

GrowerFacts

Coreopsis grandiflora

Early Sunrise

(Coreopsis grandiflora)

Germination

Use a well-drained, disease-free, soilless medium with a pH of 5.8 to 6.2 and a medium initial nutrient charge (EC) of 0.50 to 0.75 mmhos/cm (1:2 extraction). Cover the seed with a light layer of coarse grade vermiculite. This helps in keeping the seed moist during germination. Light is required for germination. Allow 4 to 6 days for germination.

Plug Production

Plug Tray Size

- Early Sunrise, Rising Sun, and Sunfire coreopsis plugs are best produced in 392-cell plug trays.
- The average plug production time is 5 weeks.

Media

Use a well-drained, disease-free, soilless medium with a pH of 5.8 to 6.2 and a medium initial nutrient charge (EC) of 0.50 to 0.75 mmhos/cm (1:2 extraction).

Sowing

Cover the seed with a light layer of coarse grade vermiculite. This helps in keeping the seed moist during germination. Light is required for germination. Allow 4 to 6 days for germination.

Temperature

Germination: 68 to 72°F (20 to 22°C)

After Germination: Plugs can be grown in the greenhouse at 70 to 75°F (21 to 24°C) days and 60 to 65°F (15 to 18°C) nights until transplant.

Light

Stage 1: Light is required for germination

After germination: 2,500 to 3,000 f.c. (25,000 to 30,000 Lux)

Seedling maturity: Up to 5,000 f.c. (50,000 Lux)

Humidity

Maintain 95 to 97% relative humidity during germination.

Soil Moisture

Keep soil moisture high at radicle emergence, then reduce moisture levels after cotyledon development. Do not allow seedlings to wilt.

Fertilizer

When cotyledons fully expand, start fertilizing with 50 ppm N twice a week. As the true leaves develop, increase the fertilizer rate to 100 ppm N. Maintain the plug media EC at 0.75 to 1.0 mmhos/cm and pH at 5.8 to 6.2.

Plant Growth Regulators

Not required.

Growing On to Finish

Container Size

4-in. (9-cm.) or 6-in. (15-cm.) pots

Media

Use a well-drained, disease-free, soilless medium with a pH of 5.8 to 6.2 and medium initial nutrient charge.

Temperature

Night: 55 to 60°F (13 to 15°C)

Day: 60 to 70°F (15 to 21°C)

Maintain these temperatures until bud initiation.

Light

Coreopsis flowers earlier under long days. Provide night interruption lighting (10 p.m. to 2 a.m.) when grown under short days.

Irrigation

Maintain even moisture. Avoid excessive wetness.

Fertilizer

After transplant, fertilize the crop with a well-balanced fertilizer supplying 150 to 200 ppm N. Maintain the media EC at 1.50 to 2.00 mmhos/cm and pH at 5.8 to 6.5.

Plant Growth Regulators

Growth Regulators can be applied for container production. Foliar sprays of B-Nine at 5,000 ppm applied twice after transplant work well. First application can be done 2 weeks after transplant followed by a second application 2 weeks later. In regard to the plant height at flowering during pack/container production, Rising Sun flowers more compact, Sunfire flowers slightly taller than Rising Sun, and Early Sunrise flowers the tallest of all the three. Hence, Rising Sun & Sunfire needs less PGR applications compared to Early Sunrise.

Crop Scheduling

Sow to transplant (392-cell plug): 5 weeks

Transplant to finish in a 4-in. (9-cm.) pot: 8 to 10 weeks

Transplant to finish in a 6-in. (15-cm.) pot: 9 to 10 weeks

Total crop time from sow to finished container: 13 to 15 weeks

The timing is dependent on the temperature and light provided. Sunfire flowers at the same time as Rising Sun and both flower a week to 10 days earlier than Early Sunrise.

Common Problems

Insects: Whiteflies, thrips, & aphids

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<http://www.panamseed.com/advancedsearch.aspx?srch>

