GrowerFacts

Coleus Chocolate Mint

(solenostemon scutellariodes)

Germination

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. In Europe, 264-cell trays can be used. Cover lightly with vermiculite.

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 than 10 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. In Europe, 264-cell trays can be used. 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 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 not needed. 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

306 pack: 1 plant per cell (Chocolate Covered Cherry only)

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

6-in. (15-cm) or gallon pots: 3 plants 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 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

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.

Florel (ethephon) can be applied for promoting increased branching and height control if necessary. A rate of 300 ppm (7.69 ml/l 3.9% formulation or 0.63 ml/l of 48% formulation) at 2 to 3 weeks after transplanting is effective. Florel also delays flowering.

Optional PGR: 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 for height control at 2 to 3 weeks after transplanting. Repeat if necessary.
Note: Use caution when using Augeo and Topflor as they could alter foliage color.
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: 6 to 8 weeks
Common Problems
Insects: Aphids, mealy bugs, whiteflies
Diseases: Alternaria, Botrytis, Verticillium, Downy Mildew
Other: Excessive internode elongation under low light
Garden and Landscape Information
• Sun tolerant grown under high humidity and under low humidity only if in low light intensity areas such as northern Europe, but are also suited to partial to full shade.
• Very tolerant of heat and high humidity.
• Reaches 12 to 28 in. (30 to 70 cm) tall (varies by variety).
• Low-maintenance requirements.
• Plants will stretch under very low light.
• Space plants 12 to 14 in. (30 to 35 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.

Ref.: May 1, 2013
http://www.panamseed.com/advancedsearch.aspx