



- 1 Inspect the Mothers for overall plant health and growth rates.

**NOTE:** Limit cuttings only to mother plants that are at least 60 days old, but no more than 185 days. Older plants tend to become "woodier" and are less likely to maintain optimal plant health or distinct genetic traits.

**PRO TIP:** Do not take any cuttings from mother plants with stunted growth, unhealthy signs of severe nutrient deficiencies, environmental stress, pests or pathogens.



- 2 Identify branches to cut, focusing on the upper and middle part of the plant.

**PRO TIP:** Branches should be at least 0.3 cm thick and be more than 15 cm long. Avoid the bent branches on the lower part of the plant.

**PRO TIP:**

Cuttings should be evenly taken from around the entire mother plant to create a balanced and uniform shape.

This technique will produce more primary branches after a three week period of regenerative growth.

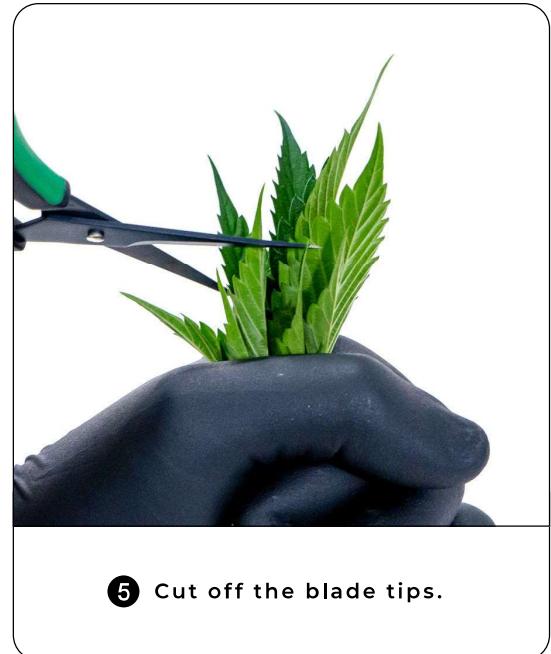
- 3 Collect the cuttings in handfuls of 25 to 36 cuttings to bring to the next station.

## MANICURE THE CUTTINGS





**4** Hold the top of a cutting by making a fist exposing the blade tips.



**5** Cut off the blade tips.



## CUP THE CUTTINGS

Allocate 25 Cuttings Per Cup

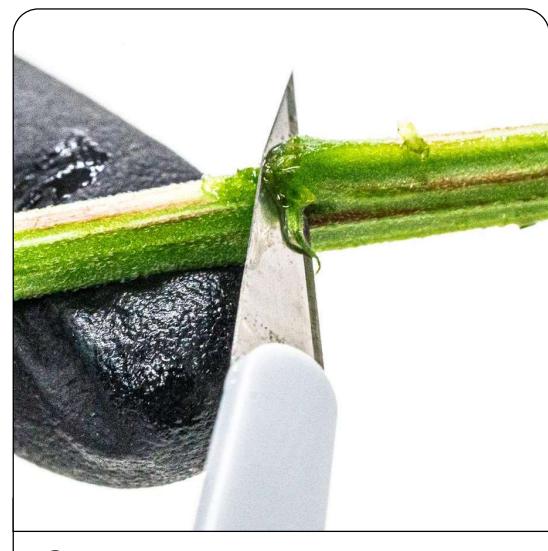
If cuttings are not plugged within 1-2 hours, add more of the Athena® Mother Recipe as needed to maintain the 100-125 mL level in each cup. The bottom 1.5 cm - 4 cm of each cutting stem should always be submerged in the solution until it is plugged to prevent any drying-up and wilting.

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Place manicured cuttings into a 500 mL cup containing 100-125 mL of the Athena® Mother Recipe (page 47 for Pro Line, page 61 for Blended Line) onto the cup station.



Each 500 mL cup can safely hold 25 cuts for 1-2 hours in that much solution.

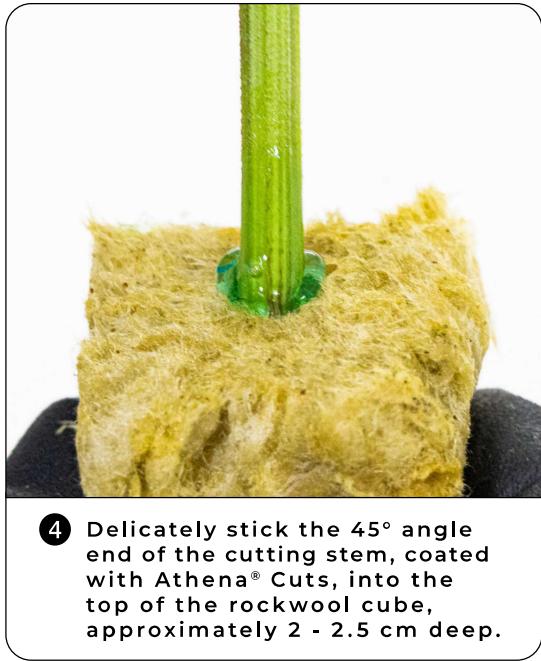
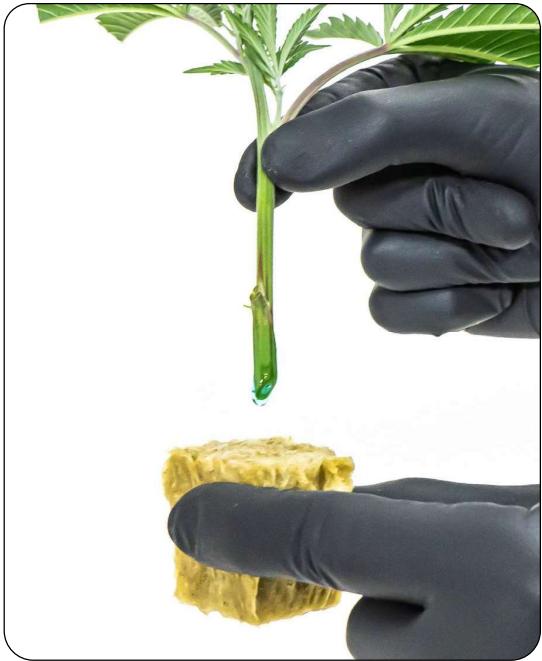


- 1 Use a scalpel to cut through the bottom of the stem at a 45 angle to expose more plant tissue hormones that promote cell division for root growth.



- 2 Dip the 45° angle end of the stem into the shot glass containing the Athena® Cuts rooting compound.

- 3 Coat the bottom 2.5cm of the stem by slowly rotating it in the compound for 5 seconds.



- ④ Delicately stick the 45° angle end of the cutting stem, coated with Athena® Cuts, into the top of the rockwool cube, approximately 2 - 2.5 cm deep.





## INSERT TRAY PATTERN

Place the plugged cuttings into the insert tray. To prevent potential canopy problems from overcrowding, use every other insert. A 72 cell insert tray should contain only 36 clones.

