Leaf Blight of Wax Myrtle

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A new disease of Pacific wax myrtle (*Myrica californica*) is affecting plants in the Newport area from Otter Rock to Lincoln City along the coastal zone.

The disease attacks the leaves, causing them to turn brown in layers from the bottom up. Initially the leaves remain attached to the plant, but they will eventually drop, leaving bare stems. Twigs at the tips of the branches can become infected, causing dark areas, which eventually die. Plants that have dropped their leaves may put on some new leaves in one to two years.

This disease is due to a fungus-like organism called *Phytophthora*. Infection occurs when spores of the organism land on a plant, germinate, and grow to penetrate the leaf tissues. Spores are spread by wind or wind-blown rain splash or irrigation water applied to leaves. Plants that are in shady conditions where the leaves remain moist for much of the day may be more severely affected than those in more open sites. This disease was first noticed in a few plants in 2007, but has become more widespread this spring.

The organism that causes this leaf blight appears to be more active during the fall and winter rather than the summer, and it is likely to be during the cool season that new infections are initiated. Roots do not appear to be affected. This is a disease of the foliage and is not a root rot.

Since this is a new disease, little is currently known about it. The following disease management recommendations are based on similar diseases on other plants.
Cultural control:
1. Prune off infected leaves and branches.
2. Rake up and destroy dead leaves around the base of plants.
3. Do not over-fertilize, and do not apply
4. fertilizer late in the season, which stimulates succulent new growth which is likely to be more susceptible to infection.
5. Keep irrigation water off leaves by watering the soil under the plant instead of using a sprinkler that hits the leaves.
6. Keep weeds away from the base of the plant to increase air circulation.

Chemical control
Chemical control measures cannot be relied upon to cure the plants, and cultural control measures should be used before any chemicals are applied.

Fungicides will protect any leaves not yet diseased, but we do not currently know when leaves become infected. Chemicals available for use do not kill the *Phytophthora* organism - the chemicals can only prevent establishment of the organism before it gets into the plant. Once the product has worn off or been washed away, the *Phytophthora* will resume growth.

The following products are registered for use by home gardeners on ornamentals with *Phytophthora* foliar blights. Timing applications to protect newly developing leaves may be helpful. Additional fall applications before the rains begin may also provide some protection.

1. Rampart T&O (made by UAP). This has some systemic activity, but it does not kill the organism. It will prevent infection and inhibit growth within the plant, but the organism will grow again when applications stop.
2. Bonide Fung-onil multipurpose fungicide. This product is a protectant only, and must be reapplied on a regular basis.
3. Bonide Liquid copper fungicide - an organic-compatible product. This is also a protectant and will need to be reapplied after rains.

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