



## Callie®

### CALIBRACHOA HYBRID

#### 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:** 7 – 10 days.

**Total Rooting Time:** 21 – 28 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.

**Misting:** Cuttings will require mist up until the 4th – 6th day or until roots begin to push into media. If using bottom heat, the cuttings may require occasional misting overnight during this crucial period. Mist for short durations as needed to keep cuttings turgid and prevent wilting. Frequency will be dependent upon light and temperature conditions. Excess misting can leach nutrients and create conditions favorable for disease.

**Disease Control:** A preventative soil drench for Pythium can be made any time after sticking. 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 wet to the touch, but not saturated. After roots are established, keep foliage as dry as possible. Irrigate in the morning to prevent Botrytis infections. Overwatering in combination with pH above 6 will cause iron deficiency in Calibrachoa.

**Ventilation:** In addition to a preventive spray program, ventilation and horizontal air flow fans are the most important tools in reducing Botrytis infections.

**Humidity:** 70 – 80%.

**Air Temperature:** 65 – 72°F (18 – 22°C).

**Bottom Heat Temperature:** 68 – 70°F (20 – 21°C). Bottom heat is recommended to promote uniform rooting.

**pH:** 5.5 – 6; pH levels above 6 in combination with overwatering can promote iron deficiency.

**Media EC:** 1 – 1.5.

**Light:** Shade fresh cuttings, at 1,500 – 2,000 foot candles, the first week to reduce transpiration and to avoid excessive misting. Under cool conditions, cuttings with established roots can tolerate higher light levels, 3,500 – 4,500 foot candles.

**Fertilizer:** Apply as soon as cuttings start to root at 50 – 100 ppm nitrogen.

#### FINISHING ROOTED CUTTINGS

**Disease Prevention/Sanitation:** Preventing plant disease 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 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:** 5.5 – 5.8. pH levels above 6 in combination with overwatering can promote iron deficiency.

**Moisture:** Alternate Moisture level 4/2. Moisture level 4 (wet) – media is wet to the touch, but not saturated. Moisture level 2 (medium) – media has changed color from dark black to a medium brown. Irrigate early in the morning to allow foliage to dry before nightfall. Do not allow plants to wilt. Drought stress will increase crop time and can potentially build up salt levels sufficiently to burn root hairs and promote root diseases. Symptoms of excessive drying include tip burn and root tip dieback. Calibrachoa is susceptible to Pythium if media is kept saturated for extended periods.

**Fertilizer:** Calibrachoa are heavy feeders. Once new root growth is initiated, begin a constant liquid feed program with a neutral nitrate-based fertilizer, such as 20-10-20 or 21-5-20 at 200 – 250 ppm nitrogen. Choose an acid based fertilizer that will maintain pH levels below 6. If pH levels exceed 6, supplemental foliar applications of iron chelate to the foliage or iron sulfate applied to the soil may be necessary to keep the foliage green.

**Media EC:** Regular leaching to maintain EC levels between 1.5 – 2 is recommended.

**Temperature:** 68 – 72°F (20 – 22°C) days; 62 – 64°F (17 – 18°C) nights.

**Light:** Provide 4,000 – 6,000 foot candles to promote compact growth. Callie has been bred to easily flower for early spring sales.

**Pinching:** Recommended to improve branching and compactness. After roots are actively growing, pinch back to three nodes. For larger containers, a second pinch may be applied two to three weeks later. Again, pinch new growth back to the third node.

**Growth Regulators:** B-Nine or Sumagic applications can begin 5 – 15 days after transplant. Apply B-Nine at 2,500 – 5,000 ppm or Sumagic at 25 ppm. Late applications of growth regulators can delay flowering.

**Common Pests:** Aphids, Thrips.

**Common Diseases:** Botrytis, Pythium.

#### GARDEN PERFORMANCE

**Location:** Full sun.

**USDA Hardiness Zone:** 10.

**AHS Heat Zones:** 12 – 1.

|        | Garden Height                  | Garden Width          |
|--------|--------------------------------|-----------------------|
| Callie | 6 – 10" (15 – 25 cm), trailing | 10 – 12" (25 – 30 cm) |

#### CALIBRACHOA SCHEDULING IN WEEKS

|                             | Callie |
|-----------------------------|--------|
| Rooted to 4" finish         | 8 – 10 |
| Rooted to 6" finish         | 9 – 11 |
| Rooted to 10" basket finish | 9 – 11 |
| Rooted to 12" basket finish | 9 – 11 |

*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.*

