

# Early Sunrise, Rising Sun & Sunfire Coreopsis

*These Bright Bloomers Stay In Flower All Summer!*

■ These bright and bold varieties are great first-year flowering perennials and weeks earlier than any coreopsis on the market.

■ **Rising Sun** is more naturally compact in a 4-in. pot – requires less PGRs.

■ **Early Sunrise, Rising Sun** and **Sunfire** have the same hardiness – Zones 4 to 9.

■ **Sunfire** is well-matched to **Rising Sun** for timing and is earlier to flower than **Early Sunrise**.

■ **Early Sunrise** features a bright yellow double flower; **Rising Sun** also has a semi-double yellow flower but with a red fleck in the center. **Sunfire** has single yellow flowers with a burgundy-red center.

■ **Early Sunrise, Rising Sun** and **Sunfire** coreopsis are available as raw seed.

■ Contact your local distributor or call PanAmerican Seed at 800 231-4868 for ordering information on coreopsis.

*Coreopsis grandiflora*

Approximate seed count: 10, 700 S./oz. (375 S./g)

## 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

# PanAmerican Seed™

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