

Wizard® Coleus

Solenostemon scutellarioides

Approximate seed count: 100,000 S./oz. (3,500 S./g)

Plug Production

Media

Use a well-drained, disease-free, soilless media with a pH of 5.5 to 5.8 and a medium initial nutrient charge (EC 0.75 mS/cm).

Sowing

Sow seed in 288 or larger plug tray. In Europe, 264-cell trays can be used. Cover lightly with vermiculite.

Stage 1 – Germinations takes 4 to 5 days.

Soil temperature: 72 to 75°F (22 to 24°C)

Light: Light is not necessary.

Moisture: Keep media evenly moist (level 4), but not saturated.

Humidity: Maintain 95%+ relative humidity (RH) until radicles emerge.

Note: Coleus is very sensitive to high salts – particularly high ammonium – during germination. Keep ammonium levels less than 10 ppm.

Stage 2

Soil temperature: 72 to 75°F (21 to 24°C)

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

Moisture: Reduce soil moisture slightly (level 3 to 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. Alternate feed with clear water. Feed between 2 to 3 clear irrigations. Irrigate early in the day so foliage is dry by nightfall to prevent diseases. Keep soil pH at 5.5 to 6.2 and EC less than 1.0 mS/cm.

Stage 3

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

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

Moisture: Allow media to dry further until the surface becomes light brown (level 2) before watering, but avoid excessive wilting to promote root growth and control shoot growth. Keep the moisture to wet-dry cycle (moisture level 4 to 2).

Fertilizer: Increase fertilizer to rate 2 (100 to 175 ppm N/0.7 to 1.2 mS/cm EC). Maintain soil pH at 5.5 to 5.8 and EC less than 1.0 mS/cm (1:2 extraction).

Growth Regulators: Generally no need. If necessary, A-Rest, B-Nine and Bonzi are effective on coleus. Always follow label recommendations.

Use temperature differential (DIF) whenever possible, especially the first 2 hours after sunrise, to control plant height.

Stage 4

Soil temperature: 60 to 62°F (16 to 17°C)

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

Moisture: Same as Stage 3.

Fertilizer: Same as Stage 3.

Growing On to Finish

Container Size

804 or 306 pack: 1 plant per pot

4 to 5-in. (10 to 13-cm) pots: 1 plant per pot

Media

Use a well-drained, disease-free, soilless media with a pH of 5.5 to 6.0 and a medium initial nutrient charge (EC 0.75 mS/cm).

Temperature

Nights: 57 to 65°F (14 to 18°C)

Days: 65 to 75°F (18 to 24°C)

Light

Provide shade if over 5,000 f.c. (53,800 Lux).

Irrigation

Avoid both excessive watering and drought.

Fertilizer

Coleus are low to moderate feeders. Excessive feed can lead to dull coloration and decreased vigor. Apply fertilizer at rate 2 (100 to 175 ppm N/0.7 to 1.2 mS/cm) using predominately nitrate-form fertilizer with low phosphorus and high potassium. Maintain medium electrical conductivity around 1.0 mS/cm (using 1:2 extraction).

Growth Regulators

Control plant growth first by environment, nutrition and irrigation management, then with chemical plant growth regulators if needed. Minimize ammonium-form nitrogen fertilizer to avoid stem elongation. Coleus are responsive to day/night DIF and are shorter with a negative DIF.

B-Nine/Alar (daminozide) 2,500 to 5,000 ppm (3.0 to 6.0 g/l 85% formulation or 4.0 to 8.0 g/l of 64% formulation) can be used at 2 to 3 weeks after transplanting. Repeat if necessary.

Pinching

Not necessary.

Spacing

Space plants when foliage is touching.

Crop Scheduling

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

Transplant to finish: 7 to 9 weeks

Common Problems

Insects: Aphids, mealy bugs, whiteflies

Diseases: *Alternaria*, *Botrytis*, *Verticillium*

Other: Excessive internode elongation under low light

Garden and Landscape Information

- Coleus is very heat and humidity tolerant.
- Reaches 10 to 12 in. (25 to 30 cm) tall.
- Low maintenance requirements.
- Plant in partial to full shade, but plants can tolerate more sun in less harsh climates.
- Plants will stretch under very low light.
- Plants may get leaf burn under high light intensity.
- Space plants 10 to 12 in. (25 to 30 cm) apart in well-drained soil.

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 chemical being used in accordance with all regulations.