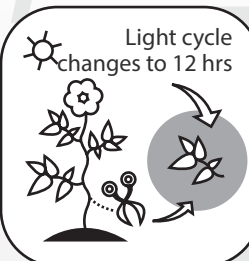
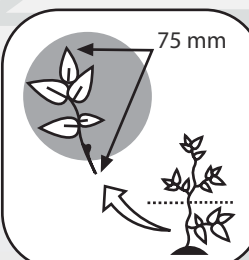


Clones begin their life without a root system, meaning that special equipment and care are necessary in order to reduce the stress suffered by cuttings during this crucial period.



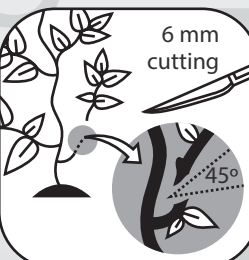
The first aspect to which attention must be paid is the genetic origin. If you start with mediocre plants, you'll end up with mediocre plants.

Taking cuttings from another plant that has certain properties means you're guaranteeing future generations of plants. The right time for cuttings is 7-14 days after having changed the light cycle to 12 hours (flowering).



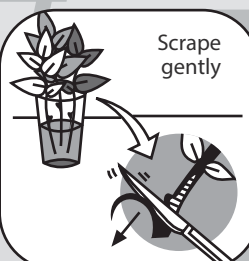
Take the cuttings from the lower and middle parts of the plant, as here the material is able to develop roots more quickly than the young plant material.

The cuttings you take should measure around 75 mm with 2 or 3 pairs of leaves and a stem that is firm but not yet fully hard. Look for cuttings that have at least one node beneath the leaves.



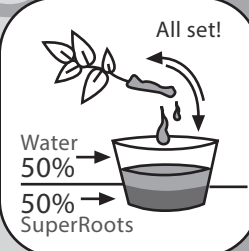
First cut the leaves that are next to the node before taking the cutting. Now make a diagonal cut (45°) into the stem of the parent plant of at least 6 mm below the lowest node.

You can use sharp scissors such as Bud Clean or a cutter and a piece of wood that serves as an aid to help you make a clean cut.



Place the cutting in a glass with lukewarm water. You should keep all the cuttings in the lukewarm water while carrying out all the other steps.

Gently scrape the node and the lower part of the node with the cutter (down to the base of the cutting). Scraping the outer bark of the stem of the cutting will speed up and promote the formation of new roots.



Immerse the lower part of the cutting in a solution consisting of 50% SuperRoots and 50% water and make sure the liquid is covering the scraped node and the entire lower part.

