

Southern Star Ruellia

R. brittoniana (*R. tweediana*)

Approximate Seed Count: 13,850 S./oz. (488 S./g)

Plug Production

Media

Use a well-drained, disease-free, soilless media with a pH of 5.8 to 6.2 and a medium initial nutrient charge (EC 0.75 mmhos/cm).

Sowing

Sow seed in 406 to 288-cell trays. In Europe, 264-cell trays can be used. Cover seed with vermiculite.

Stage 1 – Germination takes 5 to 6 days

Soil temperature: 72 to 76°F (22 to 25°C)

Light: Not required.

Moisture: Keep soil wet (level 4) during Stage 1.

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

Stage 2

Soil temperature: 72 to 75°F (22 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.

Stage 3

Soil temperature: 68 to 72°F (20 to 22°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. 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). If growth is slow, apply a balanced ammonium and nitrate-form fertilizer with every other fertilization. Maintain medium pH of 5.8 to 6.2 and EC between 1.0 and 1.5 mS/cm (1:2 extraction).

Growth Regulators: Not needed.

Stage 4

Soil temperature: 65 to 68°F (18 to 20°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

Media

Use a well-drained, disease-free, soilless media with a pH of 5.5 to 6.2 and a medium initial nutrient charge (EC 0.75 mmhos/cm).

Temperature

Nights: 65 to 68°F (18 to 20°C)

Days: 68 to 75°F (20 to 24°C)

Light

Maintain light levels as high as possible. Light intensity will significantly affect the number of flowers.

Photoperiod

Southern Star Ruellia can flower under any daylength but will flower about 5 to 7 days faster under shorter days.

Irrigation

Maintain even moisture and do not allow plants to wilt.

Fertilizer

Starting 1 week after transplant, apply fertilizer at rate 3 (175 to 225 ppm N/1.2 to 1.5 mS/cm) using predominately nitrate-form fertilizer with low phosphorus and high potassium. Maintain the media EC at 1.5 to 2.0 mS/cm and pH at 6.0 to 6.5.

Growth Regulators

Not needed.

Pinching

Not needed.

Spacing

Not needed.

Container Size

1801 pack: 1 plug per cell

4 to 4.5-in. (10 to 11-cm) pot: 1 plug per pot

6-in. (15-cm) pot: 1 to 3 plugs per pot

1-gallon (18-cm) pot: 1 to 3 plugs per pot

Crop Scheduling

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

Transplant to flower: 8 to 10 weeks

Total Crop Time:

Container Size	Number of Plants	Spring	Summer
1801 pack	1 plug per cell	15 to 16 weeks	13 to 14 weeks
4 to 4.5-in. (10 to 11-cm) pot	1 plug per pot	15 to 16 weeks	13 to 14 weeks
6-in. (15-cm) pot	3 plugs per pot	15 to 16 weeks	13 to 14 weeks
1-gallon (18-cm) pot	3 plugs per basket	15 to 16 weeks	13 to 14 weeks

Note: For 6-in. (15-cm) and 1-gallon (18-cm) pots, using fewer plants per pot results in a longer crop time to finish.

Common Problems

Insect: None

Disease: None

Tips for Landscapers and Gardeners

- Plant Southern Star Ruellia in full sun after all danger of frost is past.
- Plants thrive in heat and humidity.
- Tolerant of both drought and excessive water after establishment in the garden.
- Space plants 10 to 12 in. (25 to 30 cm) apart.
- Performs as a perennial in USDA Hardiness Zone 8 (10°F/-12°C minimum temperature) or warmer.

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.