



GrowerFacts Extra
Solarscape™ Interspecific Impatiens

Additional Culture Research

from

PanAmerican Seed®

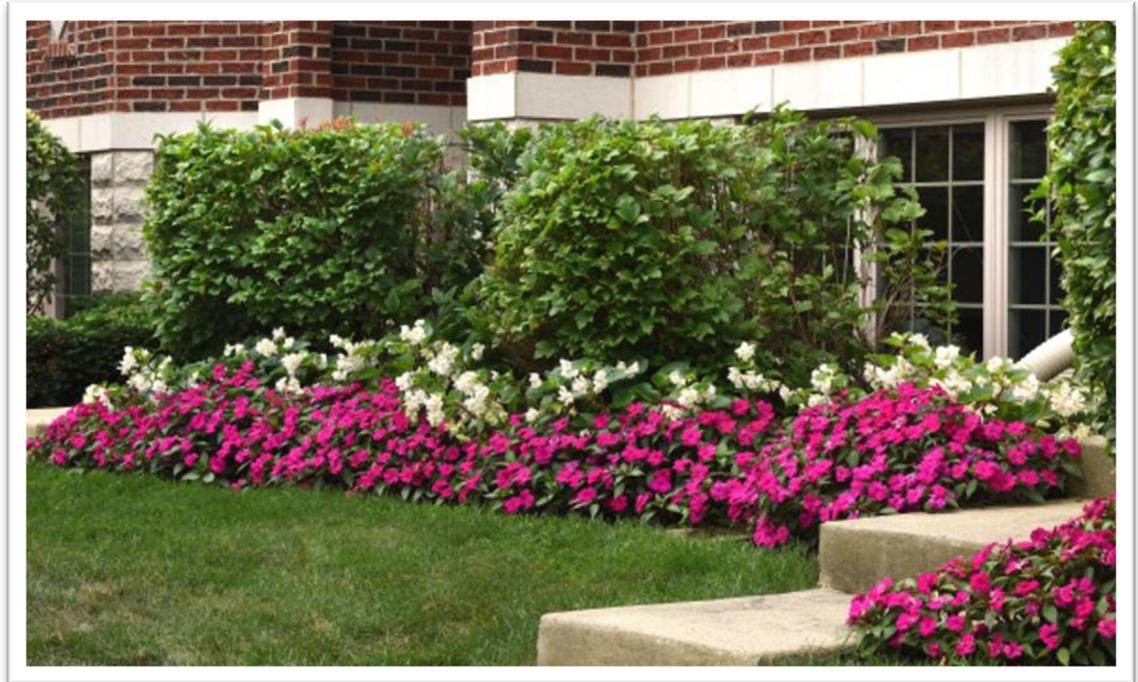
Impatiens Solarscape™

Germination and Plug Culture, published 2022

PanAmericanSeed®

OBJECTIVE

To present germination and plug culture guidelines for Interspecific Impatiens (*I. hybrida*) Solarscape™ Series.



Impatiens Solarscape™

Seed Form, published 2022

PanAmerican Seed.

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Seed Form

- Seed (raw) form
- No enhancements
- 85% germination standard



I. walleriana

Seeds/Gram Average:
1900



I. hybrida

Seeds/Gram Average:
320



I. hawkerii

Seeds/Gram Average:
635

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Cover vs. No Cover

- Light and high humidity are beneficial to germination.
- A light covering of course vermiculite is beneficial where production conditions do not favor high relative humidity in plug stage 1 and 2.



no cover

cover

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Temperature Requirements

- Stage 1: 72-77°F/22-25°C
 - Temperatures at or above 85°F/30°C result in slower germination speed and lower germination results.
- Stage 2: 72-77°F/22-25°C
 - White Shimmer may be 2 days slower than other colors.

Moisture Requirements

- Moisture level surrounding the seed is very important in Stages 1 and 2.
 - Stage 1 moisture level 4-5
 - Stage 2 moisture level 4



128 at 7 weeks old



288 at 5 weeks old

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Optimum Growing-on Temperature Range

- Day: 68-75°F/20-24°C
- Night: 60-68°F/15-20°C

Maximum Temperature

- 85°F/30°C
- Similar to vegetative products.
- Flower bud development slowed at 85°F/30°C or higher temperatures.

Minimum Growing Temperature

- 60°F/15°C
- While plants can survive, production slowed at temperatures below 55°F/13°C Average Daily Temperature (ADT).
- Lowered ADT will result in chlorosis, significantly slowed plant growth, delayed plant fill and delayed flowering.

Lowering Average Daily Temperature by 2°F/1°C will delay flowering by 2-4 days, with longer delay at cooler ADT.



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Cold Durability

While plants can survive, production at ADT below 55°F/13°C resulted in chlorosis, significantly slowed plant growth, delayed plant fill and delayed flowering.

(images taken four weeks after temperature regime implemented)



49°F/9°C

55°F/13°C

61°F/16°C

66°F/19°C

Top Row: Shimmer White
Bottom Row: XL Salmon Glow

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Plug Plant Growth Regulator (PGR)

- Respond to paclobutrazol spray and daminozide spray.
- Paclobutrazol 1 ppm spray, 10-14 days after sowing, repeat as needed.
 - Very responsive to paclobutrazol.
 - Drench in plug stage is not recommended.
- Daminozide 2,500-5,000 ppm spray, 10-14 days after sowing, repeat as needed.



