GrowerFacts

French Marigold Durango®

(*Tagetes patula*)

Germination

Approximate de-tailed seed count: 9,500 to 10,500 S./oz. (335 to 370 S./g)

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 less than 0.75 mmhos/cm with a 2:1 extraction).

Sowing
Plug Tray Size: Can be produced in 288 or larger cell-size plug trays.
Cover the seed with a medium layer of vermiculite at sowing.

Stage 1 – Germination takes approximately 3 to 4 days.

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

Light: Light is not required for germination.

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

Humidity: Maintain 95 to 97% relative humidity (RH) until radicle emergence.

Plug Production

Stage 2
Temperature: 65 to 72°F (18 to 22°C)

Light: Can be up to 2,500 f.c. (26,900 Lux) during Stage 2.

Moisture: Keep the media medium (level 3) to medium wet (level 4).

Fertilizer: Apply fertilizer at rate 1 (less than 100 ppm N/less than 0.7 mS/cm EC) with a nitrate-form fertilizer with low phosphorous.

Stage 3
Temperature: 65 to 70°F (18 to 21°C)

Light: Up to 2,500 f.c. (26,900 Lux)

Moisture: Keep the media medium wet (level 3) during Stage 3.

Fertilizer: Increase the fertilizer rate to level 2 (100 to 175 ppm N/0.7 to 1.2 mS/cm EC). Maintain a media pH of 5.8 to 6.2 and EC at 0.7 to 1.0 mS/cm (1:2 extraction).

Stage 4
Temperature: 65 to 68°F (18 to 20°C)

Light: Light levels can be up to 5,000 f.c. (53,800 Lux) if temperatures can be maintained. **Moisture:** Same as Stage 3.

Fertilizer: Same as Stage 3.

Growth Regulators: Generally not required during plug production.

Do not hold the plugs too long – transplant them on time.

Growing On to Finish

Transplant: French Mariglod plugs can be transplanted deeply to the level of the first node for stretched plugs.

Container Size
Cell-packs, 4-in./Quarts: 1 plant per cell
6-in. (15-cm) pots: 3 plants per pot

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

Temperature
Night: 60 to 62°F (15 to 17°C)

Day: 63 to 70°F (17 to 21°C)
Can be grown at moderate temperatures, minimum temperature 54°F (12°C).

Light
Keep light levels as high as possible while maintaining appropriate temperatures.

Irrigation
Maintain optimal media moisture (not too wet or not too dry).

Fertilizer
Starting 1 week after transplant, apply fertilizer at rate 2 (100 to 175 ppm N/0.7 to 1.2 mS/cm) using predominantly nitrate-form fertilizer with low phosphorus. Maintain the media EC at 1.0 to 1.5 mS/cm and pH at 6.2 to 6.5. For constant fertilizer program, can apply fertilizer at rate 1 (75 to 100 ppm N/0.5 to 0.7 mS/cm) while maintaining the above recommended EC and pH ranges.

Plant Growth Regulators
PGRs are generally not required, especially for compact series, Janie and Hot Pak. For Bonanza and Durango, to tone the plants for best appearance, we recommend applying daminozide at 2,500 ppm (3.0 g/l 85% formulation or 3.9 g/l of 64% formulation), 1 week after transplant for cell packs or 2 weeks after transplant for 6-in. (15-cm) pots.

Photoperiod
French Marigold can flower year around but flower slightly quicker under short day than long day conditions.

Crop Scheduling

Sow to transplant (288 cells): Approximately 3 weeks.

Transplant to flower: 3 to 4 weeks in pack and 5 to 6 weeks in 6-in. (15-cm) pot with 3 ppp.

Common Problems
Diseases: Damping off in the seedling stage

Insects: Aphids, Mites, and Whitefly

Garden and Landscape Information

- Offers strong branching for superior landscape performance
- Plant in full sun
- Space plants 6 to 8 in. (15 to 20 cm) apart in well-drained soil
- Mature plant height:
  - Bonanza and Durango: 10 to 12 in. (25 to 30 cm)
  - Janie: 8 to 10 in. (20 to 25 cm)
  - Hot Pak: 6 to 7 in. (15 to 18 cm)

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.

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