GrowerFacts

PanAmerican Seed™

Coleus, Premium Shade Kong™

(*Solenostemon scutellariodes*)

Germination

Approximate seed count (pelleted):

Kong: 25,650 S./oz. (900 S./g)

Kong Jr.: 22,170 S./oz. (780 S./g)

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 trays. Cover lightly with vermiculite.

Stage 1 – Germination 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 than10 ppm.

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 trays. Cover lightly with vermiculite.

Stage 1 – Germination 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 than10 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 not needed. If necessary, A-Rest, B-Nine or 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: Fertilize with 14-0-14 or calcium/potassium nitrate feed at 100 to 150 ppm N as needed.

Growing On to Finish

Container Size
4 to 6-in. (10 to 15-cm) pots: 1 plant per pot

Gallon 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: 62 to 65°F (17 to 18°C)

Days: 70 to 75°F (21 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 predominantly nitrate-form fertilizer with low phosphorus and high potassium. Maintain medium electrical conductivity around 1.0 mS/cm (using 1:2 extraction).

Growth Regulators
Kong and Kong Jr. are well branched and have short internodes, but because of the large leaves, the plants tend to get too wide and need more space before they get too tall. Growth regulators are generally not needed. But if necessary, 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 applied at 2 to 3 weeks after transplanting. Repeat if necessary.

Pinching
Pinching is not recommended. It will result in smaller leaves and delay crop time.

Spacing
Space plants when foliage is touching.

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

Transplant to finish: 4 to 6-in. (10 to 15-cm) pots: 4 to 5 weeks

Gallon pots: 6 to 7 weeks

Common Problems
Insects: Aphids, mealy bugs, whiteflies

Diseases: Alternaria, Botrytis, Verticillium

Other: Excessive internode elongation under low light

Garden and Landscape Information

- Full shade is recommended for best performance. Leaves may burn if planted in full sun.
- Space approximately 12 to 14 in. (30 to 35 cm). Plants will grow 18 to 20 in. (46 to 50 cm) for Kong and 18 to 24 in. (46 to 60 cm) for Kong Jr.
- Very heat and humidity tolerant.
- Low-maintenance requirements.
- Space plants 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.

PanAmerican Seed™

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