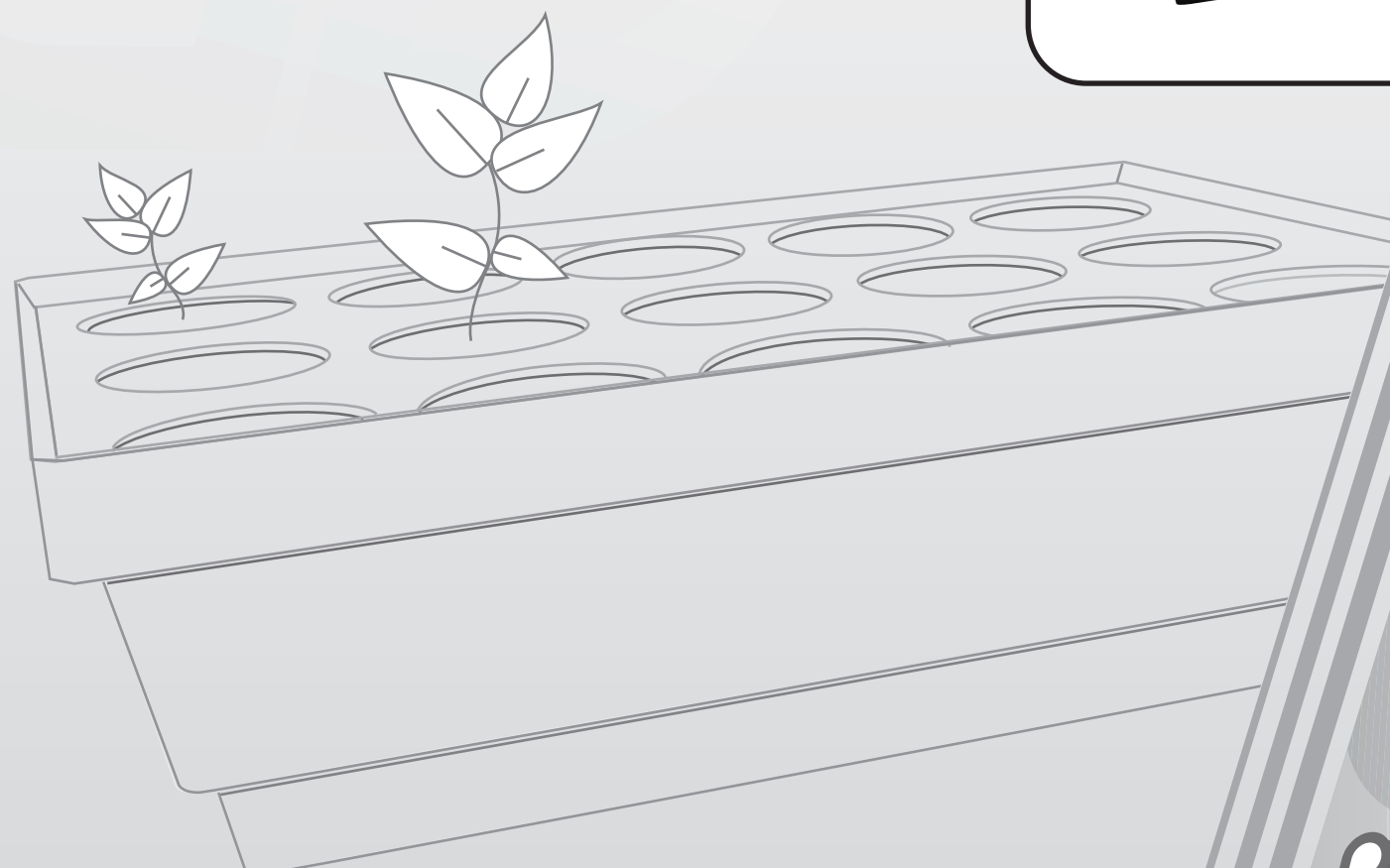
Now the cutting is ready to be placed in the chosen system.

CLON-AIR is a product of VOL Systems



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CLON AIR TURBO



CLON-AIR is a product of VOL Systems



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- compact
- simplicity of use
- energy efficiency
- effectiveness

CLON AIR TURBO

Turbo Clon-Air is a hydroponic growing system for creating cuttings. It is a small unit for new growers or experimental growers who require small quantities of cuttings to cover their limited crop needs each time they harvest the previous production.

It is more than just a conventional cloning system, as its structure and versatility make it possible to grow crops using hydroponic (Turbo Clon-Air Hydro with substrate) and aeroponic crops (Turbo Clon-Air Aero without substrate) simply by changing a few components in the set. It is not a complicated system because cloning is not complicated: simply cut your cuttings as indicated in the instructions and allow the Turbo Clon-Air to provide everything your cutting needs to develop its roots.

Turbo Clon-Air has been designed to fulfill several basic requirements:

Effectiveness

Turbo Clon-Air can be used in temperatures ranges that can be problematic for other cutting techniques.

Turbo Clon-Air has been tested in temperatures ranging from 22°C to 29°C, demonstrating a constant 100% success rate in 3-8 days (depending on whether the plant tissue is herbaceous or semi-woody).

Energy efficiency

Turbo Clon-Air only holds 2 liters of water, and in the majority of cases it is not necessary to top up or change the water during the rooting cycle. The small compressor requires very little energy and is capable of providing all the oxygen needed to the unit for the perfect rooting of the cuttings.

Simplicity

Turbo Clon-Air was designed specifically to create an ideal rooting atmosphere by pumping constant and abundant amounts of oxygen into the water in the container.

This method results in a high and constant percentage of formation of healthy and vigorous roots without the tedious procedures or costly work used in other rooting techniques.

