

Torenia Kauai™

(*Torenia fournieri*)

Germination

Media

Use a well-drained, disease-free, soilless medium with a pH of 5.5 to 6.0 and a medium initial nutrient charge (EC 0.75 mmhos/cm with a 1:2 extraction).

Sowing

Plug tray size 288 cells. Do not cover or bury the seed.

Germination takes 4 to 6 days.

Soil temperature: 71 to 76°F (22 to 24°C)

Light: Light is required.

Moisture: Keep soil moist but not saturated (level 4) during Stage 1 for optimal germination.

Humidity: Maintain 95% relative humidity (RH) until radicle emergence.

Plug Production

Media

Use a well-drained, disease-free, soilless medium with a pH of 5.5 to 6.0 and a medium initial nutrient charge (EC 0.75 mmhos/cm with a 1:2 extraction).

Sowing

Plug tray size from 288 cells. Do not cover or bury the seed.

Stage 1 - Germination takes 4 to 6 days.

Soil temperature: 71 to 76°F (22 to 24°C)

Light: Light is required.

Moisture: Keep soil moist but not saturated (level 4) during Stage 1 for optimal germination.

Humidity: Maintain 95% relative humidity (RH) until radicle emergence.

Stage 2

Soil temperature: 68 to 73°F (20 to 23°C)

Light: Up to 2,500 f.c. (26,900 Lux)

Moisture: Start to slightly reduce soil moisture (level 4) to allow the roots to penetrate into the media.

Fertilizer: Apply fertilizer at rate 1 (less than 100 ppm N/less than 0.7 mS/cm EC) from nitrate-form fertilizers with low phosphorous.

Stage 3

Soil temperature: 68 to 70°F (20 to 21°C)

Light: Up to 2,500 f.c. (26,900 Lux)

Moisture: Allow the media to further dry until the surface becomes brown to dark brown (level 3) before watering. Keep the moisture level at wet-dry cycle (moisture level 4 to 3). Do not allow the seedlings to wilt as they do not recover very well.

Fertilizer: Increase fertilizer to rate 2 (100 to 175 ppm N/0.7 to 1.2 mS/cm EC).

Growth Regulators: Growth regulators are not needed.

Stage 4

Soil temperature: 65 to 67°F (18 to 19°C)

Light: Up to 5,000 f.c. (53,800 Lux) if optimal temperature can be maintained.

Moisture: Same as Stage 3.

Growing On to Finish

Media

Use a well-drained, disease-free, soilless medium with a pH of 5.8 to 6.2 and a medium initial nutrient charge.

Temperature

Nights: 62 to 64°F (17 to 18°C)

Days: 65 to 70°F (18 to 21°C)

Light

Keep light as high as possible while maintaining recommended temperatures.

Irrigation

Avoid both excessive watering and drought.

Fertilizer

Starting a week after transplant, apply fertilizer weekly at rate 3 (175 to 225 ppm N/1.2 to 1.5 mS/cm) using predominately nitrate-form fertilizer with low phosphorus and high potassium. Maintain the media EC at 1.5 to 2.0 mS/cm and pH at 5.8 to 6.2.

Growth Regulators

Cycocel (chlormequat) can be used at rate of 500-750ppm (4.2 to 6.4 ml/l 11.8% formulation or 0.7 to 1.0 g/l of 75% formulation) at two weeks after transplant, repeat as necessary.

Bonzi (paclobutrazol) 20 to 30ppm (5.0 to 7.5 ml/l, 0.4% formulation) spray also works but slightly less effective than Cycocel.

Avoid using B-Nine/Alar or tank mix of B-Nine/Cycocel as B-Nine will bleach flower color to become less intense. B-Nine will also delay flower timing.

Pinching

No need.

Crop Scheduling

Sow to transplant (288-cell plug tray): 5 to 6 weeks.

Transplant from 288-tray to saleable finished container:

Container Size: 804 pack

Plants Per Pot: 1

Weeks From Transplant: 5-6

Total Weeks: 10-12

Container Size: 4-in. (10-cm pot)

Plants Per Pot: 1

Weeks From Transplant: 6-7

Total Weeks: 11-13

Common Problems

Insects: No serious problems

Diseases: No serious problems

Garden and Landscape Information

Location: Full shade to partial sun

Height: 8 in. (20 cm)

Spread: 8 in. (20 cm)

Spacing: 8 in. (20 cm) apart

NOTE: Growers should use the information presented here as a starting point. Crop times will vary depending on the climate, location, time of year and greenhouse environmental conditions. Chemical and PGR recommendations are only guidelines. It is the responsibility of the applicator to read and follow all the current label directions for the specific.

