

GET READY TO SHINE THE LIGHT ON COLOR IN THE SHADE!

## BRING BACK IMPATIENS WALLERIANA...

Beacon Impatiens has high resistance to Impatiens downy mildew, so it stays healthy and in color

...WITHOUT THE RISK OF DISEASE!

Grow Impatiens successfully without preventative Impatiens downy mildew fungicide applications

For growers and landscapers, there will be no costly middle-of-the-season replacements with Beacon Impatiens

Home gardeners can rely on Beacon Impatiens for season-long performance and fast fill in gardens

### **NEW BEACON IMPATIENS AND PANAMERICAN SEED® SHINE THE LIGHT ON DISEASE PREVENTION**

beacon noun

bea·con | /'bēkən a source of light and inspiration

Beacon Impatiens offers high resistance to the currently known and widely prevalent populations of Plasmopara obducens, which cause Impatiens downy mildew, offering the opportunity to bring back into production a well-known, in-demand, easy-to-grow and versatile product for gardens and landscapes without applying fungicides or using any special care regimes.



**OSTEOGENESIS** In the spirit of bringing light - and happiness - back to shade gardens all over the world, PanAmerican Seed will donate 3% of Beacon Impatiens global seed sales to a less-widely known charitable organization.

For 2019 and 2020, our chosen charity is the Osteogenesis Imperfecta (OI) Foundation. OI, also known as "brittle bone disease," is a genetic bone disorder characterized by fragile bones that break easily.

It is estimated that approximately 25,000 to 50,000 people in the United States alone have OI. The donation will go toward helping the OI Foundation improve the quality of life for those living with osteogenesis imperfecta through research, education, awareness and mutual support.

Beacon is putting the next generation of Impatiens to work for others as well.



### CULTURE PRACTICES FOR GROWING BEACON IMPATIENS

In our extensive trials process, young Beacon Impatiens plants were challenged with aerial inoculation of *Plasmopara obducens* sporangia under high disease pressure in environmentally controlled conditions.

Resistance screens were conducted in Venhuizen, Netherlands and Elburn, Illinois greenhouses and in the Ball Helix laboratory in West Chicago, Illinois. All hybrids were screened a minimum of 16 times.

The results showed a high correlation between the greenhouse/lab screens and field screens. Without any use of chemicals, Beacon Impatiens showed high resistance to Impatiens downy mildew in all of these trials

### **GREENHOUSE DEMONSTRATIONS**

4 weeks after inoculation, Beacon® is thriving, Venhuizen, NL Week 9, 2018



Super Elfin® XP Salmon vs. Beacon® Coral

### **CONTAINER DEMONSTRATIONS**

9 weeks after transplant, Beacon® is thriving, Venhuizen, NL Week 35, 2018



Super Elfin® XP Violet (Top) vs. Beacon® Violet Shades



Beacon® Orange (Top)
vs. Super Elfin® Bright Orange

### LANDSCAPE/FIELD DEMONSTRATIONS NATURAL INFECTION

vs. Beacon® Orange

**Super Elfin® Bright Orange** 

7 weeks after transplant, Beacon® is thriving, Elburn, IL Week 32, 2018



Super Elfin® XP White

Beacon® White

11 weeks after transplant, Beacon® is thriving, Venhuizen, NL Week 36, 2018





Super Elfin® XP White vs. Beacon® White



Super Elfin® XP Salmon vs. Beacon® Coral

In both field trials, no Impatiens downy mildew preventative fungicides were ever applied to the plant material.



### New Beacon® Series F<sub>1</sub>

Beacon is easy to include in your current production, 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 72-76°F (22-24°C) and takes 3-5 days; do not cover the seed. Light is optional using 450-700 f.c. Maintain the media pH at 6.0-6.2 and EC of 0.75-1.0 mmhos/cm during plug production. Keep moisture high at Level 4-5.

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

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

### **PGR**

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:** 70-75°F (21-24°C) **Night:** 62-68°F (17-20°C) The target media pH should be 6.2-6.5, with an EC of 0.75-1.0 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 is 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 varieties, Beacon's performance will not be affected if they are also treated.

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

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

### **CROP SCHEDULING**

CONTAINER SIZE	PLUGS/ POT	CROP TIME	SEASON
Cell Pack	1 ррр	3-4 weeks	Spring
4"/4.5"/Quart	1 ррр	4-5 weeks	Spring
10" Pot or HB/ 3 Gallon	3-5 ppp	8-10 weeks	Spring

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