Horticulture Column

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Q. My *Dictyosperma album* has some dark brown or black spots that develop on the bases of the petioles of older leaves and on some of the leaflets as well. The plant seems fairly healthy otherwise. It is a potted specimen, and I would like it to look as perfect as possible. Does my palm have a disease? Ray Hernandez, Florida.

A. From your description it sounds as though your palm may have a fungus disease called *Pestalotiopsis palmarum*. Only in recent years have I become familiar with this disease, and now that I know its symptoms, I see it everywhere in Florida on potted palms and especially in nurseries. Fortunately it is usually not too serious and is the kind of disease that attacks plants that are already weakened or stressed by some environmental factor. Eliminating the factors that cause stress goes a long way toward controlling the disease. *Phoenix roebellinii* palms grown in containers in nurseries are often infected by *Pestalotiopsis palmarum* (Fig. 1). Usually the petiole is the area affected, and in some cases the plant is made unsalable by the unsightly damage. *Bismarckia nobilis* (Fig. 2) is another common host. One usually sees only a few spots on the older petioles.

Pestalotiopsis palmarum occurs most frequently on palms that are heavily irrigated, especially with overhead sprinklers and very often if they are irrigated during the night. Crowding the plants together or growing them in too shady of an environment only makes matters worse. Some growers have seen a correlation between the severity of the disease and the length of time that a palm has been in its container. The breakdown of the potting medium may be a stress factor that makes a plant more susceptible to this disease.

I cannot provide an actual diagnosis of the disease on your *Dictyosperma album*, but the following suggestions should be of some help in controlling foliar fungal diseases: 1. Determine the optimum light conditions for the palm species your are growing, and try to provide those conditions. 2. Give plants adequate space to allow for good air circulation. 3. Use drip irrigation if possible, rather than overhead irrigation. 4. Fertilize with an encaspsulated or time release product so the plants do not "starve" between applications. 5. Use a potting mix that is based on either sphagnum peat or coconut fiber peat rather than pine bark, especially if you intend to keep the plant in the same container for a long time. Soil mixes based on pine bark work well for fast-growing crops that will soon be planted out or repotted, but they break down too quickly for long term use. 6. Chlorothalonil fungicide, often sold as Daconil, is a broad spectrum fungicide and may provide some protection for your palms from foliar fungal diseases. As always, fungicides are more effective as a preventative measure than as a cure.

Q. I have a couple of *Archontophoenix cunninghamiana* palms with around 2 m of clean trunk. I have recently noticed that some deep and extensive splits, which are approximately 30–40 cm long and 5 cm deep, have developed in the lower portion of the trunk of each palm. These two palms were planted out of rather large containers two years ago and have grown well, gaining quite a bit of height since I planted them in my garden. They are watered and fertilized rather generously, and until now they have responded well. Except for the fissures in the trunks, they are beautiful. Is this splitting bad, and can it lead to infection of any sort? Christopher Jones, California.

A. This problem is described in the excellent little book, Diseases and Disorders of Ornamental Palms edited by A. R. Chase and T. K. Broschat (American Phytopathological Soc. Press, 1991), and is called "excessive water uptake." The book says that it is a rare disorder and usually occurs in areas with a very high rainfall, such as in parts of Hawaii.

I have seen similar problems in Florida. If a palm was allowed to begin to develop its woody stem while in a container and then planted into the more congenial conditions of a well-maintained landscape, splitting may occur. I am not sure whether this kind of splitting is also caused by excessive water uptake or simply the drastic change in growing conditions. It might be advisable, when planting palms that have

1 (left). Petioles of *Phoenix roebellinii* infected by *Pestalotiopsis palmarum*. 2 (right). *Bismarckia nobilis* is another common host of the disease in Florida.

achieved some maturity while still in a container, to avoid overfeeding and overwatering them. It is possible that the splits in the trunks of your *A. cunninghamiana* could become entry points for fungal disease or other harmful organisms. Keep these split areas clean and dry, but do not paint, seal or fill them. Make sure that your irrigation system does not spray directly into these areas. An occasional spraying with a fungicide might help prevent diseases from establishing, and ants or other insects should be discouraged from making homes in the splits.

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