



## Calypso™

### SUTERA

#### RECEIVING UNROOTED/CALLUSED CUTTINGS

Open the boxes upon arrival. Cuttings should be stuck as soon as possible. Cuttings may be temporarily stored overnight at 42°F (8°C) in open boxes.

#### ROOTING UNROOTED CUTTINGS

**Root Emergence:** 8 – 12 days.

**Total Rooting Time:** 18 – 21 days.

**Preparation Prior to Arrival of Cuttings:** Clean and disinfect propagation area. Place rooting media on the bench shortly before arrival of cuttings. Preservation of cutting quality is dependant upon how quickly cuttings are stuck into ideal propagation conditions.

**Rooting Hormones:** Will encourage uniform rooting. Determine proper concentrations prior to sticking the entire crop. Excess hormones can cause severe damage. Generally, rooting hormones are not needed if proper bottom heat is provided.

**Misting:** Mist only as needed to prevent wilting. Excess water is detrimental.

**Disease Control:** A preventative soil drench for Pythium can be made after roots begin to emerge. Preventative sprays aid in controlling Botrytis. Excessive pesticide usage either in frequency or concentration may delay root development.

**Moisture:** Moisture level 4 (wet) — media is moist to the touch, but not saturated. This will prevent iron deficiency. After roots are established, keep foliage as dry as possible.

**Ventilation:** Ventilation and horizontal air flow fans are the most important tools in reducing Botrytis infections.

**Humidity:** 90%+.

**Air Temperature:** 64 – 72°F (18 – 22°C).

**Bottom Heat Temperature:** 64 – 72°F (18 – 22°C).

**pH:** 5.6 – 5.9.

**Media EC:** 0.75 – 0.80 mS/cm in a saturated media extract (SME).

**Light:** To reduce stem stretch and to encourage branching, the plants should be grown under high light conditions and moderate air temperatures.

**Fertilizer:** Begin feeding when roots become visible. Initially fertilize at 75 ppm nitrogen and gradually increase to 150 ppm nitrogen as the root mass develops. Avoid excessive phosphorus and ammoniacal nitrogen which may encourage excessive vegetative growth in favor of a strong rooting system. If growing tips become yellow (iron deficiency), a drench of either iron chelate (Sprint 330 or 138) or iron sulfate at a rate of 2 – 4 ounces/100 gallons will help green the new growth.

**Other Tips:** Many propagators will stick two cuttings/plug cell, especially for larger 50-cell plugs. Although not a prerequisite for success, this is fairly common for varieties of bacopa, jamesbrittenia, nemesia, diascia and a few others. Sticking two cuttings/cell results in a fuller and better branched rooted liner. Plants can also be pinched during the propagation stage.

#### FINISHING ROOTED CUTTINGS

Calypso Bacopa has been bred for a vigorous trailing habit and early flowering. Very “grower friendly,” its excellent basal branching and many small, round leaves produces full and attractive baskets.

**Disease Prevention/Sanitation:** Proper sanitation is the easiest and most cost effective method to control potential disease problems. Prior to the arrival of your rooted cuttings disinfect all growing surfaces. Use only new pots and fresh media.

**Media:** Select a porous media that drains well. A low pre-plant charge of micro- and macro-nutrients is recommended.

**Pre-Plant:** Thoroughly water the rooted cuttings until media is saturated. Moisten finish container media until wet to the touch, but not saturated. Dibble a small hole to prevent breaking of delicate roots when transplanting rooted cuttings.

**Transplanting:** Transplant directly into finish container with rooting media level with soil in container. Rooting media above soil line will promote excessive drying out and wilting of the rooting cutting despite a moist environment.

**Media pH:** 5.3 – 5.8.

**Moisture:** Moisture level 3 (moist) — media is black but not glistening. Bacopa is susceptible to root diseases if overwatered early on. The key to growing a successful crop is to avoid severe water stress and drying out of media.

**Fertilizer:** Constant liquid feed with a balanced fertilizer at 200 ppm nitrogen with additional iron. Avoid an excessive use of phosphorous and ammonia cal nitrogen which will encourage vegetative growth at the expense of flowers. If growing tips become yellow (iron deficiency), a drench of either iron chelate (Sprint 330 or 138) or iron sulfate at a rate of 2 – 4 ounces/100 gallons will help green the new growth.

**Media EC:** 1.5 – 2 mS/cm in an SME.

**Temperature:** To get a good branching habit and nice dark foliage grow at a relatively cool night temperature.

**Light:** Bacopa prefers to be grown under bright conditions. Provide 4,000 to 6,000 foot candles (40,000 – 60,000 lux). Calypso Bacopa is daylength neutral. High light in combination with cool temperatures promotes the highest quality plants. Low light levels may promote stretching.

**Pinching:** Pinching is recommended to encourage basal branching. Pinch 10 to 14 days after transplanting. For larger containers, pinch as needed to shape the plant.

**Growth Regulators:** When all growing conditions are optimal, Calypso Bacopa does not need growth regulators. Generally Calypso will grow quickly and flower early. The plants will be saleable before plant growth regulators are usually needed. If chemical growth regulation is needed (i.e. under very warm growing conditions), then B-9 at 1,500 ppm is usually sufficient.

**Common Pests:** Thrips, Aphids and Whitefly.

**Common Diseases:** Botrytis, Pythium and Rhizoctonia.

#### GARDEN PERFORMANCE

**USDA Hardiness Zone:** 11.

**AHS Heat Zones:** 6 – 1.

	Garden Height	Garden Width
<b>Calypso</b>	8 – 10" (20 – 25 cm), trailing plant habit	20 – 24" (50 – 60 cm)

#### BACOPA SCHEDULING IN WEEKS

	Calypso
<b>Rooted to 4" finish</b>	6 – 7 (1 plant/pot)
<b>Rooted to 6" finish</b>	8 – 9 (1 – 2 plants/pot)
<b>Rooted to 10" basket finish</b>	10 – 12 (3 – 4 plants/pot)
<b>Rooted to 12" basket finish</b>	10 – 12 (4 – 5 plants/pot)

*Note: These suggestions are only guidelines and may have to be altered to meet individual grower's needs. Check all chemical labels to verify registration for use in your region.*