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Lobelia: *Impatiens Necrotic Spot Virus (INSV)*

Stunted lobelia plants with mottled leaves were observed while visiting a grower. Both symptoms are typical of what occurs with a virus. This Alert will aid in identification of an impatiens necrotic spot virus infection.

A grower asked us to look at a few plants which were stunted (Fig. 1). A closer inspection also revealed that the leaves were mottled (Fig. 2). Both of these symptoms are common with a virus.

A plant was tested for impatiens necrotic spot virus (INSV) and it was confirmed with an enzyme-linked immunosorbent assay (ELISA) test (Fig. 3). If you suspect a virus problem, have the plants tested by a diagnostic clinic. You can also conduct in-house testing with ELISA kits from Agdia (<http://www.agdia.com/>). It is important to test multiple leaves from the same plant that is exhibiting symptoms. The total leaf area tested should be around 1 square cm.

Management

Once a plant has INSV or tomato spotted wilt virus (TSWV), it cannot be removed. Discarding

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Figure 1. Stunted lobelia plant.

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e-GRO Alert

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infected plants is the only option, and this will help prevent the virus from spreading further. It is important to note that some plants may be asymptomatic, but still have INSV or TSWV. Since the primary method of spreading these viruses is via Western Flower thrips (*Frankliniella occidentalis*) feeding, it is critical to keep them under control. See e-GRO Alert 4.18 for management options.



Figure 2. A lobelia plant with mottled leaves which commonly denotes a virus infection.



Figure 3. A close up of a mottled lobelia leaf with a virus.



Figure 4. A confirmed INSV infestation with an enzyme-linked immunosorbent assay (ELISA) test. Note the double lines.

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