

TECHNICAL GUIDE

Gazania rigens F₁ Zany™

Flowering

Flowering Type: Facultative long day plant, flowering more quickly under a longer day length.

Flowering Mechanism: Longer day length, higher light intensity and warmer temperatures will decrease the number of days to flower. Flower initiation occurs when the plants reach the 6-8 leaf stage. Supplemental lighting during germination will benefit but is not necessary.

Plug Culture

Germination: Maintain optimal conditions for seedling development, beginning on the day of sowing until radicle emergence. Expect radicle emergence in 4-6 days

Cover: No cover is necessary; however, a thin layer of medium vermiculite will help improve moisture around the seed.

Sowing method: 1 seed per plug

Media: pH 5.5-5.8; E.C. 0.5-0.75

Temperature: 21-23 °C (70-73 °F), until radicle emergence, then lower to 20-21 °C (68-70 °F).

Moisture: Begin with a wet (4) and on day 4 reduce to a moist (3). On day 6, after radicle emergence, begin to alternate between and wet (4) and medium (2). Allow the media to approach a medium (2) before re-saturating to a wet (4). Gazania require slightly drier moisture levels during and after germination.

Humidity: 95-100% until day 4; then reduce to 40-60%. Provide proper ventilation and horizontal airflow to improve oxygen levels in the media.

Light: Light is not necessary for germination but can improve overall seedling performance. If utilizing a germination chamber provide 10-100 ft. candles (100-1,000 lx) to prevent seedling stretch after germination.

Fertilizer: Maintain an EC < 1.0 Begin feeding on day 5 using 50-60 ppm nitrogen. Fertilize using a calcium based fertilizer 14-4-14 or 15-5-15. Lower phosphorous levels are recommended to keep seedlings more compact. Fertilized water should not exceed an EC of 0.5.

Plug Bulking and Flower Initiation: Optimum conditions during the vegetative stage from cotyledon expansion to flower initiation. This stage is when the seedling root to the edge of the plug and reach the 6-8 true leaf stage when flower initiation occurs.

Media: pH 5.5-5.8; EC 0.75-1.0

Light: Light levels can be increased to 8-10 mol/m²/day (2,500-3,000 ft. candles or 25,000-30,000 lx)

Temperature: 20-21 °C (68-70 °F). To tone the plug before transplant reduce the temperature to 16 °C (60 °F) one week before transplanting.

Moisture: Alternate between moisture levels wet (4) and medium (2). Allow the media to reach a medium (2) before re-saturating to a wet (4). Gazania prefer to be grown at a lower media moisture. This also helps to control soft growth.

Fertilizer: Fertilize with a complete calcium based fertilizer 1-2 times per week. Use a 14-4-14 or a 17-5-17 feed at 100 ppm nitrogen.

Growth Regulators: Gazania are not very responsive to growth regulators. Growing at lower temperatures will prevent seedling stretch. If needed, sprays with B-Nine (daminozide) at 2,500 ppm can be used. Under higher temperatures, the rate can be increased to 5,000 ppm. Cycocel (chlormequat) sprays at 500 ppm can also be used with the higher rates at higher temperatures.

Fungicides: Fungicide applications should not be necessary unless plants are grown under low light and cooler temperatures. Then an application at recommended rates would be beneficial.

Growing On

Media: pH 5.5-5.8; EC 1.0-1.5

Light: After transplant gazania prefer high irradiance conditions so they should be grown in full sun. Provide light levels of 10-18 mol/m²/day (3,000-5,000 ft. candles or 30,000-50,000 lx)

Temperature: 16-17 °C (60-62 °F) nights, 17-18 °C (62-64 °F) days for the first 7-10 days or until the roots reach the bottom of the container. Thereafter temperatures may be lowered to 13-15 °C (56-58 °F) night, with a moderate increase in day temperature.

Moisture: Alternate between moisture levels wet (4) and medium (2). Allow the media moisture to reach a medium before re-saturating to a medium.

Humidity: 40-60% humidity is ideal. Providing good ventilation and horizontal airflow will help lower the humidity and dry back the media, providing oxygen to the roots.

Fertilizer: Fertilize 1-2 times weekly using a complete fertilizer, 15-5-15, 17-5-17, at 150-200 ppm nitrogen. Under warmer temperatures and higher light conditions a 20-10-20 fertilizer can be used.

Growth Regulators: If growing cooler, no growth regulators are necessary. If needed, sprays with B-Nine (daminozide) at 2,500 ppm can be used. Under higher temperatures the rate can be increased to 5,000 ppm. Cycocel (chlormequat) sprays at 500 ppm can also be used with higher rates at higher temperatures.

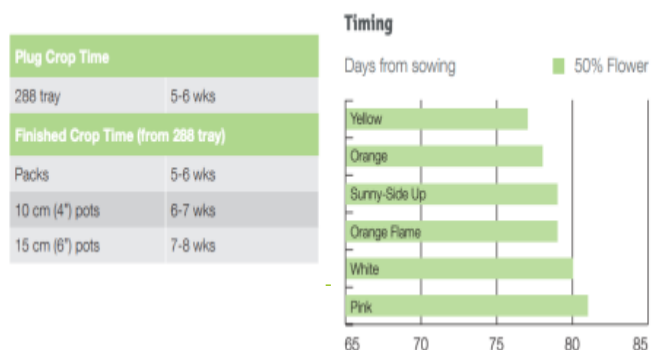
Fungicide: Apply fungicides during long periods of low light, cooler temperatures and high humidity.

Common Diseases: Botrytis is the primary concern under conditions of low light and high humidity.

Pests: Primarily aphids and thrips.

Post Harvest to Maintain Quality: Fertilize with Potassium Nitrate at 100 ppm 1-2 weeks prior to shipping.

Timing & Positioning Charts



Moisture Codes

Saturated (5) Water is easily observed when finger is pressed on cell. Water moves freely from the top of the plug to the bottom.

Wet (4) Media looks black and is not glistening. The media feels wet to the touch but there is very little water movement.

Moist (3) Water is not easily visible. When finger is pressed on the cell there is very little movement from top to bottom.

Medium (2) Media is not black, but now looks medium brown. There is no water movement when pressed with finger.

Dry (1) Media has changed color to a very light brown and is dry to the touch.

All information in our technical guide is based on our own trials and would therefore be as guideline only. Detailed cultivation aspects vary depending on climate, location, time of year and environmental conditions. Benary expressly disclaims any responsibility for the content of such data/information and makes no representation or warranty for the cultivation of any products listed. It is recommended that growers conduct a trial of products under their own conditions.