Compact

This unit has space for 15 cuttings and its dimensions are: 8 cm height x 21 cm width x 30.5 cm length. This means that it fits perfectly into the majority of mini greenhouses on the market, and the Turbo Clon-Air Hydro2 also fits into a large propagator; 2 units lined up next to each other occupy the surface covered by the Twin 55; in short, it is a very handy unit that can be used to grow almost anywhere. It weighs less than 3 kilos when the tank is full, making it easy to move.

The item is provided with the expanded clay needed to fill the 15 mesh plant pots.

-Rinse these expanded clay balls to cleanse them of any residue they may contain.

-Check the pH: place the balls in a container with water neutralized to pH 7.0 and let them rest for one hour. Measure the pH after this, and if it is higher than 8.0, leave them in an acidic solution (4.0) for 24/48 hours. Rinse well and they'll be ready to use.

-Cut the cutting (see the section "How to select and take cuttings) and scrape the lower part to help the root get started. Remove the leaves from the plant, leaving 2 or 3 new leaves.

-Place the cuttings in their mesh plant pot and fill the pots with the expanded clay in order to position them in place. Make sure the Turbo Clon-Air container contains at least 2 liters of water. Add Super Roots or Stimulex Radicular to speed up and ensure the rooting process. It is also recommended to apply SoloTek Bloom at a ¼ of the recommended dose from the 3rd day onwards.

-Store the system in a warm place. In general, the proper ambient temperature for making cuttings is 24 to 25°C, with an atmospheric humidity level of 80 to 95%, while the ideal water temperature is 20-22°C, with a water pH of between 5.5-5.8 and conductivity of 0.4-0.6 mS. If you're using a heated propagator, in the majority of cases you won't need the cover.

-Ensure the plants are well lit, but not with direct sunlight or high-intensity lamps, since these may quickly dry out the cuttings. Fluorescent lighting is the best option. View "shopping list".

-When roots appear, and before they begin to intertwine, transplant the cuttings to a different hydroponic system or substrate if you wish. Cuttings produced using Turbo Clon-Air are highly resistant and will develop very well in their new environment.

Instructions for use TURBO CLON-AIR HYDRO

The unit comes with 15 neoprene foam discs with a profile in the center in which the cuttings are placed. These foam discs measure 5.2 mm in diameter and 12 mm in thickness and fit perfectly into the circular holes in the upper tray of the Turbo Clon-Air.

-Cut the cutting (see the section "How to select and take cuttings) and scrape the lower part to help the root get started. Remove the leaves from the plant, leaving 2 or 3 new leaves.

-Insert the cuttings into their neoprene foam disc to position them in place. The container should have enough water and the bottom part of the cuttings should be immersed in the water, otherwise the cutting will not take root. Make sure the Turbo Clon-Air container contains at least 2 liters of water. Add Super Roots or Stimulex Radicular to speed up and ensure the rooting process. It is also recommended to apply SoloTek Bloom at a ¼ of the recommended dose from the 3rd day onwards.

-Store the system in a warm place. In general, the proper ambient temperature for making cuttings is 24 to 25°C, with an atmospheric humidity level of 80 to 95%, while the ideal water temperature is 20-22°C, with a water pH of between 5.5-5.8 and conductivity of 0.4-0.6 mS. If you're using a heated propagator, in the majority of cases you won't need the cover.

-Ensure the plants are well lit, but not with direct sunlight or high-intensity lamps, since these may quickly dry out the cuttings. Fluorescent lights are the best option; you should connect them with a cycle of 18 hours of light and 6 of darkness via a timer. View "shopping list".

-When roots appear, and before they begin to intertwine, transplant the cuttings to a different hydroponic system or substrate if you wish. Cuttings produced using Turbo Clon-Air are highly resistant and will develop very well in their new environment. These cuttings should be transplanted to their new medium swiftly, as the exposed root suffers from dehydration when not inserted in its medium.

Here is our recommendation for the products you need to take cuttings and maintain them:

1. Lighting kit: Twin 55 or Propagator 4x55W.
2. Analog timer.
3. Cutter or Bud Clean scissors.
4. SuperRoots and Stimulex Radicular.
5. Solo Tek Bloom.
6. Glass with lukewarm water.
7. 1 or 2-liter sprayer.
8. Thermometer with suction cup or digital thermohygrometer.
9. Heated propagator (do not use heat in summer).
10. PH up/pH down.
11. Turbo Clon-Air.

