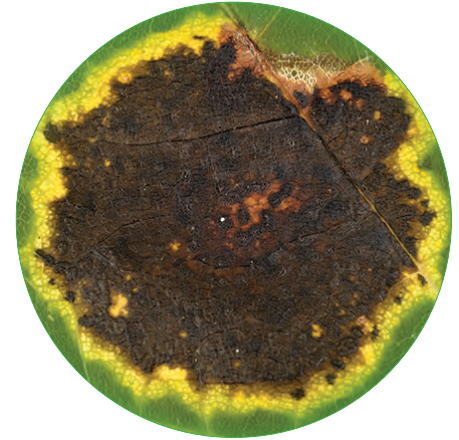


# Healthy Choices to Control Lawn and Garden Pests

## BLACK SPOT

### What Do They Look Like?

- Black spot is a common infectious disease of roses
- It appears on the upper surface of leaves and stems of roses as small to large circular black spots with fringed margins
- Leaves turn yellow and fall prematurely; occasionally petals may become distorted or have red dots



### Where Do I Find It?

- Black spot affects many varieties of roses, although some shrub roses and rugosa roses (native to the Victoria area) are more resistant
- Many hybrid tea roses are known to be more susceptible to black spot

### Black Spot Life Cycle

- Black spot is a fungal disease that lies dormant during winter on fallen rose leaves, leaf buds and in stems
- It germinates and infects leaves when temperature and moisture increase in spring
- Spores are produced throughout the growing season, causing repeat infections in warm, wet weather
- It is easily spread by air currents, water splashes, wind-driven rain, insects and garden tools

### Is Black Spot Really A Problem?

- Repeated loss of leaves weakens roses and causes plants to produce fewer blooms; it also makes roses more susceptible to other stresses

- Under ideal conditions (moist, humid, and warm), the disease can infect roses within one day and can begin to cause leaf damage within 4 to 5 days of the initial infection
- It is most often a problem in summers with extended rainy periods
- Black spot is not likely to cause long-term damage to the more resistant native rose species

### What Can I Do? Non-Pesticide Treatments

- Water early in the day to allow plants to dry, and avoid wetting leaves during watering
- Prune all infected leaves and branches immediately, even if this means removing all foliage. Make sure you remove this material completely from your garden and dispose in household garbage
- In spring, remove any leaf debris near roses that may be left over from winter, as it could have black spot fungus; dispose in household garbage

## How Can I Prevent It Next Year?

- In the fall, prune infected plants within 10-15 cm of where two or more stems join
- Completely remove prunings and leaf debris around plants, and dispose in household garbage
- Plant spot-resistant varieties in open, sunny areas, and avoid planting roses in areas with existing dense vegetation as air flow may be poor - consult your local garden centre or garden professional for recommended spot-resistant rose varieties
- Avoid overhead watering of your rose plants; water at the bases instead
- Spray lime-sulphur in spring before buds break to kill spores (available from garden centres)
- Mulch roses in spring to prevent re-infection from overwintering spores
- To avoid the growth of fungus on plants, spray water in the morning so leaves dry out during the day

## Tips For A Healthy Garden

- Ensure soil is healthy, well conditioned with organic compost and has adequate drainage (remember that plants get most of their nutrients from the soil)
- Plan your garden so plants are put in areas where they naturally thrive (dry or wet, sun or shade)
- Plant in raised beds (good for the plants, good for the back)
- Use native plants that are already acclimatized, require low maintenance and have an in-bred resistance to local pests and diseases
- Water deeply but infrequently to maintain a strong root structure
- Protect and attract native beneficial species (give them a place to live and a source of water and they'll do the rest)
- Practise annual crop rotation for each type of vegetable (keeps patterns of disease or insect invasion in check)
- Fertilize regularly in spring and fall with organic compost

