

Pentas: the Summer Sales Solution



'Northern Lights Lavender'



'New Look Pink'



'Graffiti White'

Long renowned for their extraordinary heat and drought tolerance, pentas offer today's growers a tough-as-nails solution for every climate with dazzling retail and landscape performance.

By **Danny Brooks**

Pentas, which are native to northeast Africa, are well known to thrive in very hot and dry conditions. Did you know that they are also very tolerant of salt exposure and high humidity? Due to recent advancements in breeding, there are even pentas that can thrive in the short Northern growing season. With the incredible range of vibrant colors that are now available, pentas offer growers a cost-effective alternative for late spring and summer programs.

Variety Information

Kaleidoscope pentas from Benary grow to 18 inches in the garden. Their early, intensely colored flower clusters make them well suited to mixed containers and landscapes. Benary's Graffiti pentas series offers a mid-sized alternative with even a wider color range including a clean white with large flower heads. Graffiti pentas can be produced on tighter bench spacing allowing for more cost-effective production. The New Look series is Benary's most compact with a garden height of 10 inches.

For cool Northern climates, Northern Lights blooms early and shines all season long, even in cool temperatures. Northern Lights is also less pH sensitive than other varieties so it is very easy to grow.

Scheduling

Crop times listed are from transplant to flower from a 128-cell plug. A 4½-inch pot will need seven to eight weeks to finish, while a 6-inch pot will require nine to 10 weeks. A 10- to 12-inch pot will require 11 to 12 weeks. High light levels and heat will reduce crop times.

Germination

Sow seed in a media with a pH range of 6.5 to 6.7. Maintain uniform soil moisture levels and humidity levels above 95 percent. Stage 1 temperatures of 75 to 80° F optimize germination. Maintain a pH range of 6.5 to 6.7. Do not cover seed, as light increases germination rate and improves seedling uniformity. Begin light fertilization with 25- to 50-ppm nitrogen. Continue Stage 1 conditions for seven to 10 days.

Plug Culture

Gradually reduce temperatures to 70 to 75° F during Stage 2 (seven to 10 days). Increase fertilization levels to 50- to 75-ppm nitrate nitrogen in a well-balanced mix. Increasing light levels to 1,000 foot-candles improves seedling quality and plug uniformity. During Stage 3 (14 to 21 days), gradually lower temperatures to 65 to 70° F. Increase light

levels to 2,500 foot-candles, and feed at 75- to 100-ppm calcium nitrate in a well-balanced mix.

Keep plug pH between 6.6 and 6.7 for both Stages 3 and 4. During Stage 4, increase fertilization to 100- to 150-ppm nitrogen and decrease temperatures gradually to 62 to 67° F. Do not allow soils to remain saturated during plug growth.

Growing On

Grow on at temperatures of 65 to 70° F. Fertilize weekly at 100- to 150-ppm nitrogen in a well-balanced mix. Monitor soil pH levels, and maintain a pH above 6.5. Watch for pH levels that dip below 6. Pentas show iron toxicity at these levels. High light levels will promote branching and flower initiation.

Cultural Hints

Pentas' roots naturally release hydrogen ions into the soil, which over time drops the pH to toxic levels if not monitored and adjusted as necessary. Maintain pH levels between 6.5 and 6.7 to avoid iron deficiencies or iron toxicity. If magnesium levels are too low, leaf puckering will occur. In case of iron deficiency apply iron-chelate one to two times and in case of iron toxicity adjust the pH in substrate with lime.

For irrigation use warm water (above 64° F) because the foliage is sensitive to cold water. Overwatering in combination with cool temperatures (below 50° F) can delay flowering.

Plant Growth Regulators

Bred to be naturally well branched, pentas from Benary do not require plant growth regulators to finish a premium crop.

Insect and Disease Control

Thoroughly cleaned production space will help to keep insect and disease occurrences down during production. Conduct weekly scouting counts to keep insect populations at a minimum.

The most common insect pests of pentas are thrips and aphids. Fungus gnats can also be problematic if soil remains too saturated.

Pentas prefer a very porous, well-drained soil. Excessive soil moisture increases the risk for Pythium and Phytophthora infestations. A fungicide drench may be applied after plants have rooted into the pot. As always, maintain good drainage and air circulation to prevent problems. ☒

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