

Cultural Information for: Coleus Fairway & Rainbow Annual

Common Name: Coleus

Botanical Name: Coleus hybrida

Seed Count: 122,000/ounce 4,300/gram Fairway
113,400/ounce 4,000/gram Rainbow

Optimum Germination Temperature: 70-75°F/ 21-24°C

Optimum Growing Temperature: 65-70°F / 18-21°C

Optimum pH: 5.8 – 6.2

EC – Plug: 0.4 – 0.8 mmhos/cm (1:2) / 0.9 – 2.0 (SME) / 1.1 - 2.6 (Pour Thru)

EC – Finishing: 0.9 – 1.3 mmhos/cm (1:2) / 2.1 – 3.5 (SME) / 2.7 - 4.6 (Pour Thru)

Plug Culture: 4 weeks (288 / 12 x 24 tray)

Stage 1 (days 1-6) Sow seed into a sterile and well-drained media with a pH between 5.5-6.5. Coleus is very sensitive to high salts, particularly high ammonium. Provide a soil temperature of 70-75°F/21-24°C. Apply a light coat of vermiculite to maintain sufficient moisture but not too heavy as seeds need light to germinate.

NOTE: Coleus is a facultative short day plant so to delay pre-mature flower formation, subject the plugs to a long photoperiod (>13 hours).

Stage 2 (days 7-13) Reduce the moisture level once radicle emergence occurs. Allowing the soil to dry out slightly before watering provides the best germination and rooting. Fertilize plugs with 50 ppm N once per week to maintain strong growth. Coleus is sensitive to strong sunlight at this stage. Optimum light level is 2,000-3,500-foot candles/21,500-38,000 lux.

Stage 3 (days 14-21) Drop the temperature to 68-70°F/20-21°C. Allow the soil to dry thoroughly between irrigations but avoid excessive wilting to promote root growth and control shoot growth. Fertilize plugs with 100-150 ppm N. Use negative DIF whenever possible, especially the first 2 hours after sunrise, to control plant height.

Stage 4 (days 22-28) Lower the temperature to 61-65 °F/16-18°C for 7 days to tone the plugs. Fertilize as needed to maintain strong growth.

Transplant: 6-9 weeks

Media: A sterile and well-drained media high in organic matter.

Fertilizer: Feed with 100-150 ppm N as needed to maintain strong growth. It is important to supply sufficient amounts of Potassium in the fertilizer for good foliage color. Coleus is a moderate feeder and excessive feed can lead to dull coloration and decreased vigor.

Temperature: Maintain a day temperature of 70-75°F/21-24°C with a night temperature of 60-65°F/15-18°C.

Light: Provide light levels up to 5,000-foot candles/54,000 lux. Provide a photoperiod greater than 13 hours after transplanting to prevent premature flower formation.

Growth retardant: Environmental controls (moisture stress, negative DIF, recommended light intensity, good air movement and correct spacing are effective in controlling plant stretch. Alternatively, apply B-Nine® (daminozide) at 2,500 to 5,000 ppm/0.25 to 0.5% to reduce stem elongation

Diseases and pest control: Coleus are susceptible to Pythium, Rhizoctonia, Botrytis, Aphids, Whitefly, Leaf Miners and Mites.

Schedule: Coleus is sold for its colorful foliage and plants can be sold as soon as the plants reach market size.

Container	Variety	Plug	Finish
Cell Pack	Fairway	4 weeks	5 weeks
4 inch/10 cm.	Rainbow	4 weeks	8 weeks

“All information given is intended for general guidance only and may have to be adjusted to meet individual needs. Cultural details are based on North American conditions and Sakata cannot be held responsible for any crop damage related to the information given herein. Application of recommended growth regulators and chemicals are subject to local and state regulations. Always follow manufacturer's label instructions. Testing a few plants prior to treating the entire crop is best.”