GROWERTALKS

Culture Notes

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No-Risk Color for the Shade

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For fast-filling, season-long flower color for the shade, you just can't beat *Impatiens walleriana*. But with disease pressures still looming in the landscape, how can you confidently grow and sell this garden staple? The team at PanAmerican Seed is pleased to introduce the new Beacon Impatiens, which has proven high resistance to the currently known and widely prevalent populations of *Plasmopara obducens*, the cause of Impatiens Downy Mildew.

Beacon is easy to include in your current production, too, as it offers similar plant structure, flowering time, flower size and crop culture to Super Elfin Impatiens. Below are the general greenhouse guidelines to bring impatiens back without the risk of disease.

Plug crop time: 4 to 5 weeks

Transplant to finish: 3 to 4 weeks

Plug culture

Beacon Impatiens is offered in raw seed form. Sow 1 seed per cell in a recommended 288 plug size. It germinates at 72 to 76F (22 to 24C) and takes three to five days; do not cover the seed. Light is optional using 450 to 700 f.c. Maintain the media pH at 6.0 to 6.2 and EC of 0.75 to 1.0 mmhos/cm during plug production. Keep moisture high at Level 4 to 5.

During Stage 2, provide moisture levels at 2 to 4 with temperatures at 70 to 72F (21 to 22C). Set light at 450 to 700 f.c. (4,800 to 7,500 Lux). Apply fertilizer less than 100 ppm N, less than 0.7 EC. Lower temperatures to 68 to 70F (20 to 21C) during Stage 3, with light and fertilizer regiments maintained the same as Stage 2. Set moisture at Level 2 to 3.

In Stage 4, keep moisture at Level 2 to 3 and lower temperatures again to 62 to 65F (17 to 18C). Light and fertilizer is the same as Stage 2 and 3.

PGRs

Impatiens will respond to daminozide, paclobutrazol and uniconazole. Monitoring of water and fertilization can help with controlling plant growth and vigor.

Growing on to finish

Temperatures for finishing Beacon Impatiens:

Day: 70 to 75F (21 to 24C)

Night: 62 to 68F (17 to 20C)

The target media pH should be 6.2 to 6.5, with an EC of 0.75 to 1.0 mmhos/cm. Apply a fertilizer less than 100 ppm N, less than 0.7 EC. Beacon Impatiens are day neutral.



Preventative chemicals

Beacon exhibits high genetic resistance to Impatiens Downy Mildew without the use of chemicals. While Beacon is not immune to IDM, Beacon can be grown successfully without preventive IDM fungicide applications.

It's not necessary to apply preventative fungicides for IDM disease management with Beacon Impatiens in either young plant or finish production. If IDM prevention

is part of an overall spray program for susceptible genetics, Beacon's performance will not be affected if they're also treated.

Pictured: Beacon Coral (right) outperforms susceptible competing variety (left) in a side-by-side field trial in The Netherlands in Summer 2018.

There are scenarios where preventive IDM fungicides may be recommended for Beacon Impatiens:

- Plugs or plants are being produced where impatiens are currently growing in the landscape (which could expose greenhouse or nursery-grown plants to high levels of natural inoculum) and then shipping to other regions.
- Receiving plugs or plants from a region where impatiens are currently growing in the landscape and susceptible genetics are being grown at the recipient location.

Crop Scheduling

Container Size	Plugs/Pot	Crop Time (weeks)	Season
Cell Pack	1 ppp	3 to 4	Spring
4 in./4.5 in./Quart	1 ppp	4 to 5	Spring
10-in. Pot or HB/3 Gallon	3 to 5 ppp	8 to 10	Spring

Beacon Impatiens fill shade gardens once again with bright, long-lasting color without the risk of disease. It's available in six colors and two mixes for the retail 2020 season. Contact your preferred supplier for these disease-resistant impatiens. **GT**

Lisa Lacy is Global Product Manager for PanAmerican Seed, stationed at its Elburn, Illinois, location. She's part of an international team responsible for bringing Beacon to market. Listen to the STEM Greenhouse Podcast on Spotify for the full story behind Beacon Impatiens.