Bonzi 1 ppm spray

B-Nine 5,000 ppm spray

Control

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Post Transplant PGR

Response differs between varieties.

Magenta Bliss, Shimmer White and Orange Burst

- Paclobutrazol 0.25 ppm drench or Paclobutrazol 5-10 ppm spray.
- If in dry growing conditions, a lower rate is recommended.

Neon Purple

- The most compact hybrid.
- Paclobutrazol 0.10 ppm drench or Paclobutrazol 5 ppm spray.
- If in dry growing conditions, a lower rate is recommended.

XL Salmon Glow

- More vigorous hybrid recommendations:
- Paclobutrazol 0.5 ppm drench or Paclobutrazol 10 ppm spray.

Bonzi 0.25 dr Control



Bonzi 0.5 dr Control



306
pack



Solarscape Magenta Bliss



Solarscape XL Salmon Glow

Quart
pot

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Water Stress

- Plant size can also be effectively controlled via water management.
- Dry growing significantly reduced plant size and final height.
- Water stress was achieved by not watering until leaves exhibited slight wilt.



Water Stressed

Control

Magenta
Bliss



XL Salmon
Glow

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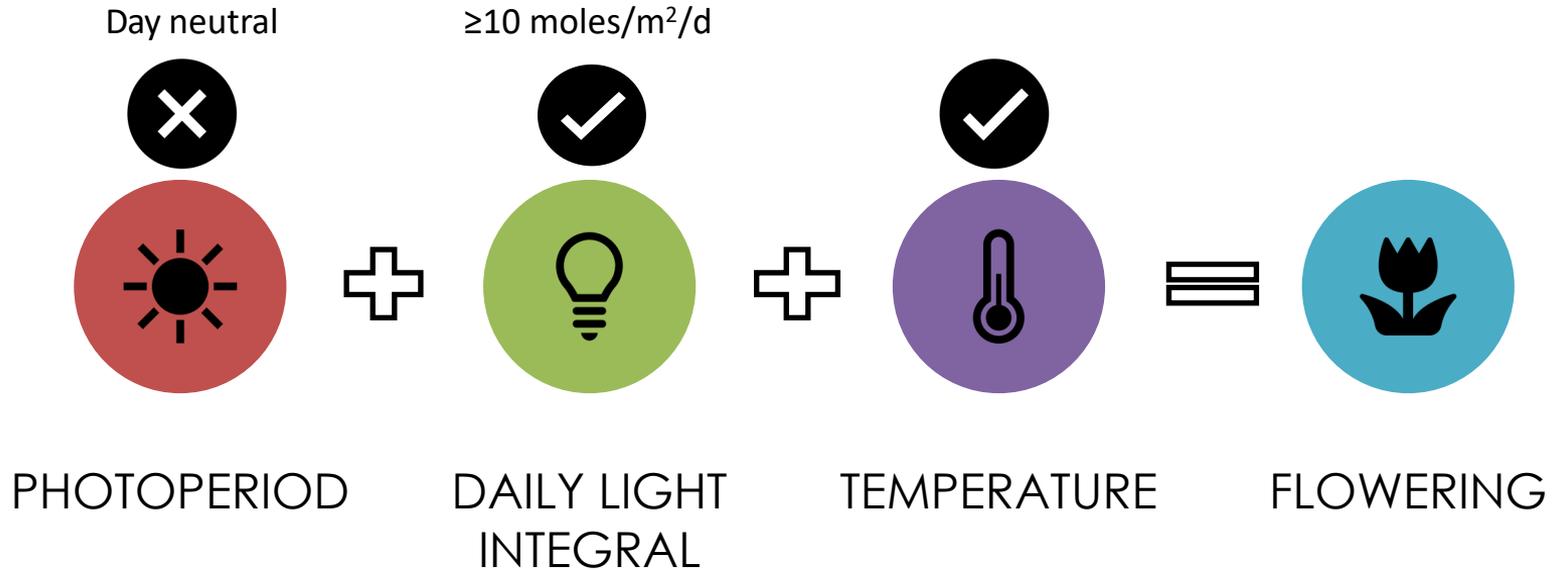
Flower Timing

- 5 to 7-day window @ 50% flowering
 - XL Salmon Glow
 - Magenta Bliss
 - Neon Purple
 - Orange Burst
 - Shimmer White
- Total crop time from sow to 50% flowering, Spring production conditions:
 - 1801/306 or like cell size, 1 ppp: 11-12 weeks
 - Quart/11 cm, 1 ppp: 11-12 weeks
 - 6 in./13.5 cm, 1 ppp: 12-13 weeks



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Finish Environment



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Crop Culture, published 2022

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Plug Crop Time

- 288: 1 seed/cell, 4-5 weeks
- 128: 1 seed/cell, 5-6 weeks

Container Sizes

- 1801/306 or like cell size
- Pint/10 cm, 1 plant/pot
- Quart/11 cm, 1 plant/pot
- 6 in./13.5 cm, 1 plant/pot
- Gallon/15 cm, 1-3 plants/pot

Minimum growing temperature

- 60°F/15°C
- While plants can survive, production at temperatures below 55°F/13°C ADT will result in chlorosis, significantly slowed plant growth, delayed plant fill and delayed flowered.

Maximum temperature

- 85°F/30°C
- Flower bud development is slowed at 85°F/30°C or higher temperatures.

Plant Vigor

- Solarscape and Solarscape XL plant vigor can be controlled with water and fertilization.

Day-length

- Neutral

