GrowerFacts

Petunia Madness®

(*Petunia x hybrida*)

Germination

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

- Soil temperature 75 78°F (24-26°C).
- Keep media medium moist. Do not saturate!
- Do not cover or bury the seed.
- Light at 150 400 foot-candles may be necessary to prevent watery looking seedlings and improve germination.
- Soil pH 5.5 5.8 and soluble salts (EC) less than 0.75 mmhos/cm (2:1 extraction).
- Germination of some varieties may be improved by a 25 50 ppm N application of potassium nitrate after sowing.

Plug Production

STAGE 2: Stem and cotyledon emergence (7 10 days)

- Soil temperature 68 75°F (20-22°C).
- Reduce moisture levels once radicle emergence occurs! Allow the soil to dry out slightly between irrigations for best germination.
- Supplemental light from HIDs of 450 700 foot-candles for 2 3 weeks after cotyledons expand for 14 18 hours/day. This will promote early and uniform flowering.
- Keep soil pH 5.5 5.8 and EC less than 1.5 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 every other irrigation to control height.
- Apply protective fungicides for Thielaviopsis and Pythium control once in full stand.
- Use a fungicide drench for best control.

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

- Soil temperature 65 70°F (18-21°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 14 18 hours/day may be beneficial.
- Maintain soil pH 5.5 5.8 and EC less than 1.5 mmhos/cm.
- Increase feed to 100 150 ppm N from 20 10 20 alternating with 14 0 14 or other calcium/potassium nitrate fertilizer.
- Alternate feed with clear water to control plant height.
- Use DIF whenever possible, especially the first 2 hours after sunrise.
- B-Nine, A-Rest, and Bonzi are all registered for use on petunias.

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

- Soil temperature 60 62°F (16-17°C), no lower than 59°F (15°F).
- Flower delay may result if the temperature is held too low for too long, and if the plants have not initiated flowers.
- Allow soil to dry thoroughly between irrigations.
- Maintain soil pH 5.5 5.8 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.
- Potassium nitrate has been shown to promote flowering in petunias.
- No ammonium nitrate feed at this temperature!
- An additional fungicide drench may be necessary at this stage.