# GrowerFacts Gazania New Day

(Gazania rigens)

### Germination

# Media

Use a well-drained, disease-free soilless plug media with a pH of 5.8 to 6.2, and an EC of 0.75 mmhos/cm (1:2 extraction).

# Sowing

#### Plug Tray Size

Can be produced in a 406 or 288-cell size plug trays. For Europe – can be produced in a 264-cell size plug tray.

A medium covering of coarse-grade vermiculite is recommended at sowing to help maintain humidity around the seed for better germination performance. 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 the media moisture at medium wet (level 4) during Stage 1.

**Relative humidity:** Maintain 95 to 97% relative humidity until cotyledons emerge.

# **Plug Production**

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#### Stage 2

**Soil Temperature:** 68 to  $72^{\circ}F$  (20 to  $22^{\circ}C$ ) days; 60 to  $62^{\circ}F$  (16 to  $17^{\circ}C$ ) nights

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

Media Moisture: Keep the media moisture at 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

Soil Temperature: 68 to 70°F (20 to 21°C) days; 60 to

### 62°F (16 to 17°C) nights

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

**Media Moisture:** Keep the media moisture medium dry (level 2) to medium (level 3).

**Fertilizer:** Increase the fertilizer rate to 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** 

**Soil Temperature:** 65 to 68°F (18 to 20°C) days; 60°F (16°C) nights

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

Media Moisture: Same as Stage 3

Fertilizer: Same as Stage 3.

Plant Growth Regulators

Not required.

# Growing On to Finish

**Container Size:** 306-packs, 4-in. (10-cm), and 6-in. (15-cm) pot.

#### Media

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

### Temperature

Night: 55 to 60°F (13 to 16°C) Day: 65 to 70°F (18 to 21°C)

#### Light

Keep light levels as high as possible while maintaining the optimal temperatures.

#### Fertilizer

Starting a 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. Maintain the media EC at 1.50 to 2.00 mS/cm and pH at 5.8 to 6.2.

#### Irrigation

Maintain optimal media moisture, i.e. not too wet or not too dry.

#### Plant Growth Regulators

If needed can use B-Nine/Alar (daminozide) at 3,500 ppm (4.2 g/l of 85% formulation or 5.6 g/l of 64% formulation) to tone the crop. One application at 2 to 3 weeks after transplant will be sufficient.

# Pinching

Pinching is not required.

#### Crop Scheduling

Sow to transplant: Approximately 5 weeks for a 288 or a 264-cell (Europe) and 4 weeks for a 406-cell size plug.

#### Transplant to finish:

Container Size: 306-packs

Plants per Pot: 1

Weeks from Transplant: 8-9

Total Weeks: 12-14

Container Size: 4-in (10-cm) pot

#### Plants per Pot: 1

Weeks from Transplant: 8-9

#### Total Weeks: 12-14

Container Size: 6-in (15-cm) pot



#### Plants per Pot: 3 Weeks from Transplant: 8-9 Total Weeks: 12-14

Crop time can be influenced by light levels i.e. when grown in areas with low light levels or during period of low light intensities, the crop time could be a few weeks (approx. 3 weeks) longer.

#### Common Problems

**Diseases:** Damping-off during seedling production. **Insects:** Check/monitor for Thrips, Mites, Whiteflies and Aphids.

#### Garden and Landscape Information

Location: Full Sun

Height: 8 to 10 in. (20 to 25 cm) Spread: 6 to 8 in. (15 to 20 cm)

**Spacing:** 6 to 8 in. (15 to 20 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.

Ref. : 9 May 2013 http://www.panamseed.com/advancedsearch.aspx?srch

