

## African Marigold Vanilla

(*Tagetes erecta*)

### Germination

**Seed Count:** 9,000-10,000 S/oz. (317-352 S/g)

#### Plug Tray Size

Can be best produced in a 288, 200 or a similar cell size plug tray.

#### Media

Use a well-drained, disease-free, soilless medium with a pH of 6.2 to 6.5 and a medium initial nutrient charge (EC) of 0.75 mmhos/cm (1:2 extraction).

#### Sowing

Cover the seed with coarse vermiculite. Allow 3 to 4 days for germination.

#### Temperature

**Germination:** 70 to 72°F (21 to 22°C)

**Cotyledon stage:** 65 to 72°F (18 to 22°C)

**True leaves:** 65 to 70°F (18 to 21°C)

**Hold plugs:** 65 to 68°F (18 to 20°C)

#### Light

**Stage 1:** Light is not required for germination

**After germination:** 1,000 to 2,500 f.c. (10,600 to 26,500 Lux)

**Seedling maturity:** Up to 3,000 f.c. (31,800 Lux)

#### Humidity

Maintain 95% relative humidity (RH) until cotyledons emerge.

#### Soil Moisture

Keep soil moisture high until radicle emergence, then reduce moisture levels after the radicle penetrates the medium. Do not allow seedlings to wilt.

### Plug Production

#### Fertilizer

**Stages 2 & 3:** Apply 50 to 75 ppm N, maintaining an EC of 1.0.

**Stage 4:** Apply 100 to 150 ppm N, maintaining an EC of 1.0 to 1.5. Maintain pH in the range of 6.0 to 6.5.

#### Growth Regulators

PGRs are not required.

### Growing On to Finish

#### Container Size

Can be produced in 4.5-in. (11-cm) or similar size containers.

#### Media

Use a well-drained, disease-free, soilless medium with a pH of 6.2 to 6.5 and a medium initial nutrient charge.

#### Temperature

**Nights:** 60 to 62°F (15 to 17°C)

**Days:** 65 to 68°F (18 to 20°C)

#### Light

Keep light levels from moderate to high.

#### Irrigation

Maintain even moisture. Do not allow plants to wilt.

#### Fertilizer

Feed plants weekly with 150 to 200 ppm N with a complete fertilizer. Maintain the media EC at 1.5 to 2.0 mmhos/cm and pH at 6.2 to 6.5.

#### Growth Regulators

PGRs are not required.

**Crop Scheduling**

**Sow to transplant (288 cell plug tray):** 3 weeks

**Transplant to finish in 4.5 (11 cm) pot:** 7 to 8 weeks

**Total crop (sow to flower):** 10 to 11 weeks

**Common Problems**

**Diseases:** Damping off in the seedling stage

**Insects:** Aphids, mites, whitefly

