

Impatiens Dazzler®

(*Impatiens walleriana*)

Germination

- Time of radicle emergence (3-5 days)
- Soil temperature 75-78°F (24-26°C), no higher.
- Keep media very moist, near saturation.
- Do not cover or bury the seed.
- Light at 100-400 foot-candles may be beneficial for germination.
- Soil pH 6.0-6.2 and soluble salts (EC) less than 0.75 mmhos/cm (2:1 extraction).
- Impatiens are very sensitive to high salts, particularly high ammonium, during germination.
- Keep ammonium levels less than 10 ppm.

Plug Production

STAGE 1 - Time of radicle emergence (3-5 days)

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STAGE 2 - Stem and cotyledon emergence (10 days)

- Soil temperature 72-75°F (22-24°C).
- Reduce moisture levels once radicle emergence occurs! Allow the soil to dry out slightly before watering for best germination and rooting.
- Light can be provided between 450-700 foot-candles using supplemental HID lights for 2 weeks after cotyledons expanded (12-18 hours/day).
- Keep soil pH 6.0-6.2 and EC less than 1.0 mmhos/cm.
- Keep ammonium levels less than 10 ppm.
- Begin fertilizing with 50-75 ppm N from 14-0-14 or a calcium/potassium nitrate feed once cotyledons are fully expanded.
- Alternate feed with clear water.

STAGE 3 - Growth and development of true leaves (14-21 days)

- Soil temperature 68-72°F (20-22°C).
- Allow the soil to dry thoroughly between irrigations but avoid permanent wilting to promote root growth and control shoot growth.
- Supplemental light from HIDs of 450-700 foot-candles for 2-3 weeks after cotyledons expand for

12-18 hours/day.

- Maintain soil pH 6.0-6.2 and EC less than 1.0 mmhos/cm.
- Increase feed to 100-150 ppm N from 20-10-20 alternating with 14-0-14 or other calcium/potassium nitrate fertilizer.
- Fertilize every 2-3 irrigations.
- If using 15-0-15 supplement with magnesium 1-2x during this stage, using magnesium sulfate (16 oz/100 gal) or magnesium nitrate. Do not mix magnesium sulfate with calcium nitrate as precipitate will form!
- Use DIF whenever possible, especially the first 2 hours after sunrise, to control plant height.
- A-Rest, B-Nine, Bonzi, or Sumagic can be used to control height.

STAGE 4 - Plants ready for transplanting or shipping (7 days)

- Soil temperature 62-65°F (17-18°C).
- Allow soil to dry thoroughly between irrigations.
- Maintain soil pH 6.0-6.2 and EC less than 0.75 mmhos/cm.
- Fertilize with 14-0-14 or calcium/potassium nitrate feed at 100-150 ppm N as needed.

Growing On to Finish

TEMPERATURE

Night: 62 to 65°F (17 to 18°C)

Day: 65 to 75°F (18 to 24°C)

LIGHT

Maintain light levels as high as possible while maintaining moderate temperatures.

MEDIA

Use a well-drained, disease-free soil-less medium with a medium initial nutrient charge and a pH 6.2-6.8.

FERTILIZATION

- Fertilize every other irrigation with 15-0-15 alternating with 20-10-20 at 150 ppm nitrogen.
- Maintain medium electrical conductivity around 1.0 mmhos/cm (using 1:2 extraction).

CONTROLLING HEIGHT

- Once plants are rooted to the sides of the containers they can be allowed to wilt prior to irrigation to provide some height control.
- Height can also be controlled by withholding fertilizer, especially phosphorous and ammonium-form nitrogen.
- Impatiens are responsive to day/night temperature differential (DIF), and are shorter with a negative DIF.
- A-Rest, B-Nine, Bonzi and Sumagic are effective for impatiens height control, although these compounds are not labeled for this use in all locations.
- Always follow label recommendations.

Post Production Care

TEMPERATURE

Day: 62-65°F (17-18°C)

Night: 65-75°F (18-24°C)

- Optimum conditions may be difficult to maintain, especially if plants are displayed outside.
- Using a negative DIF will help keep the plants short and of high quality.

LIGHT

Impatiens are shade plants and should not be exposed to excessive amounts of sun. If properly hardened, impatiens can handle up to 4 hours of morning sun.

COMMON PROBLEMS

INSECTS: Aphids, Thrips

DISEASES: Pythium Root Rot, Rhizoctonia stem rot, Botrytis, TSWV/INSV

