

IMPATIENS

To manage Impatiens Downy Mildew, use High Resistance Beacon Impatiens varieties and spray fungicides when growing susceptible varieties. And find many great resources below.

- *Plasmopara obducens* – Impatiens Downy Mildew
- The primary source of infection is air borne spores from infected plant material within the regional vicinity. The spores are easily wind borne and can originate from 100s of miles away. Disease experts believe that overwintering spores may form in dying stems and become the source of infection the following year. Removal of dead plants is highly recommended.
- Older varieties of Impatiens walleriana are susceptible. Beacon impatiens and New Guinea Impatiens exhibit High Resistance. Plants with High Resistance may support IDM infection, but the disease does not cause death. Susceptible varieties will die if infected with IDM.
- Down Mildews are found on the underside of the leaf. The first symptoms are a general chlorosis of the lower foliage of the plant. Under optimum conditions the downy mildew will sporulate and produce a white fluff on the lower leaf surface. Once the underside of the leaf is covered the leaf will fall off or dry up.
- Growing Beacon Impatiens, a High Resistance variety, will significantly reduce the spread of IDM. When growing the older susceptible varieties regimented fungicide spray programs are required to prevent infection and spread. Due to the zero tolerance for IDM at retail, we recommend that all Impatiens walleriana are treated with fungicides to prevent sporulation at retail.
- When growing impatiens, select IDM resistant impatiens series like Beacon Impatiens. Make sure that plugs are treated during the plug stage and at least once after transplant with appropriate fungicides. Review the attached results of commercial trials and apply the fungicides according to label directions.
- Growers are responsible for managing the spread of Impatiens Downy Mildew in their operations.

Impatiens walleriana @ Risk Crop
 Beacon Impatiens are exhibit High Resistance to Impatiens Downy Mildew (IDM). Although Beacon Impatiens do not die, like susceptible older series, they may have spores on the foliage making the plants unsalable. Growers must apply fungicides to control the *Plasmopara obducens* (IDM) when growing susceptible varieties or when disease pressure is high.



Impatiens Downy Mildew Retail Risk Management Strategies

Grower Assortment	No Control Strategy	Integrated Control Strategy Environment + Fungicide
Option A	Vegetative Doubles	Vegetative Doubles
Option B	Vegetative Doubles Susceptible self-sown or plugs Beacon self-sown or plugs	Vegetative Doubles Susceptible self-sown or plugs Beacon self-sown or plugs
Option C	Only Beacon self-sown or plugs	Only Beacon self-sown or plugs

High Risk
Manage Risk
Reduced Risk

To determine the risk of an IDM infection, growers must determine if they are going to use fungicides or not (no control strategy) and which Impatiens series they are growing. This table outlines high to reduced risk strategies: Option C + use of fungicides is the lowest risk of IDM infection.

The following tables provide fungicide results from the Ball Pathology testing lab on effective control strategies. Always refer to the current chemical label and apply according to the directions on the label. Remember that the first line of defense with IDM is always maintaining good cultural and environmental conditions to eliminate the opportunity for disease infection and spread.

Fungicides **MUST** be applied **preventatively** as once an infection enters the production area; fungicides cannot eliminate (**not curative**) the disease!

Review the information from the Ball Plant Diagnostic Group for [more information](#).

If you would like to consider other fungicides that the Ball Plant Diagnostic Group showed were effective in controlling IDM, review the information on [creating your own IDM control program](#).

For more information on Beacon High Resistant Impatiens, PanAmerican Seed has many resources explaining the High Resistance story and what you need to do to create benefits for your customer.

Additional Resources:

Todd Cavins has a great review on the Plug and finish cultural program on the [Ball Seed YouTube Channel](#).

Our [In the Break Room](#) series covers a wide range of topics growing teams can use to review key production issues.

Find more resources: <https://www.ballseed.com/QuickCulture/ProductionGuides/>

Tech On Demand Podcast: <https://www.growertalks.com/TechOnDemand/>

Young Plant Production					
Use Different FRAC codes to minimize resistance					
Treatment	Day After Stick or Sow	FRAC Code Use one	US	Canada	Method
Plug & Liner #1	Day 10-14 once roots are elongated	43+M3	Adorn + Protect DF + Capsil	Not Labeled	Drench
		43+4	Adorn + Subdue MAXX	Fluopicolide 4SC + Subdue Maxx	Drench
		33+4	K-Phite 7LP T/O + Subdue MAXX	Phostrol + Subdue MAXX	Drench
Plug & Liner #2 (omit with short crop times)	Day 24-28 after Stick or Sow	40	Stature SC	Forum	Spray
			Micora	Micora	Spray
		11+7+M3	Pageant + Protect DF + Capsil	Not Labeled	Spray
Plug & Liner #3	Day 31-35 after Stick or Sow Before ship or Transplant	U15	Segovis	Not Labeled	Drench
		43+4	Adorn + Subdue MAXX	Fluopicolide 4SC + Subdue Maxx	Drench
		33+4	K-Phite 7LP T/O + Subdue MAXX	Phostrol + Subdue MAXX	Drench
Finished Plant Production					
Use Different FRAC codes to minimize resistance					
Treatment	Days after Transplant	FRAC Code Use one	US	Canada	Method
Finish #1	Day 7-10 once roots are at edge of container	43+M3	Adorn + Protect DF + Capsil	Not Labeled	Drench
		43+4	Adorn + Subdue MAXX	Fluopicolide 4SC + Subdue Maxx	Drench
		33+4	K-Phite 7LP T/O + Subdue MAXX	Phostrol + Subdue MAXX	Drench
Finish #2 (omit with short crop times)	Day 14-28 after Transplant	40	Stature SC	Forum	Spray
			Micora	Micora	Spray
		11+7+M3	Pageant + Protect DF + Capsil	Not Labeled	Spray
Finish #3	Day 31-35 after Transplant Before Ship	U15	Segovis	Not Labeled	Drench
		43+4	Adorn + Subdue MAXX	Fluopicolide 4SC + Subdue Maxx	Drench
		33+4	K-Phite 7LP T/O + Subdue MAXX	Phostrol + Subdue MAXX	Drench