

Dipladenia: Leaf Distortion

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This past week a grower asked me to stop by and look at a bench of dipladenia plants with distorted leaves (**Photo 1**). The plants had been grown in the corner of the greenhouse during the poinsettia season. When they were moved, it was noticed that the new leaf growth was distorted.

Distorted leaf growth can be the result of a number of different situations. Boron deficiency, 2,4-D type herbicide drift, aphid infestation and thrips feeding are the most common reasons with greenhouse grown plants.

Upon inspection, the newest leaves were twisted and distorted (**Photo 2**). Based on the symptoms, western flower thrips (WFT) feeding seemed the most logical cause. Western flower thrips prefer to feed on the growing points of plants. Feeding consists of chewing on the leaves and then drinking

the plant juice/sap. When the leaves are small and unfolding, only a small amount of feeding can result in leaves being extremely distorted. That is because as the leaf expands, the destroyed tissue does not grow, and the expansion of the other cells causes uneven, twisted

growth. On flowers, the petals can have white scarring (**Photo 3**).

To confirm your diagnosis, inspect plants for thrips. Take a white piece of paper and gently hit the leaf to dislodge any thrips. Mature western flower thrips

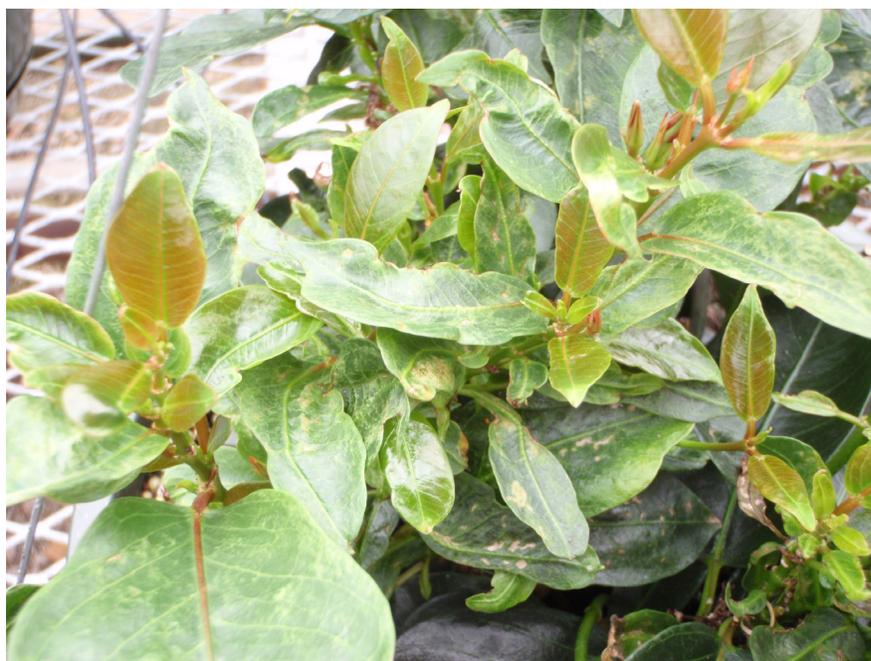


Photo 1. Dipladenia with distorted leaves.



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Photo 2. Leaf distortion.

will have a light brown coloration and larvae will be smaller, creamy-orange colored, and wingless. Thrips will also feed on pollen, so I find inspecting the flowers is the easiest way to find them (**Photo 4**).

Management. Use your standard insect control strategy to knock down heavy populations (such as seen here with dip-landenia). Consider biological controls if population pressures are lower.



