



Downy mildew (*Plasmopara viburni*) disease causes these spots and defoliation on Awabuki viburnum (left). Guava rust disease (*Puccinia psidii*) causes the reddish spots with yellow spores on this Australian brush cherry (*Syzygium paniculatum*) (right).

Two Dry Season Ornamental Plant Diseases: Guava rust and Viburnum Downy Mildew

Doug Caldwell

Two common ornamental plant diseases which occur during our south Florida winter is guava rust (*Puccinia psidii*) and downy mildew (*Plasmopara viburni*). We typically associate fungal and diseases with wet conditions, but there are a few pathogens which thrive in our "cooler" winter periods and do fine without a lot of extra water.

One of these pathogens is a downy mildew which attacks stressed Awabuki (commonly referred to as mirror-leaf viburnum), a variety of sweet viburnum (*Viburnum odoratissimum*). This species can be recognized by the green pepper fragrance when you crush its leaves, besides the big dark green shiny leaves. During the winter it will move in on weak plants and cause spotting (light green to reddish-brown), yellowing and defoliation. This is a minor disease usually, but it has caused extensive defoliation. Once the hotter days of late spring arrive, the disease tends to dissipate. Key point in control is removal of fallen infected leaves. Get those out of your landscape and do not compost! Make sure the sprinkler system is not directly hitting the foliage as the water will disperse the spores and the disease will consume more of your hedge.

If you feel you need to apply a fungicide, try products labeled for ornamentals, such as mancozeb or phosphoric acid based products which are available to homeowners. These products should be reapplied every 10 to 14 days as a preventive. A fairly recent group of fungicides products contain strobilurins and are available to professional landscape maintenance applicators. Fewer applications are needed with these compounds and they are a little pricey.

Another pathogen, *Puccinia psidii* goes by the name of guava rust and is evident by the rusty spores on new growing tips and young leaves. It is found on Simpson's stopper (*Myrcianthes fragrans*), *Eugenia* species, bottlebrush (previously *Callistemon* now *Melaleuca* spp.), *Pimenta dioca* (allspice), rose-apple (*Syzygium jambos*). One of those Latin names should have made you perk up—*Melaleuca*. Yes, this pathogen attacks our unwanted and over-aggressively invasive punk tree (*Melaleuca quinquenervia*).

Although this pathogen doesn't seem to slow the melaleuca too much, it causes some dieback as it does with our woody ornamentals in the Myrtaceae family. This fungus appears to be producing new strains which attack plants it was unknown to attack in the past. Usually we welcome anything that will slow the growth of some of these shrubs. Maybe the rust disease could be considered beneficial, say, a fungal pruning agent? If you feel it has gone too far, you may consider fungicides labelled for ornamentals and rust control, such as certain propiconazole and triadimefon products. Or just wait until the heat of summer arrives (already, it seems, here in mid-May)? and this rust pathogen will become less active.



Guava rust disease has killed the terminal growth on Australian brush cherry in late March 2003 (top left). Bottom left, the rust is coating the fruit of a Simpson's stopper in late April 2004. Right, the new growth of a melaleuca is infected with guava rust. Photo by Min Rayamajhi, IPRL, USDA-ARS.

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