

Cultural Information for: Osteospermum Crescendo™ Annual
Common Name: Cape Daisy
Botanical Name: Osteospermum sp.
Optimum Growing Temperature: 55°F / 13°C

Propagation: 3 weeks

Rooting: For best results in propagation use a rooting hormone with up to 3,000 ppm IBA. Mixtures that include up to 500 ppm NAA work well too. Choose a well-drained aerated propagation media. Bottom heat may increase rooting uniformity but may also increase the tendency for stretching. Maintain soil temperature between 65-68°F/18-20°C during the first 2 weeks of propagation. Mist cuttings so that they remain turgid but avoid over misting which results in cooler media temperature, slow rooting and stretch. Average days with mist vary from 9-12 depending on greenhouse conditions. Once the roots initiate, reduce temperature to 60°F/15°C. Growth regulators like B-Nine® (daminozide) or Cycocel® (chlomequat) can be applied as sprays to prevent stretch. Begin applications approximately 1 week after sticking and spray weekly until transplanting.

Forcing to flower:

Potting: The Crescendo series is best suited for 6 inch/15 cm pots and larger.

Media: A light, sterile media with good drainage and aeration is best. The optimum pH range is between 6.0 and 6.5. Keep in mind the consumer's needs when selecting a media.

Irrigation/Fertilization: Avoid excess irrigation and fertilization when plants are young which slows root development. Two weeks after transplant begin feeding with a complete, balanced fertilizer at 200 - 250 ppm N (constant liquid feed / CLF). Optimum EC is 0.75 - 1.0 (1:2 dilution). Alternate with Calcium Nitrate on a regular basis and provide complete minor element program. The use of Osmocote® or other appropriate slow-release fertilizer products may be beneficial in supplementing a CLF program, especially if growing under field conditions, and may provide improved performance for the consumer. Crescendo may turn yellow along leaf margins if excess sodium is present in water supply or fertilizer mixes. Additional calcium can help counter these symptoms. Provide periodic clear water applications if excess soluble salts accumulate.

Temperature/Humidity: Establish the crop at 60-65°F/15-18°C average temperature. Once established, grow at 65-75°F/18-24°C during the day and 50-60°F/10-15°C at night to promote compactness. Crescendo varieties do not need vernalization to initiate flower buds. Provide good air circulation at all times. Maintain relative humidity below 70% to prevent diseases like Botrytis (gray mold).

Light: Bright light is ideal for this crop. Retractable roof greenhouses and field production are suggested. Provide a minimum of 5,000-6,000 foot candles/ 53,800-64,600 lux. The use of supplemental light (14-16 hours, beginning at midnight) is beneficial for early spring flowering.

Pinching: Pinch out the growing tip 1-2 weeks after transplanting once a good root system is established. For baskets pinch to 4-5 nodes. For 6 inch pots or larger, pinch to 6-7 nodes.

Plant Growth Regulators (PGRs): Cold temperatures and high light are the best control methods for preventing stretch. Crescendo usually requires a few applications of growth regulator to keep compact. Treatments should be made before flower buds are visible. Spray applications of B-Nine at 2,500 ppm/0.25% have worked well during the first 3-4 weeks after pinch. Avoid higher rates that delay flowering or late applications that can cause changes in the flower presentation. Drench applications of Cycocel at 3000 ppm can be used for growth control. Apply the solution volume based on growing container size and label directions. Complete application before visible bud. Spray applications of Cycocel at 750 ppm may also be used to control height. Cycocel sprays should be applied 2 or 3 times starting after pinch and through visible bud stage.

Spacing: Plants can be established pot-tight but should be spaced before foliage touches. Space 6 inch/15 cm pots 14 inches/35 cm on center and 8 inch/20 cm pots 24 inches/60 cm on center.

Insects and Diseases: Aphid, caterpillar, fungus gnat, spider mite, thrip, and whitefly. Botrytis, root and stem rots, viruses.

Usage: Ideal early spring crop in multiple container sizes. Easy to produce along with other 'cool' crops like Pansy, Perennials, Cyclamen and Regal Geraniums.

Crop Scheduling:

| Container | # of rooted cuttings | Weeks to establish | Weeks to flower | Total Crop Time (weeks) |
|---------------------|----------------------|--------------------|-----------------|-------------------------|
| 6" / 15 cm | 1 | 1-2 | 9-11 | 10-13 |
| 10" / 25 cm Basket | 3 | 1-2 | 9-11 | 10-13 |
| 2 gallon / 7 liters | 3 | 2-3 | 10-12 | 12-15 |

"All information given is intended for general guidance only and may have to be adjusted to meet individual needs. Cultural details are based on North American conditions and Sakata cannot be held responsible for any crop damage related to the information given herein. Application of recommended growth regulators and chemicals are subject to local and state regulations. Always follow manufacturer's label instructions. Testing a few plants prior to treating the entire crop is best."