GrowerFacts

Argyranthemum Madeira

(*Argyranthemum frutescens*)

A Ball FloraPlant Product

Propagation

- Choose a well-drained medium with an EC of 0.75 to 0.80 mmhos and a pH of 5.8 to 6.2
- Open shipping boxes immediately. Stick cuttings within 12 to 24 hours of arrival. Cuttings can be stored overnight, if necessary, at 45 to 50°F (7 to 10°C)
- Soil temperature should be maintained at 68 to 73° F (20 to 23°C) until roots are visible
- Begin fertilization when roots become visible with 75 to 100 ppm N. Increase to 150 to 200 ppm N as roots develop
- As the rooted cuttings develop, high light, appropriate water stress and moderate air temperatures should reduce the need for chemical plant growth regulators (PGR). Argyranthemum are responsive to B-Nine and Cycocel, should PGRs be needed
- Pinching should not be necessary during propagation
- Argyranthemum rooted cuttings should be ready for transplanting 21 to 28 days after sticking

Growing On to Finish

Media

Use a well-drained, disease-free, soilless medium with a pH of 5.8 to 6.2.

Temperature

- Nights: 50 to 61°F (10 to 16°C)
- Days: 65 to 79°F (18 to 26°C)
- Excessively warm temperatures will cause stem stretch and greatly reduce overall quality
- Moderate night temperatures will create maximum branching and the best possible habit
- Night temperatures routinely below 50°F (10°C) will substantially increase crop time.

Light

- Keep light intensities at 6,000 to 9,000 f.c. (60,000 to 90,000 Lux)
- Low light levels promote stem stretch
- Flowering is best under long days of Spring and Summer, although plants will bloom year-round in moderate climates. Crop time will be longer under short daylength
- For fastest flowering during short daylength, maintain night temperatures at 58 to 61°F (14 to 16°C)

Watering

- During the first 10 to 14 days, the media should be watered sparingly and never saturated. Argyranthemum are susceptible to root diseases if over-watered
- The media should dry slightly between waterings, but wilt should be avoided

Fertilizer

- Argyranthemum require moderate to heavy fertilization
- Use constant feed at 225 to 300 ppm with additional iron as needed
- A full complement of minor elements should be provided
- Use clear water with every third watering if high soluble salt problems occur

Pinching

- Pinching is not required when growing Ball FloraPlant Argyranthemum in 4 to 4.5-in. (10 to 11-cm) containers. Growers may choose to pinch plants in larger, 5 to 8-in. (13 to 20-cm) containers to enhance branching and increase the number of flowers that open at first flower. Under low light conditions, pinching is recommended
- Pinch plants 4 to 10 days after transplanting if desired. Pinching will delay the crop approximately 10 to 14 days

Controlling Growth

- Use high light, moderate water stress and cool temperatures to control growth
- If necessary, growers can use 1 or more applications of B-Nine (1,500 to 3,000 ppm), starting 2 weeks after transplant. Cycocel as a spray (750 to 1,000 ppm) can also be used to control growth. Argyranthemum are also very responsive to Sumagic, applied as a spray (10 to 20 ppm). Bonzi, applied as a drench (2 to 5 ppm) when the plants reach saleable size, can be used to “hold” the crop while allowing flower development to continue. When using any PGR as a drench, growers must pay close attention to rate, volume of solution applied and measurements during preparation
- Some plant growth regulators applied late in the crop cycle can delay flowering 1 to 2 weeks and significantly reduce flower size. Application should

be avoided once flower buds appear
- These recommendations for plant growth regulators should be used only as general guidelines. Growers must trial all chemicals under their particular conditions

Common Problems

All Ball FloraPlant Argyranthemum cuttings are derived from culture and virus-indexed stock from the Ball Certified Plants® program.

Insects: Aphids, thrips, whitefly, leafminers

Diseases: Botrytis, Rhizoctonia, Pythium

Problem: Plant collapse

Causes: Wet media for an extended period (Pythium); Rhizoctonia due to planting too deep

Problem: Delayed flowering

Causes: Late application of growth regulators

Problem: Excessive vegetative growth

Causes: High ammonia concentration in the soil; Over-fertilization under low light conditions; Low light and overwatering; wet media; High nighttime temperatures

Problem: Poor branching

Causes: Low fertilization; lack of nitrogen, low light

Problem: Stretched plants

Causes: Low light; Excessive phosphorous

Problem: Chlorosis

Causes: Iron deficiency; High pH; Nitrogen deficiency

Argyranthemum Crop Schedule & Uses

Unrooted cuttings:
4-In. (10-Cm) Pots 1 PP* 9 – 11 weeks
6-In. (15-Cm) Pots 1 PP* 10 – 13 weeks
10–12-In. (25–30-Cm) Pots 3–5 PP* 12 – 16 weeks

Unrooted cuttings:
4-In. (10-Cm) Pots 1 PP* 6 – 9 weeks
6-In. (15-Cm) Pots 1 PP* 7 – 10 weeks
10–12-In. (25–30-Cm) Pots 3–5 PP* 9 – 12 weeks

*PP: Plants per pot or basket

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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