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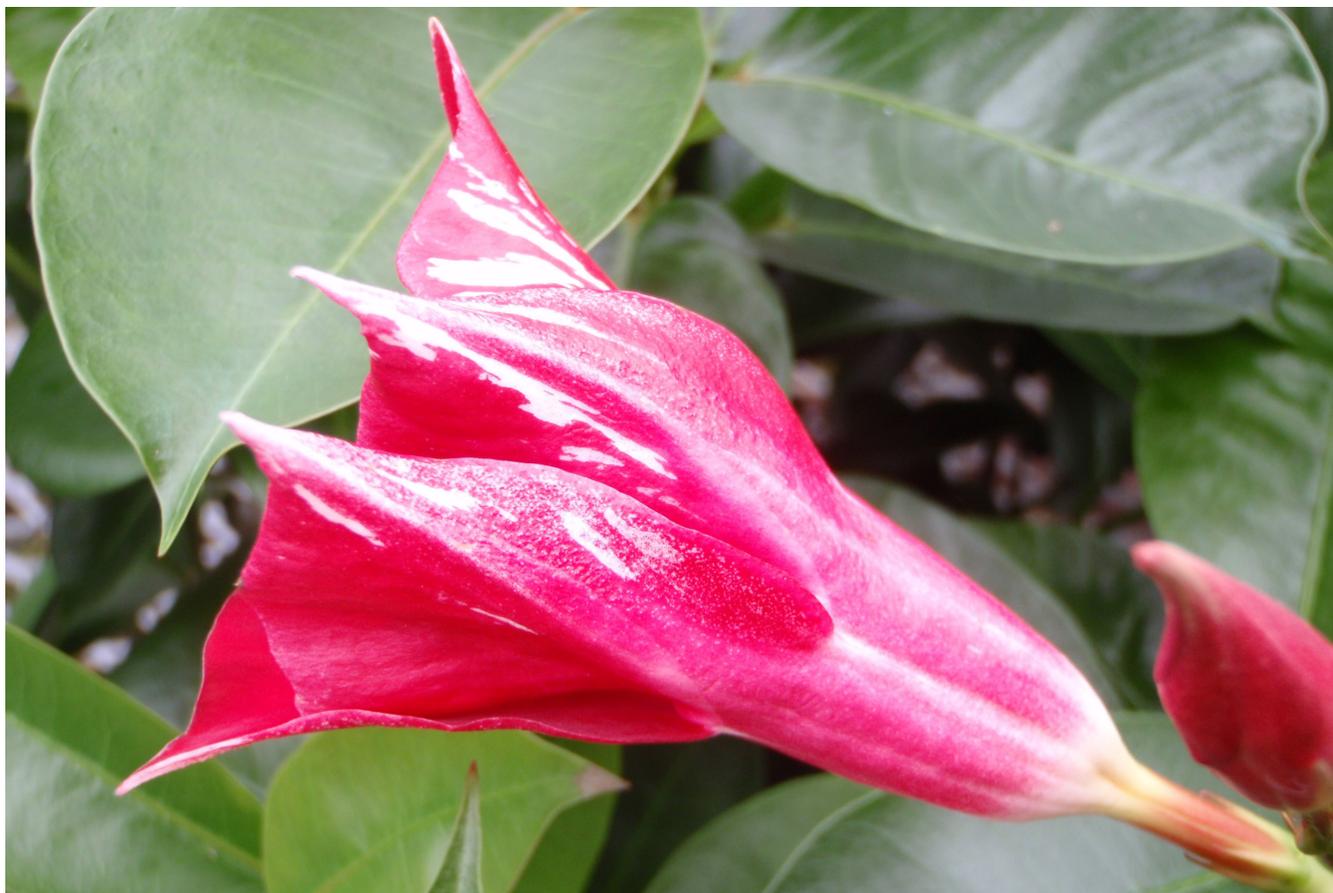


Photo 3. White scarring on flowers due to western flower thrips feeding.

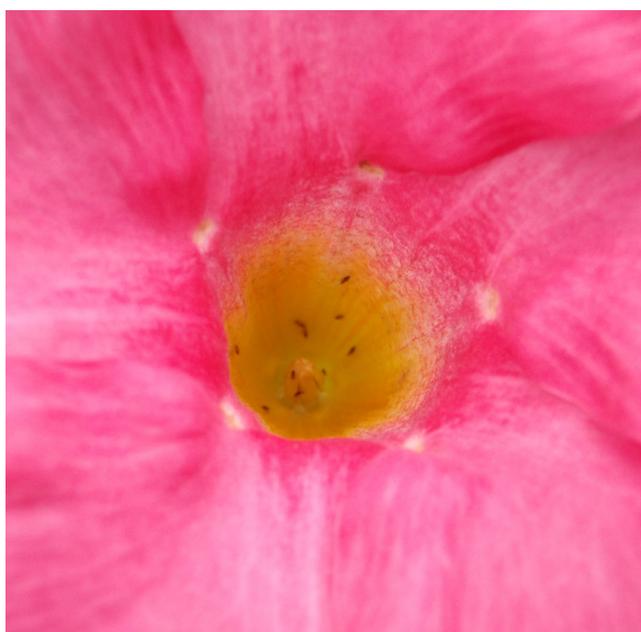


Photo 4. Western flower thrips can be found inside the flower feeding on pollen.