

Raspberry pest management for home gardeners

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Raspberries can be grown throughout Wisconsin. The cultural practices listed below will usually reduce disease and insect problems. If pests become too abundant despite cultural practices, temporary chemical control measures may be needed. Certain insect pests will always be troublesome if many wild host plants grow near the patch. This bulletin is a companion to Extension publication *Growing Raspberries in Wisconsin* (A1610), which describes pests and cultural practices in greater detail.

General suggestions

- Use only pest-free nursery stock. Chemical sprays will not control diseases such as mosaic, crown gall, and orange rust.
- Choose well-drained soils or plant in raised beds to prevent root rots.
- Abandoned and wild brambles harbor insects and disease organisms; destroy those located near plantings.
- Prune raspberries annually. To avoid cane blight, prune at least 3 days before anticipated rain if possible. Pruning will also help control borers and tree crickets.
- Keep plant rows narrow and control weeds to allow good circulation and rapid drying. This will minimize disease development.
- Cut out old bearing canes in late summer after harvest.
- Destroy prunings and old canes.

Disease management

The general suggestions listed above should provide adequate control of most diseases. If losses to disease are unacceptable, apply the appropriate fungicide.

To control **anthracnose**, **cane blight**, and **spur blight**, apply lime sulfur in early spring before leaves are ½ inch long; spraying lime sulfur later could seriously burn foliage. If **powdery mildew** develops, apply wettable sulfur at 14-day intervals.

Insect management

Japanese beetles, small metallic green and reddish beetles, can cause significant feeding damage to fruit and foliage between late June and early August. The insecticides listed in this publication will kill the adults present, but others may rapidly invade. If using traps, place them at least 50 feet away from the plants you wish to protect as they attract beetles. Small plantings can be protected using floating row covers; wait until blossoms have fallen before covering plants to allow pollination.

Sap beetles, small black beetles with orange markings, feed on over-ripe and damaged fruit. Control by regularly removing such fruit from the garden. You can prepare a sap beetle attractant by mixing 3 quarts dark corn syrup, 2 quarts water, and one cake yeast. Place the mixture plus a small amount of insecticide in coffee cans outside the planting.

Tree crickets lay eggs in canes in the fall. Inspect canes during dormant pruning for egg-laying scars.

Prune out cane just below scar and destroy prunings.

Raspberry cane borers lay eggs in stem tips, causing the cane tips to wilt. Prune out infested cane tips when they begin to wilt in summer. Make cuts about 6 inches below girdled area. Remove prunings from the planting and destroy.

Weed management

Weeds or other vegetation may reduce yields and fruit quality by competing for light, water, and nutrients, and they may also harbor insect or disease pests. Keep raspberry rows free of other vegetation. A cover crop may be planted between the rows.

Unwanted vegetation may be controlled either mechanically or chemically. A combination of the two is usually most effective. Mechanical weed control methods include shallow (1–2 inches deep) cultivation every few weeks with a sharp hoe, shovel, or rotary tiller, being careful not to damage the crowns, canes, or roots. Weeds within the rows may have to be pulled by hand. Do not injure emerging canes which will produce fruit the following year.

A mulch of shredded leaves, wood chips, sawdust, straw, or other organic materials that will stop weeds may also be used. Do not mound mulches up around the canes. Apply them alongside the rows. Renew mulches each year.

Although other registered herbicides are available, the ones suggested in this publication are particularly effective under Wisconsin conditions.

Insect and disease spray schedule

When to spray	Pests	Material per gallon water ^{*,1}
Delayed-dormant —when leaf buds are showing ¼- to ½-inch green tip	Diseases anthracnose, cane blight, spur blight	1½ cups liquid lime sulfur
Just before blossoms open —spray green shoots and bearing canes	Insects raspberry fruitworm, raspberry sawfly, cane borer and red-necked borer, picnic beetle	2 tbsp carbaryl (Sevin) 50% WP, or rotenone dust (2 applications, 3 days apart)
Bloom	Insects <i>Do not apply insecticides during bloom. Protect pollinator insects.</i>	
Post-bloom —as soon as blossom petals fall	Insects aphids, Japanese beetle, raspberry sawfly	4 tbsp malathion 25% WP, or rotenone dust (2 applications, 3 days apart)
Post-bloom	Diseases powdery mildew	6 tbsp wettable sulfur ²
	Insects Japanese beetle, raspberry sawfly, sap beetle	4 tbsp malathion 25% WP (up to 1 day before harvest)

* **tbsp** = level tablespoon; **WP** = wettable powder

¹ Spray plants to runoff; smaller patches will require less than 1 gallon of spray.

² Do not apply sulfur on days when temperatures are expected to be greater than 85°F.

Herbicide spray schedule

When to spray	Material per 500 sq ft [*]	Remarks
Up to a year before planting	Roundup, 2–6 tsp; or Ortho Kleen-up, 16 oz (glyphosate, 1–3 lb/a)	<i>Use glyphosate only for site preparation.</i> Do not use in raspberry plantings after canes are planted. Use glyphosate to control quackgrass or stubborn perennial weeds before planting raspberries. It is non-selective, non-residual. Glyphosate kills desirable plants as readily as weeds. Glyphosate must be used according to label directions. Read the label for correct dilution of concentrate mixtures.
Fall or early spring	Casoron G-4, 3 cups (dichlobenil, 2–4 lb/a)	Dichlobenil will control most annual weeds and quackgrass. Treat in late fall or early spring when temperatures are below 60°F to avoid loss of material due to volatilization. Apply prior to weed germination. Use the granular formulation. Do not use on raspberries on light sandy soils. Use only on established plantings.
Spring or fall after harvest	Princep 80W, 4 tbsp; or Princep 4G, 3 cups; or Princep 4L, 2 tbsp (simazine, 2–4 lb/a)	Simazine will control many annual weeds and quackgrass. Treat in the spring or fall at the 4 lb ai/a rate. The treatment can also be split, applying 2 lb ai/a in the spring and 2 lb ai/a in the fall. If quackgrass is a problem, use the 4 lb ai/a rate in the fall.

*Abbreviations: **ai/a**=active ingredient in commercial material per acre; **lb/a**=pounds per acre; **sq ft**=square feet; **tbsp**=level tablespoon

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 pesticide exposure. Failure to do so violates the law.



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