GROWERTALKS

Culture Notes

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Lead the Parade with Majorette Gerberas

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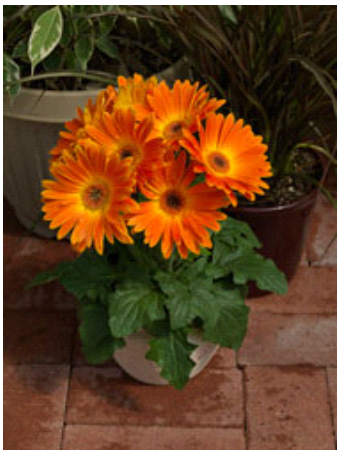

Gerbera Daisies always bring a smile to your face due to their bright colors and pleasing flower shape. Sakata's new Majorette series leads the parade with unparalleled uniformity, flower power and controlled plant growth. Gerbera Majorette initially features seven colors, including one bicolor, and is ideal for use in 1-qt. pots and larger with multiple plants. Majorette Gerbera varieties are offered as Slick Coat seed for streamlined sowing and singulation.

Pictured: Majorette Sunset Orange Gerbera

Plug stage

Tray size—The main plug trays used are 288, 144 and 128 depending on the finished container. Gerbera is sensitive to excess humidity and moisture control is easier in trays with less soil volume.

Media—A long fiber peat or high porosity peat blend works well to provide media aeration. Poor soil aeration suppresses boron and calcium uptake, resulting in tip abortion and gnarled/stunted growth. Target a starting pH of 5.5 to 5.8 and EC of 0.7 (2:1 slurry).

Cover—Gerbera requires light to germinate, but a light cover of soil or coarse vermiculite is beneficial to prevent the seed from drying out, especially when germinating in the greenhouse. Covering with Reemay (fiber spun cloth) is often used to manage light, humidity and temperature during this important stage.

Temperature—Optimum germination temperature ranges from 72 to 75F (22 to 23C).

Fertilizer—When the cotyledons are up and lying flat, apply 75 ppm N. As the plants progress and form true leaves, increase to 150 ppm N. Cal/Mag formulations, such as 15-5-15, work well combined with 20-10-20, as needed, to maintain pH between 5.5 and 5.8 and EC between 0.8 and 1.0 mmhos. Water early in the day and rinse the foliage with fresh water, as young foliage is sensitive to salts. Gerbera is sensitive to low boron, so target 0.25 ppm B at each fertilization.

Lighting—Gerbera is a light accumulator and benefits from supplemental lighting during periods of low light (winter). Supplementing with 300 to 500 foot candles from HID lights works well. 10 to 14 moles of light per day is optimum.

PGRs—In general, not required in the plug stage if proper culture is followed. If needed, B-Nine at 500 to 1,000 ppm is effective.

Crop timing—Crop time ranges from 5 weeks in a 288 to 7 to 8 weeks in a 128 tray.

Finish stage

Potting—Well-drained, porous media with a pH between 5.5 to 5.8 and EC between 0.8 and 1.0 mmhos.

Spacing—Initially keep pot-tight for the first 4 to 5 weeks and then space out as needed. Care should be taken to prevent leaves of neighboring plants from covering the plant crown as this induces flower bud abortion.

Temperature—Close to zero DIF is recommended. An average daily temperature of 68F (20C) with days around 70F (21C) and nights at 66F (18C) is a good strategy.

Watering and fertilization—Gerbera prefers a well-aerated media that is allowed to dry in between irrigations for optimum nutrient uptake. Similar to the plug recommendation above, apply 150 to 200 ppm N using a combination of Cal/Mag and ammonium-based fertilizer blends to maintain EC at 1.2 to 1.5 mmhos and a pH between 5.5 to 5.8. A pH below 5.5 increases the risk of manganese toxicity (black spots on lower foliage) and a pH above 6.0 results in iron and manganese deficiency (interveinal chlorosis on the upper foliage).

Lighting—The quality and quantity of light directly impacts crop time and flower bud count. Supply 4,000 to 6,000 foot candles and 14 moles of light for the best results. In winter, when the daylength is less than 12 hours, apply supplemental lighting from HID or similar lights to increase the daily light integral. A maximum photoperiod of 14 hours is best as a longer photoperiods promote stretching.

PGRs—An application of B-Nine a few weeks after establishing the crop is recommended to flatten the foliage and expose the plant crown to higher light, which increases flower bud count. A rate of 1,250 to 1,500 ppm is sufficient. Additional applications of B-Nine may be needed, depending on the pot size and environment. 2,500 to 3,750 ppm are typical rates used to control growth. The use of cultural controls should be employed first, as each B-Nine application delays flowering by one week.

Note: To prevent short flower stems (flowers hidden under the foliage canopy), do not apply growth regulators once the flower buds reach the size of a pea (1 cm). Instead, use fertilizer, light and temperature to manage stem length.

Pests and diseases—Major pests include aphids, broad mites, cyclamen mites, leaf miners, thrips and whiteflies. Major diseases include alternaria, phytopthora, powdery mildew, pythium and sclerotinia.

Crop time—Gerbera Majorette flowers from 15 to 16 weeks in spring to 14 to 15 weeks in summer. **GT**

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