

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

Propagation: 3-4 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® (chlormequat) can be applied as sprays to prevent stretch. Begin applications approximately 1 week after sticking and spray weekly until transplanting.

Forcing to flower:

Potting: Cape Daisies work best in 5 inch/12.5 cm pots and larger. Some cultivars are also suitable for 4 inch/10 cm pots.

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 mmhos (1:2 dilution). Alternate with calcium nitrate on a regular basis and provide a 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. Cape Daisies may turn yellow along leaf margins if excess sodium is present in water supply or fertilizer mix. 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 60-70°F/15-21°C during the day and 45-55°F/7-13°C at night. A minimum of 2-3 weeks of cold temperature, *vernalization*, below 55°F/13°C, is required to initiate flower buds. This 2-3 week period results in the greatest bud set and flowering. Higher day temperature will usually be fine as long as the nights are cold. Osteos can also be grown very cold, down to 36-37°F/2-3°C., which increases production time but also keep plants more compact and saves energy costs. They will grow slower but also stay compact. 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. Cape Daisies are not photoperiodic but bloom quicker under long day conditions. 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 5 inch/12.5 cm pots and 10-12 inch/25-30 cm. baskets, pinch to 4-5 nodes. For 6 inch/15 cm 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. Cape daisies usually require a few applications to control growth. Applications 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, which 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 continuing through visible bud stage.

Spacing: Plants can be established pot-tight but should be spaced before foliage touches. Space 5 inch/12cm pots 10 inches/25 cm on center, 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 in tandem with other 'cool' crops like Pansies, Perennials, Cyclamen and Regal Geraniums.

Crop Scheduling:

Product Form	# of rooted cuttings	Weeks to establish	Weeks growth before cold *	Weeks to flower **	Total Crop Time (weeks)
6 inch / 15 cm.	1	1-2	1	10-12	12-15
1 gallon / 3 liters.	1	1-2	1	10-12	12-15
Baskets	3	1-2	1	10-12	12-15
3 gallons / 10 liters	3	2-3	2-3	10-12	14-18
Patio trees	1	8-10	1-2	10-12	19-24

*additional weeks of vegetative growth to build plant body at 60-65°F/15-18°C average temperature

**a minimum of 2-3 weeks cold temperature (vernalization) at 45-55°F/
7-13°C, is required to initiate the flower buds. Finish plants at 55-
60°F/13-15°C.

*“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.”*