mid- to late-maturing varieties--spray at 2 weeks and at 3 days prior to picking.)

Insects

June beetles

Carbaryl
(Sevin® liquid,
several
formulations)

Refer
to label.

Diseases

Brown rot

Benomyl
(Benlate®)
50% DF

1.5-2.3 Tbs.

Do not apply within 3 days of
harvest.

or

Thiophanate-
methyl (Topsin
M® 80% WP)

1.5 -2.3 Tbs.

Can be applied on day of harvest.
Wash all of fruit before eating.

or

Funginex®
(several
formulations)

Refer to
label.

Not approved on plums in preharvest
period.

**Post harvest--mid-to late
August**

Insects

**Peach tree
borer**

Chlorpyrifos
(Lorsban®
12.9%)

2 Tbs.

Thoroughly wet from base of tree up
to first scaffold limbs.

or

Lindane
(Lindane® 20%
EC)

1 Tbs.

or

Endosulfan
(Thiodan® 9.7%
EC)

2 Tbs.