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## Dragon Wing Begonia: INSV

*Symptoms Impatiens necrotic spot virus (INSV) of leaf mottling and distortion were seen on a dragon wing begonia.*

On a recent visit to a greenhouse, a dragon wing begonia plant caught my eye – it was showing symptoms of some leaf distortion on the new growth along with some mottling (irregular patches of light and dark green colors), and occasional necrotic (dead) patches. Leaf samples were brought back to the lab and tested using an Agdia test strip ([www.agdia.com](http://www.agdia.com)) and were positive for *Impatiens spot necrotic virus* (INSV).



Symptoms of INSV observed on dragon wing begonia included leaf distortion on the new growth along with some mottling (irregular patches of light and dark green colors), with occasional necrotic patches. (Photos: Nora Catlin)

Symptoms of INSV can vary widely depending on the plant host. On begonia seeing any type of mottling – subtle or striking – should raise suspicion. Check out this great *e-Gro Alert* written a couple of years ago that shows symptoms on different types of begonias: <https://www.e-gro.org/pdf/2023-12-38.pdf>.

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Luckily, only one plant was showing symptoms – but with a virus that is spread by thrips this is little peace of mind in the spring when greenhouses are full and thrips populations are increasing.

To tackle INSV the first step is being able to recognize and diagnose the problem. You can familiarize yourself with the variety of symptoms through numerous e-Gro Alerts written on the topic. Links are shared on the next page. Getting help with proper diagnosis is the next step, as there can be a number of look-a-like causes. If you are doing your own virus testing with test strips, it's good practice to test for both INSV and the closely-related and also thrips-vectored TSWV.

Once you confirm the virus, infected plants should be discarded to prevent being a source of virus that will spread to other plants. You should also make sure you have good management of the thrips vector which spreads the virus from plant to plant.

**Find more e-Gro Alerts on INSV:**

[Heliotropium: Inconspicuous INSV](#)

[Shrimp Plant: Impatiens Necrotic Spot Virus \(INSV\)](#)

[TSWV and INSV on annual bedding plants](#)

[Begonias Gone Viral](#)

[New Guinea Impatiens: Impatiens Necrotic Spot Virus \(INSV\)](#)

[INSV on Nemesia](#)

[Coleus: Impatiens Necrotic Spot Virus \(INSV\)](#)

[Lobelia: Impatiens Necrotic Spot Virus \(INSV\)](#)

[Torenia: Impatiens Necrotic Spot Virus \(INSV\)](#)

[A Pictorial Guide to Common Symptoms of INSV in Greenhouse Crop](#)

[Tips for Diagnosing Impatiens Necrotic Spot Virus \(INSV\)](#)

[INSV on Echinacea](#)

[INSV on Penstemon](#)

[Gerbera: Mottling and Necrotic Spotting](#)

[INSV on Coleus](#)

[Sempervivum: Ringspots and Necrosis](#)

[Ranunculus: Necrotic Leaf Spots and Mottling](#)

[Torenia: INSV](#)

[Non-Stop Begonias: Impatiens Necrotic Spot Virus \(INSV\)](#)

**e-GRO Alert**

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