

# Calceolaria Dainty

Crop	Calceolaria
Series	Dainty
Botanical name	<i>Calceolaria herbeohybrida</i>
Plant type	Annual
Seed type	Pellet
Seed count	800 pellets / gr
Germination	20°C -5 days light favored
Growing	18-22°C
Optimum pH	5.5-6.0

Calceolaria is a unique pot crop that is economical to produce. The Dainty series is ideal for 8-10 cm pot production and possesses a higher resistance to botrytis than other series. Calceolaria Dainty is available in Mix, Red, Red & Yellow, Yellow w/Spots and Bronze. Calceolaria Dainty is sold as pelleted seed only and is ready to sell finish plant about 4 months after sowing.

### Plug Culture: 5 weeks (288 cell tray)

**Stage 1** (days 1-10) Single sow (pelleted) seed into a plug tray filled with a sterile and well-drained media. Lightly cover with coarse vermiculite as seed requires light to germinate. Vermiculite helps to keep optimum humidity and dissolve the pellet. Maintain a temperature of 18-20°C.

**Stage 2** (days 11-20) After seedlings germinate place in a bright greenhouse with good air movement and a day temperature of 21-22°C and a night temperature of 18-20°C. Supplemental lighting can help hasten development under low light periods. If no fertilizer is present in the media, apply a light feed of 75-100ppm nitrogen from a well-balanced fertilizer.

**Stage 3** (days 21-34) The true leaves have formed, and the seedlings are beginning to fill in the plug cells. Maintain the pH at 6.2 or lower to avoid iron chlorosis. Fertilize as needed to maintain strong growth and allow the media to dry slightly between irrigations. Maintain the temperature between 18-23°C to avoid premature flower initiation. Calceolaria is sensitive to sunburn at all production phases so do not grow the plants under high light intensity conditions.

**Stage 4** (days 35) The seedlings are now ready to transplant into pots. Do not delay transplanting.

### Transplanting to finish: 11-15 weeks

**Transplant:** Transplant into pots using a rich and well-drained soil. A soil pH of 5.5 to 6.0 will give best results.

**Fertilizer:** Fertilize as needed with 75-100 ppm nitrogen using a well-balanced calcium nitrate-based formulation.

**Vegetative growth:** To produce enough vegetative growth prior to flower bud initiation, maintain a minimum temperature of 18°C.

**Flower Initiation:** Calceolaria Dainty is basically day-length neutral regarding flower initiation. Night temperature is the major factor that influences flower initiation. Flower bud initiation occurs when the plants have 3-4 pairs of true leaves and the night temperature is between 11-14°C. Allow 5-6 weeks for flower bud initiation.

### Standard Cropping Production Schedule (18-20 weeks)

Cultural Step	Production time	Temperature
Sow seed: (288 cell tray)	5 weeks	18-21°C
Transplant: vegetative growth	4-5 weeks	18-22°C
Flower bud initiation	5-6 weeks	12°C
Forcing	4 weeks	15-17°C

responsible for any crop damage related to the information given herein. Always follow manufacturer's label instructions. Testing a few plants prior to treating the entire crop is best.

### Fast Cropping Production Schedule (16-18 weeks)

Cultural Step	Production time	Temperature	Photoperiod
Sow seed: (288 cell tray)	5 weeks	18-21°C	15 hours
Transplant: vegetative growth	2-3 weeks	18-22°C	15 hours
Flower bud initiation	5-6 weeks	12°C	10-12 hours
Forcing	4 weeks	15-17°C	11 hours

\*Photoperiod does not influence flower bud initiation, but supplemental lighting can accelerate plant development and reduce time to flower.

**Plant growth regulators:** Dainty is naturally compact and should not require any plant growth regulator applications.

**Pests:** whitefly, mites and aphids.

**Disease:** botrytis, root and crown rots and tomato spotted wilt virus (TSWV).

**Chlorosis:** If the foliage begins to turn chlorotic, check the root system for signs of poor development that could have been caused by over-watering, root rots, or high salt levels. The pH of the media is also critical as a high pH reduces iron uptake and a low pH reduces magnesium absorption.

**In general:** Calceolaria will stretch and deteriorate quickly if held in dark and/or warm temperature conditions.

*All information given is intended for general guidance only and may have to be adjusted to meet individual needs. Cultural details are based on Asian conditions such as in Japan and Sakata cannot be held*