

Cultural Information for: Crossandra Orange Marmalade Annual
Common Name: Crossandra
Botanical Name: Crossandra sp.
Optimum Growing Temperature: 77-86°F / 25-30°C

Propagation: 5 weeks

Rooting: For the best results stick one cutting per cell and use a rooting hormone up to 3,000 ppm of IBA. Mist as needed to maintain the plants turgid. Bottom heat enhances root development. Maintain soil temperatures between 70-75°F/ 21-24°C. Crossandra is a true tropical plant and appreciates warmer air temperatures. Maintain 75°F/24°C days and 68°F/20°C nights until roots are present. To prevent plant stretch apply Cycocel at 3,000 ppm or B-Nine at 3,000 ppm. Alternatively, the plants may be pinched at the grower's discretion. Remove any visible flowers or buds while in propagation and apply 175 ppm N once a week beginning in week 2.

Forcing to flower:

Potting: Plant one rooted cutting per 4 inch/10 cm. or 3 cuttings per 6 inch/15 cm. pot with no pinch.

Media: A light, sterile media with good drainage and aeration is best. The optimum pH range is between 5.8 and 6.2.

Irrigation/Fertilization: Plants should be allowed to dry thoroughly between watering and always water in the early part of the day allowing the foliage to dry before nightfall. Allowing the plant to wilt should be avoided. Constant liquid feed at 200-250 ppm with a balanced liquid fertilizer. Supplemental magnesium at 30-50 ppm is beneficial. Crossandra requires iron and manganese so a trace element program is also beneficial. The EC should range from 1.5-2.0 mmhos (2:1 dilution).

Temperature/Humidity: Crossandra thrives under high temperature, high light, and high humidity. Night temperatures should be maintained at 65-75°F/18-24°C and day temperatures at an average of 75°F/24°C. Crossandra does not handle cold temperatures well. At temperatures below 55°F/13°C the foliage will turn black and drop. Higher temperatures will also speed flowering. At 75°F/24°C flowering will start 9 days earlier than plants grown at 70°F/21°C. During the vegetative stage high relative humidity should be maintained. During the flowering stages relative humidity should be reduced to control botrytis.

**Note: In cooler northern climates, Crossandra is best grown in mid to late summer and early autumn to take advantage of the high light intensity, warmer temperatures, and high relative humidity.*

Light: Crossandra is not photoperiodic but flower development is dependent on light intensity. Flowers will only develop when the light intensity is 2,000 ft candles/21,520 lux or higher. The plant will remain vegetative when the light intensity is below 1,800 foot candles/19,500 lux so in low light regions supplemental lighting is required.

Pinching: A pinch may be helpful 1-2 weeks after transplant to promote branching and shape. Growers can also experiment with the use of Florel (ethephon) to enhance branching.

Plant Growth Regulators (PGRs): Under adequate light intensities and proper spacing the use of plant growth regulators is usually not necessary. If needed, Crossandra will respond to B-Nine® (daminozide).

Spacing: Plants should be established pot tight but spaced before foliage touches.

Insects: Aphids, spider mites and whitefly.

Disease: Phythium and rhizoctonia

Crop scheduling from transplant:

Container	# of cuttings	Northern Area	Southern Area
4 inch /10 cm.	1	13-14 weeks	10-11 weeks
6 inch/15 cm.	3 - no pinch	15 weeks	12 weeks
6 inch/15 cm.	1-pinched 2x	17-18 weeks	14-15 weeks

Usage: Crossandra will thrive in warm temperatures and high light and is ideal for 4 -6 inch/10-15 cm. pots and 1 gallon/4 liter containers. These plants will be showcased at a time when other annuals have shut down from the heat. The orange flowers bring a nice splash of color to late summer and early fall. Crossandra will compliment mixed containers and patio planters, or can be planted alone. An important characteristic of Crossandra is that they keep flowers longer even in a room condition. In other words, they have a longer shelf life than other pot plants and can be used for sunny & shade places.

"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."