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Powdery Mildew on New Guinea Impatiens and Torenia

Watch for powdery mildew on New Guinea impatiens and other crops!

If you are in an area hard hit by impatiens downy mildew, you likely have more New Guinea impatiens on your benches than a couple of years ago. There are a few pests and diseases you already know to look for on this crop, broad mite and Impatiens necrotic spot virus (INSV) for example. Powdery mildew is not a disease that has typically been a large concern for New Guinea impatiens crops, however we have been seeing it with more frequency over the past couple of seasons and we're currently hearing reports of it in greenhouses.

While you are keeping your eye out for powdery mildew on New Guinea impatiens check your other crops too. Powdery mildew can be a production issue for torenia, another crop that we're seeing increased production of in areas in which



impatiens production has been reduced. We haven't heard reports yet of powdery mildew on torenia this season, but saw numerous



Powdery mildew on New Guinea impatiens. Photo courtesy of Margery Daughtrey.

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Powdery mildew on New Guinea impatiens in a 2013 variety trial. Symptoms were observed in the late season.

cases in greenhouses last season.

Watch your crops carefully for the first signs of powdery mildew; if spotted early this disease is manageable with a rotation of fungicides and environmental management. Scout weekly, and don't stop scouting after fungicide treatments (you'll need to watch to know if repeat applications are necessary). When scouting, make sure to check the interior and lower leaves - humidity is higher within the canopy and is likely where disease will first occur. Remember - early identification and treatment are critical to management.

Powdery mildew development and spread is favored by moderate temperatures, nights with high relative humidity (high humidity favors spore formation), and days with low relative humidity (low humidity favors spore dispersal). Keeping your greenhouse humidity down, less than 90% RH, will help prevent powdery mildew. Good plant spacing will improve air circulation and help lower humidity at the plant level (good spacing will also help you get better coverage when using fungicides). Using fans will also help. Heating and venting your greenhouse prior to nightfall and cooler

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Powdery mildew on New Guinea impatiens. Photo courtesy of Margery Daughtrey.



Powdery mildew on torenia.



Powdery mildew on torenia foliage and stems.

temperatures will also lower the humidity in the greenhouse.

Numerous fungicides are labeled for powdery mildew management on ornamentals in greenhouses. Use different modes of action in rotation and make sure to read the pesticide label and follow all instructions and precautions.

Good sanitation is always a key in disease management. Removing and discarding diseased plants and tissue can help prevent spread - make sure to bag the infected material before carrying through house so you don't spread the spores. Also make sure to clean the house at the end of the season of all plant debris, carryover plants, volunteer plants, and weeds in and around the greenhouse.

For many plants, using resistant cultivars is an easy and effective way to

manage powdery mildew. Currently, I am unaware of research describing the resistance and susceptibility of cultivars of New Guinea impatiens or torenia. However, if you notice that you have particular trouble with one cultivar and not another, keep notes and consider seeking alternative cultivars for the ones that are troublesome.