# Quick Reference Guide to CLONING with CLONEX® and ROOT RIOT®

# **Materials Needed**

- CLONEX Gel
   CLONEX Clone Solution
   CLONEX Mist
- Root Riot Starter Cubes
   Tray/Insert
   Humidity Dome
  - Water (RO is optimal)
     Measuring device for liquids
    - Shot Glass Scalpel (Scissors not recommended)
    - Rubbing Alcohol
       Paper Towel or Clean Towel
      - Nitrile Gloves
         Glass of Water
        - Donor Plant (Mother Plant)

### **Environment**

- Temperature Range: 70 78°F (75°F is optimal)
  - Humidity Range: 80%+ for first 5 to 7 days
    - CO2 Range: 380 500 ppm
- Lighting designed for Cloning/Plant Propagation

### **Procedures**

- Prepare Mother Plant
- Foliar feed Mother Plant with CLONEX Mist 2-3 days prior to taking clones
- Thoroughly hydrate Mother Plant at least 5 hours prior to taking clones
  - Prepare Work Area & Tools
- Put on Nitrile Gloves
- 2 Sterilize Scalpel and work area with Rubbing Alcohol
- Pour amount of CLONEX Gel needed into Shot Glass
- Reseal the container Pro Tip: to avoid contamination, DO NOT dip clones into container, DO NOT pour unused CLONEX Gel from shot glass back into container

- **6** Put Root Riot Cubes into Tray/Insert
- 6 Mix 5-10mL CLONEX Clone Solution into 1 QT/L of Water
- Prior to taking clones, pour prepared nutrient solution over the Root Riot Cubes, then completely drain off any remaining solution from the tray

### Taking a Clone

- 1 Identify branches on the lower part of Mother Plant with multiple leaf nodes and strong growing tips
- 2 Cut just below a node at 45° angle; Place clone in Water
- Dip clone into CLONEX Gel
- Gently insert stem of clone into Root Riot Cube
- When tray is full, lightly mist with CLONEX Mist Avoid over spraying In low humidity environments,
  mist the inside of a Humidity Dome with water and cover Tray
- 6 Repeat misting clones with CLONEX Mist every 2 days
  Stop using CLONEX Mist once clones are transplanted.

## **Care for Clones**

- 1 Lighting should remain constant (on for 24hr/day)
- After 3-4 days, mix CLONEX Clone Solution with water to reach EC 1.0-1.5, adjust pH to 5.8-6.2 and feed clones; repeat every 3-4 days or as needed; Briefly remove Humidity Dome once a day to replenish CO<sub>2</sub>
- When roots emerge from cube, feed rooted clones every 1-2 days with EC 1.2-1.6 solution Vent Humidity Dome to start the hardening off process
- Transplant clones when fully rooted

