

The Unlucky Side of Lucky Bamboo

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There is no question- Lucky Bamboo is big! Although *Dracaena sanderana* has been used as a houseplant for at least 25 years, only recently has it seen marketing success. However, in the past 6 months I have come to question the name “Lucky Bamboo.” When I worked for the University of Florida Research Center in Apopka, we occasionally saw problems during production of this *Dracaena* species. Leaf diseases were most common with bacterial leaf spots caused by *Erwinia* and *Pseudomonas*, as well as fungal leaf spots caused by *Phyllosticta* and *Colletotrichum*. We saw un-rooted and rooted cuttings from Central America with these and other symptoms in the 80’s and 90’s.

I was blissfully unaware of the marketing boom that Lucky Bamboo had achieved in the past few years until January 2002. After attending the TPIE show in Ft. Lauderdale I visited an importer of Lucky Bamboo. Some of the rooted and sprouted canes showed signs of stem rot and root rot when they were received from their source in China. Some canes showed symptoms upon receipt but most were apparently healthy only to succumb to cane and root rot later. Since a planting usually includes multiple canes, even loss of a single stem destroys its salability. The importer shipped us a case of small plants and we watched them for three months under typical retail conditions. Indeed, by the end of the trial we had lost 25% of the plants to one or more diseases.



I took samples and cultured two pathogens from the diseased plants. The stem rot is most obvious and we recovered an undetermined species of *Colletotrichum* (also called anthracnose). We also isolated from the rotted roots and recovered *Fusarium moniliforme*. This fungal pathogen was a familiar cause of Fusarium leaf spot on many *Dracaenas* when I worked in Florida. We sat down and outlined a control strategy and I thought that was the end of the Lucky Bamboo saga.



But, I was wrong. In early May, I received a call from another importer – this time from Canada. The story was almost the same with US inspectors rejecting containers of the crop due to anthracnose. The crops were again grown in China. A day later, I went to Australia to work with Scotts Australia on a new fungicide launch. Part of the bribery they paid was to let me visit nurseries when we had time. The first place we went (near Sydney) had Lucky Bamboo. In Australia, they also bring the rooted plants in from China. In this case, they treat them with methyl bromide before releasing them to the nurserymen. Then they are held in quarantine for 3 months before finishing and shipping the plant out. This is the first time I had seen so many cultivars of *D. sanderana* employed.

The grower said they had no problems with the crop which could have been due to the much shorter shipping distance. Was the grower right? No! When I checked out the plants I found the same symptoms of anthracnose I had seen in California in person and in the Canadian images. In this case, the canes were infected although the leaves and roots looked healthy.

It is obviously difficult to determine the health of plants when they are received whether they come from China or your local producer. The best protection against such a loss is to know your source and have a good relationship with them. In the case of the Lucky Bamboo, the growers in China may have had no idea that the cuttings are infected when they are shipped. What is more, the most effective controls will be made at the source and not after they go through shipping and finishing. If you can visit the producer personally that will help you understand their growing methods and constraints and strengthen your relationship.

Once you have established good communications, the next step is thorough examination of the plants when they are received. Check them in the brightest light possible since this is the only way you will see insects and mites. Make sure their stems are firm and have no spots. Leaves should never have spots or tears (new spots can start here) and turn them over. Roots should be examined too. Take the plant out of the pot. It might be messy, but if you do not check the roots you are taking a big risk. Be sure they are white, firm and in the right proportion to the top to support the plant once it is

installed. Rotted roots do a poor job of delivering water and nutrients to the stems and leaves and plants will only decline further when stressed indoors.

Finally, you can make a decision regarding accepting the plant or rejecting it. If you decide to accept the plant you should consider treating it with a root drench, spraying with an insecticide or miticide and washing off unsightly residues. Trim away damaged leaves to minimize new problems.

The world is shrinking more each day. The internet has been partially responsible for this but the ease with which we ship plants throughout the world is astonishing. Unfortunately, the pathogens and pests that are present in the country of origin are sometimes hitching a ride. Lucky Bamboo can bring luck, but only if you examine your plants carefully.