GrowerFacts PanAmericanSeed®

Chocolate Mint & Dark Chocolate Coleus

Solenostemon scutellarioides
Approximate Seed Count: 27,500 S./oz. (970 S./g)

Plug Production

Stage 1 – Time of radicle emergence
(4 to 5 days)
■ Soil temperature: 72 to 75°F (22 to 24°C).
■ Keep media evenly moist, but not saturated.
■ Cover seed lightly with vermiculite.
■ Light is not necessary for germination until radicle emergence.
■ Soil pH should be 5.5 to 5.8 and soluble salts (EC) less than 0.75 mmhos/cm (2:1 extraction).
■ Coleus is very sensitive to high salts – particularly high ammonium – during germination.
■ Keep ammonium levels less than 10 ppm.

Stage 2 – Stem and cotyledon emergence
(10 days)
■ Soil temperature: 72 to 75°F (22 to 24°C).
■ Reduce moisture levels once radicle emergence occurs. Allow the soil to dry out slightly before watering for best germination and rooting.
■ Keep soil pH at 5.5 to 6.2 and EC less than 1.0 mmhos/cm.
■ Keep ammonium levels less than 10 ppm.
■ Begin fertilizing with 50 to 75 ppm N from 14-0-14 or a calcium/potassium nitrate feed once cotyledons are fully expanded.
■ 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.

Stage 3 – Growth and development of true leaves
(14 to 21 days)
■ Soil temperature: 68 to 70°F (20 to 21°C).
■ Allow the soil to dry thoroughly between irrigations but avoid excessive wilting to promote root growth and control shoot growth.
■ Maintain soil pH at 5.5 to 5.8 and EC less than 1.0 mmhos/cm.
■ Increase feed to 100 to 150 ppm N from 20-10-20, alternating with 14-0-14 or other calcium/potassium nitrate fertilizer.
■ Fertilize every 2 to 3 irrigations.
■ Use temperature differential (DIF) whenever possible, especially the first 2 hours after sunrise, to control plant height.
■ A-Rest, B-Nine and Bonzi are effective on coleus. Always follow label recommendations.

Stage 4 – Plants ready for transplanting or shipping
(7 days)
■ Soil temperature: 60 to 62°F (16 to 17°C).
■ Allow soil to dry thoroughly between irrigations.
■ Maintain soil pH at 5.5 to 5.8 and EC less than 0.75 mmhos/cm.
■ Fertilize with 14-0-14 or calcium/potassium nitrate feed at 100 to 150 N as needed.

Growing On to Finish

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. (50,000 Lux).

Media
Use a well-drained, disease-free soilless medium with a medium initial nutrient charge and pH of 5.5 to 6.0.

Fertilization
■ Fertilize every other irrigation with 15-0-15 alternating with 20-10-20 at 150 to 200 ppm nitrogen.
■ Maintain medium electrical conductivity around 1.0 mmhos/cm (using 1:2 extraction).
■ Coleus are low to moderate feeders. Excessive feed can lead to dull coloration and decreased vigor.

Controlling Height
■ Once plants are rooted to the sides of the containers, they can be allowed to wilt prior to irrigation to provide some height control.
■ Height can also be controlled by withholding fertilizer, especially phosphorus and ammonium-form nitrogen.
■ Coleus are responsive to day/night DIF and are shorter with a negative DIF.
■ A-Rest, B-Nine and Bonzi are effective at controlling height on coleus.

Post Production Care
Temperature
- **Night**: 62 to 65°F (17 to 18°C)
- **Day:** 70 to 75°F (21 to 24°C)
- Optimal conditions may be difficult to maintain, especially if plants are displayed outside.
- Using a negative DIF will help keep the plants short and of high quality.

Light
- Recommend partial to full shade, but plants can tolerate full sun in less harsh climates. Keep soil moist when grown in full sun exposure.
- Plants will stretch under very low light.
- Plants may get leaf burn under high light intensity.

Common Problems
Insects: Aphids, mealy bugs, whiteflies
Diseases: *Alternaria, Botrytis, Verticillium*
Other: Excessive internode elongation under low light

Chocolate Mint & Dark Chocolate Coleus Crop Schedule & Uses

Sow to Transplant (288 plugs)	**Stage 1:** 4 to 5 days **Stage 2:** 10 days **Stage 3:** 14 to 21 days **Stage 4:** 7 days **Total:** 5 to 6 weeks
Transplant to Finish (pack, 5 in./13 cm, gallon/15 cm – 3ppp)	6 to 8 weeks

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.

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