

# Thoughts and Observations on Red Spotted *Dendrobium speciosum*

By  
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Over the past few years there has been a lot of talk about plants of *Dendrobium speciosum* that have varying amounts of red markings on the floral segments. During this time I have observed many of these plants and spoken at length with many experienced growers about this phenomenon, and feel confident enough now to make public my thoughts on the matter, however, I must stress at this point that they are just that, my thoughts and growers of plants of this type should wait for conclusive evidence before deciding what they should do with these plants.

I strongly suspect that this phenomenon is caused by the presence of an, as yet, unidentified virus which is infecting these plants. My reasons for thinking this are as follows:

1. All the subject plants that I have seen are poor performers, rarely flowering well and usually smaller than normal flowers on small twisted spikes. The flower count is also usually much lower than one would expect. Further, many of these plants have mutated flowers on these spikes. It does appear that this phenomenon moves through the plant relatively slowly and it is possible a plant may only show these symptoms on the spikes of older bulbs whilst the spikes on new sections do not. I would suggest that such plants have not been infected for very long.

2. Most of the subject plants are poor growers and suffer more problems from fungal infections in the roots as well as the leaves, possibly due to a weakened immune system caused by the virus. The new growths on such plants often show chlorophyll deficient sections randomly distributed. This is most observable when these growths are immature. At this young stage the leaves look like they are variegated, however, it is often hard to spot. This type of symptom is common in other virus infected plants.

3. One of the most convincing pieces of evidence is that there are some collections around where these plants are present, within which this phenomenon has spread to other plants of *Dendrobium speciosum*, which have been in cultivation for many years but only recently started flowering with red markings on the flowers. These collections are often neglected and suffer from aphid infestation and I strongly suspect that they may be one of the vectors. It makes me suspicious when only a few years ago red spotted *Dendrobium speciosum* was unheard of; now, however, many growers are saying that they have more and more of them showing up in their collections each year. If this is a virus then it spreads quite quickly under the right conditions.

Although no conclusive evidence that this phenomenon is a virus exists at present, I personally am convinced that it is and I am not alone in this thinking. I therefore hope other lovers of our native orchids will listen and take extreme care when handling these plants until an answer can be given by those currently carrying out tests on some of these plants. In the meantime I would recommend that growers take the following advice.

- a. Isolate these plants from all your other plants.
- b. Insure that these plants don't become pest infected as they may spread it to your other plants.
- c. Don't cut any part of these plants unless all your implements and your working area is thoroughly sterilised after being in contact with them. Don't forget to wash your hands.
- d. Don't reuse anything that has been in contact with these plants, such as pots, tags, compost etc. as they can also spread virus to the next plant they contact.
- c. Don't trade or sell these plants as you may be the cause of the further spread of this problem. It is not fair to sell these plants to unsuspecting beginners.
- f. If you have purchased seedlings from plants exhibiting these symptoms they may not be infected if the breeder used dry seed and not a green pod. There is strong evidence that most of the seedlings from a normal dry seed pod will normally not carry a virus, even if the parents were infected, however, this is not a 100% guarantee, so these should also be isolated. If ultimately the seedling flowers normal colour then it is probably clean. If it flowers with the red spots then I would be vary careful with it until final results are published.

If this proves to be a virus then we will all need to work together to halt its spread so that this most significant species can be saved. Remember to be fore warned is to be fore armed!

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