

Divine New Guinea Impatiens Culture

It's Divine™
the disease-resistant
Impatiens from seed

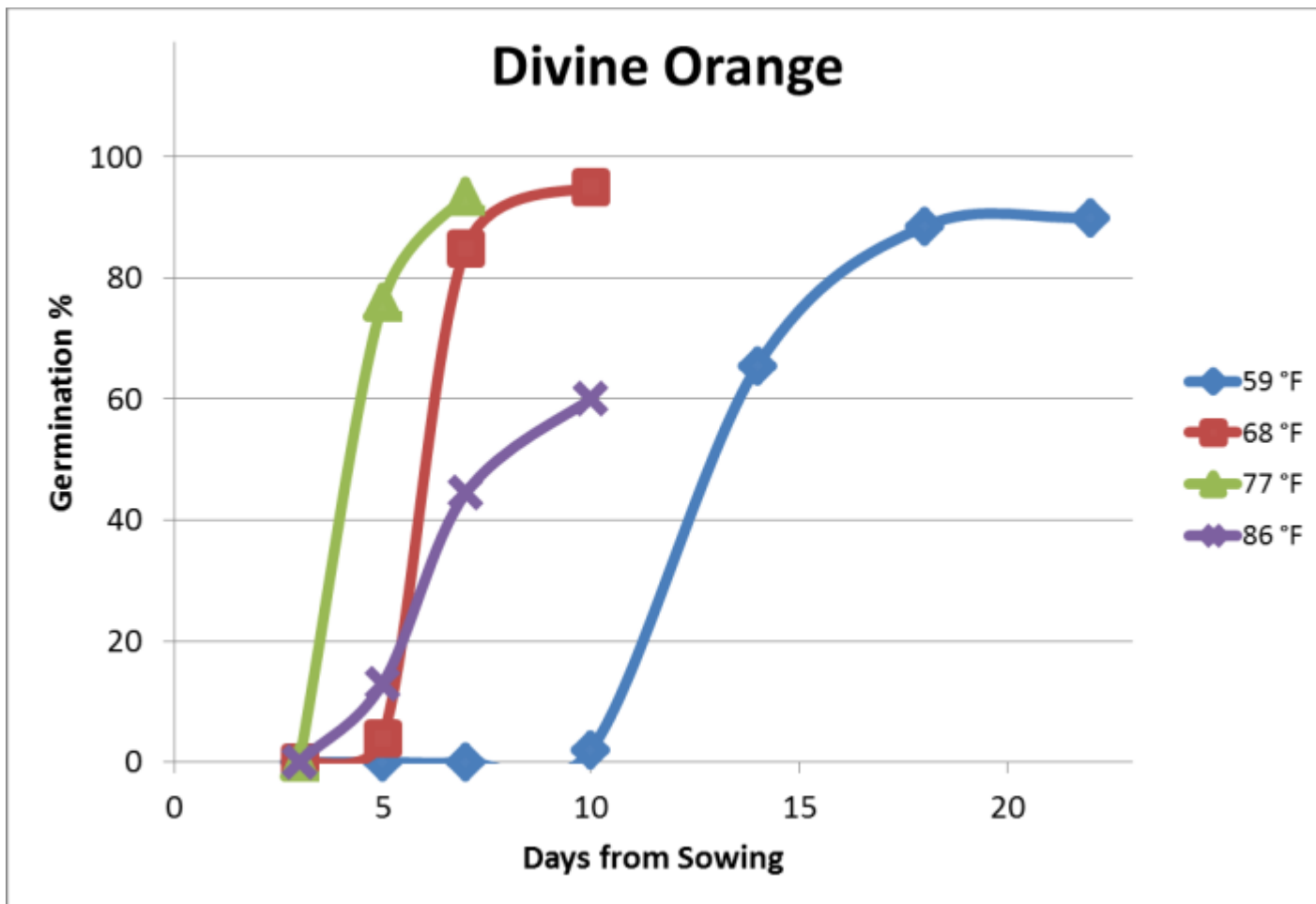


PanAmerican Seed®

Plug Culture: Stage 1 (until radicle emergence)

- 1 seed/cell
- Cover: Not needed under high RH
- Stage 1 Temperature: 77 °F
 - Non-uniform germination at lower temperatures
 - Lower germination at ≥ 86 °F
- Stage 1 Moisture: level 5
 - Lower moisture at stage 1 can reduce germination % and uniformity
- 7 days to complete stage 1 at 77 °F
- Note that recommended stage 1 conditions are similar to petunia rather than *Impatiens walleriana*

Germination Response to Stage 1 Temperature



Example of Non-uniform Germination at $\leq 74-77\text{ }^{\circ}\text{F}$



Plug Culture: Stages 2-4 (cotyledon emergence to pullable)

- Decrease temperature to 70-74 °F
- Moisture: Cycle between level 3 to 5
 - Saturated media causes stretch
 - Wilted plugs may not recover
- Fertigate with a CLF at 65-75 ppm N
- Avoid phosphorus (P) deficiency by providing 8-10 ppm P constantly
- Plug crop time of 5 and 6 weeks in 288-cell and 128-cell trays, respectively



Plug PGR: Daminozide (B-Nine, Dazide, etc.)

- Daminozide is inactive in media and evens out crop
- Apply at 3 to 4 weeks from sowing
 - When cotyledons are pencil eraser size (5-6 mm) or at first true leaf
 - Delayed plug PGR application
- Spray Daminozide between 1250 to 2500 ppm and repeat as needed
- Paclobutrazol (Bonzi, Piccolo) spray also effective between 1-2 ppm
- Negative DIF will also control stem elongation



Example of a Good Quality Plug Crop



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Finishing

- Use lower fertilizer rates to avoid stretch and lush growth
- Apply CLF at 75-125 ppm
 - Use lower rates under low ADT and higher rates at high ADT
- Avoid P deficiency by supplying 12-15 ppm P constantly
- Maintain pH above 5.8
 - Sensitive to micronutrient toxicity at lower pH
- Sensitive to high EC
 - Maintain EC below 1 mS/cm and sodium levels below 50 ppm
- Cycle media moisture to level 2 to 4
 - Excessive moisture causes stretch
- Finish crop time of 7 weeks in 306-packs at 74 °F ADT
- Provide high DLI of $\geq 10 \text{ moles} \cdot \text{m}^{-2} \cdot \text{d}^{-1}$

High Fertility Promotes Stretch



Example of Severe P Deficiency



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Example of Stretching under a Drip



Finish PGRs

- May not be needed when grown at moderate EC, with moisture cycling, and under a negative DIF
- If needed, Paclobutrazol drench at 0.25 to 0.5 ppm within a week from transplant is effective
- Daminozide spray at 2500 ppm is also effective

Divine Finish Crop Time

Container Size	288-cell plugs per pot	Spring	Autumn (Southeast)*
306 or 1801 flats	1	7 to 8	8 to 10
4 to 5-inch or quart pot	1	7 to 8	8 to 10
6-inch pot	1-3	8 to 9	9 to 11
10-inch basket	3-4	8 to 9	9 to 11
12-inch basket	4	8 to 9	9 to 11

Example of a Good Quality Finish Crop

