

Fireblight in Raspberries: Control Strategies



Photo A.Mintenko

Figure 1: 'Shepherd's crook' fireblight symptoms on raspberry cane tip.

Many members of the Rose Family like raspberries and apples are susceptible to fireblight bacteria (*Erwinia amylovora*) (Figure 1 and 2). Fireblight can be an issue in these fruit crops when environmental conditions are favourable for infection which include warmer than 18°C, high humidity, heavy dews, and overall moist conditions. Raspberry cultivars Boyne, Fallgold and K81-6 are quite susceptible to fireblight, while other cultivars such as Nova and Royalty can be less susceptible. Boyne is



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Figure 2: Fireblight infection in leaf grooves and curled leaves.

unique compared to other raspberry cultivars in that the same strain of fireblight that infects apples can also infect Boyne. Fire blight overwinters in raspberry canes at the edge of cankers formed during previous growing seasons. In the spring, as weather warms up, the bacteria multiply, and ooze to the surface in sticky droplets. The bacteria multiply rapidly at temperatures greater than 18°C.

Cultural Control

Production practices to minimize plant susceptibility and disease spread:

- 1) Blight is most common on young succulent growth therefore avoid excessive nitrogen fertilization which can lead to excessive and prolonged growth.
- 2) Keep raspberry rows between 16 and 24 inches wide which will improve air flow and allow raspberry leaves to dry off faster during the day.
- 3) Prune out infected canes immediately upon discovery. Disinfect pruners after EVERY CUT with hand sanitizer or disinfectant spray. Do not prune when plants are wet as that can spread the infection as well. Burn or dispose of canes immediately.

Chemical Control

Bactericides registered for use on raspberries are Serenade Max (suppression), copper fungicides, and Kasumin. Well-timed sprays of bactericides can be very effective at protecting plants against infection. Products like Serenade (a biofungicide) protects the raspberry plant when applied by occupying the same areas on the plant that fireblight bacteria will try to colonize/infect, thereby outcompeting fireblight for that space.

If you had Fireblight in your Raspberries in the Past

- 1) Apply Serenade as soon as budding initiates, this will put beneficial bacteria right where they will be useful.
- 2) Scouting early and often, examining...
 - a. Leaves and tender new branches
 - b. Flowering in mid-late June
- 3) If fireblight does appear, prune out blighted shoots as soon as they appear in the spring/ early summer. Cuts should be made at least 5-6 inches below the margin of visible infection. Pruning out new shoot blight infections as they appear can also help limit disease spread but will be most effective if practiced rigorously during the first few weeks after bloom. Pruning will do little to slow disease spread if delayed until many infections are visible.
- 4) If pruning not successful or too widespread, apply Kasumin and rotate with copper fungicide (i.e. trade names Cueva and Copper Spray Fungicide)
 - i. Kasumin- up to 4 applications/year, rotate chemicals, PHI 1 day.
 - ii. Cueva (Copper octonate) or Copper oxychloride fungicide- up to 4 applications/year, rotate chemicals, PHI 2 days.
 - iii. Serenade- apply before fall rains and during dormancy before spring.

[Pesticide Label Search - Health Canada \(hc-sc.gc.ca\)](#)
- 5) After fruiting ends, prune out the old floricanes in summer-bearing raspberries or cut down entire row when dormant in the late fall or early spring if practicing biennial raspberry production system.

References

[Province of Manitoba | agriculture - Raspberry Production \(gov.mb.ca\)](#)

[Fireblight - Gardening at USask - College of Agriculture and Bioresources | University of Saskatchewan](#)