

P  
penstemon

Phoenix™



#### RECEIVING UNROOTED/CALLUSED CUTTINGS

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

#### ROOTING UNROOTED CUTTINGS

**Root Emergence:** 2 weeks

**Total Rooting Time:** 2-3 weeks

**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:** 4 seconds/45 minutes (initially, 4-6 days). This will vary depending on light levels and temperatures.

**Disease Control:** A preventative soil drench for Pythium can be made any time after sticking. Preventative sprays aid in controlling Botrytis. Excessive pesticides usage either in frequency or concentration may delay root development.

**Moisture:** Media should be moist at all times, but not saturated.

**Ventilation:** Ventilation and Horizontal Air Flow fans are the most important tools in reducing Botrytis infections.

**Humidity:** 75-85%

**Air Temperature:** 19-23°C

**Bottom Heat Temperature:** Not Necessary

**pH:** 5.8-6.2

**Media EC:** 1.0

**Light:** ~3,000 fc

**Fertilizer:** Not Necessary

#### 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 macronutrients is recommended.

**Pre-Plant:** Thoroughly water the rooted cuttings until media is saturated. Moisten finish container media till 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:** 5.8-6.2

**Moisture:** Media should be allowed to dry out between waterings and should never be kept too wet.

**Fertilizer:** 150-200ppm N

**Media EC:** 1.0-2.0

**Temperature:** 70-80

**Light:** 5,000-8,000 fc (Higher light will produce more intensely colored flowers and reduce stretching.)

**Pinching:** Not necessary, however, recommended one pinch to 2 nodes at transplant

**Common Pests:** Aphids

**Common Diseases:** Pythium and other root rots.

#### SCHEDULING

**Rooted to 10cm finish:** 9-10 weeks (Longer under very short days)

**Rooted to 15cm finish:** 10-11 weeks

#### GARDEN PERFORMANCE

**Garden Height:** 45-60cm

**Width:** 30-45cm