# PROPAGATION

AUTOPOT WATERING SYSTEMS

## PREPARATION

CocoMats are an excellent means of irrigating and feeding young plants during propagation. Made of coco fibre and natural latex, the CocoMat controls watering by holding and gradually wicking the water to the plants via capillary action. CocoMats can be cut to fit any size of garden tray. Prepare your CocoMat, place into your tray, followed by a root control sheet and sit small pots, seed trays, plugs, cubes, or root balls on top.

To prepare your CocoMat place it in pH 4.5 water and keep fully submerged to soak for 24-48hrs. During this 24-48hrs the pH of the water may fluctuate as the CocoMat stabilises. There is no need to compensate for fluctuation in the pH levels. Rinse before use. A root control sheet will be required on top of the CocoMat. To prepare, submerge the root control sheet in water for 30mins. This is merely in order to wet the sheet. It is not necessary to check the water pH during this soak.

## SET UP - USING EASY2PROPAGATE WITHOUT AQUAVALVE

Growers can use CocoMat in easy2Propagate with or without AQUAvalve. If not using AQUAvalve simply place the prepared CocoMat in the easy2Propagate tray. Place the prepared root control sheet on top of the CocoMat – gold face up.

Place small pots or seed trays on the surface of the root control sheet. Ensure pots/seed trays are flat based and that they allow the growing media to make contact with the surface of the root control sheet. If using plugs, cubes or root balls ensure that they are in full contact with the root control sheet.

Water through each pot, seed cell, cube, plug, or root ball once from the top. This helps ensure capillary action starts between the surface of the root control sheet and the growing media on the root control sheet. Pour water into the tray until the CocoMat is 2/3 submerged. Quarter strength nutrient solution may be added if required.

To ensure that your plants receive full levels of light remove protective film from easy2Propagate Lid. Place easy2Propagate Lid onto tray ensuring all corners are fitted snugly.

## SET UP - USING EASY2PROPAGATE WITH AQUAVALVE

Cut a section out of one corner of the CocoMat using heavy duty scissors, this is to allow a space for the AQUAvalve and AQUAvalve cover to sit on the garden tray. Allow sufficient space for both to fit comfortably - 20cm x 12cm is ideal. Cutting is easier after the CocoMat has been soaked. Cut an identically sized, identically placed section out of the root control sheet to allow placement of the AQUAvalve and AQUAvalve cover. Place the CocoMat in the easy2Propagate tray. Place the root control sheet on top of the CocoMat gold face up.

Now place small pots or seed trays on the surface of the root control sheet. ensure that pots / seed trays are flat based and that they allow the growing media to make contact with the surface of the root control sheet. Similarly, always ensure that plugs, cubes or root balls are in full contact with the root control sheet.

Water through each pot, seed cell, cube, plug, or root ball once from the top. This will help ensure that capillary action starts between the surface of the root control sheet and the growing media in contact with the root control sheet.

## SET UP - THE AQUAVALVE

1

Remove threaded collar from AQUAvalve.

Push one end of the ready-assembled 9mm Elbow Bar through the collar and attach to AQUAvalve nozzle.

Then replace the AQUAvalve collar.

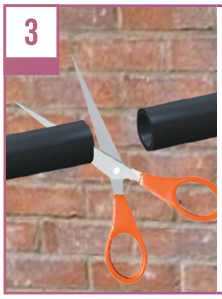
2

Place the AQUAvalve cover over the AQUAvalve.

The AQUAvalve and cover should be placed directly onto the tray.

Ensure the circular spirit level indicates the tray is level, adjust if required.

3



Cut 9mm pipe to appropriate length if required. Connect to 9mm Elbow Bar.

4

Position the 9mm Elbow Bar so that it routes out of the piping port in the easy2Propagate lid.

Ensure:

- The pipe does not trap
- The lid fits snugly
- AQUAvalve and Cover still sit flat on the tray.

5

Connect to your system using 16mm or 9mm fittings.

6


To connect the FlexiTank push 16mm-9mm Click Fit Adapter and Filter onto the 9mm pipe.

Then push the Click-Fit Adapter and Filter onto the FlexiTank tap.



AutoPot Global Ltd, Unit 5, 108 Hawley Lane, Farnborough, Hampshire, GU14 8JE, UNITED KINGDOM Tel: +44 (0)1276 534900

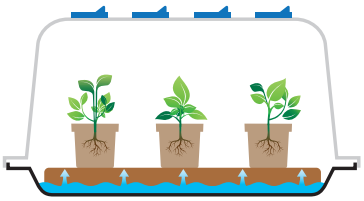
# PROPAGATION

AUTOPOT WATERING SYSTEMS

## OPERATION

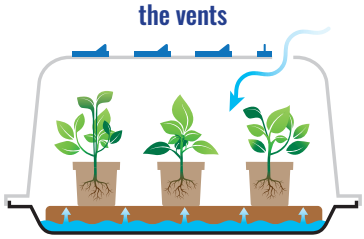
There are four vents in the easy2Propagate lid. Initially these should be kept shut to maintain warmth and humidity levels. Later the vents can gradually be opened as small seedlings/cuttings establish a root system and need “hardening off”. See illustration below for further details.

### Close vents to generate temperature and humidity



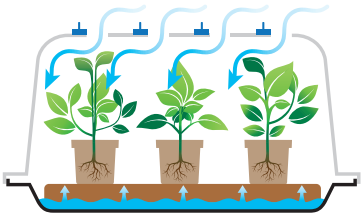
If your area is not sufficiently warm use heat pads under the tray or propagation lights above it to warm the water and create humidity.

### When to begin opening the vents



Once the seedlings or cuttings have rooted you can begin to gradually open the vents.

### Hardening off



Once the vents are fully opened leave for several days prior to removing the lid.

## ADVICE

**Nutrients** - Suitable mineral fertilisers, whether liquid or powdered, can be used if required. Do not attempt to use organic fertilisers when using CocoMats. The CocoMats are designed to deliver nutrients at exactly the gradual rate required by plants at this stage of development. This gradual rate of nutrient uptake is far slower than the rate at which organic nutrients decompose. Organic nutrients will simply fall apart before they reach the plants

Remember that young plants need less food than established ones. Do not connect your easy2Propagate to an AutoPot growing system that is also feeding established plants.

**Water** - All water supplied to the propagator, whether enriched with nutrients or not, should have a pH of 5.5-5.6. This pH level best compliments the composition of the CocoMat.

The desirable Ec/ppm of the water being supplied will be dependent on the stage of the young plants growth and the substrate used.

**Substrates & Pots** - Plants or seedlings in pots, seed trays, plugs or cubes can be propagated on CocoMats in an easy2Propagate.

If pots or seed trays are chosen they may contain a wide range of substrates or blends - rockwool, soil, coco, perlite, and vermiculite represent just a few examples. If a potted substrate or blend is selected it must contain some ingredient that supports capillary action.

If using raised terracotta or bonsai pots, a small length of capillary matting (not included) can be cut and pushed inside the hole at the bottom of the raised pot. The capillary matting will act as a wick.

Orchids will thrive when using the easy2Propagate but will need to be in net pots or similar, please note that suitable water, such as rain water will need to be used if irrigating Orchids along with a suitable liquid mineral feed.

**Temperature** - During germination/rooting of cuttings we recommend a target temperature of 70-80°F / 25-30°C with minimum 80% humidity.

Once rooted reduce temperature and humidity by 10/15%.

A suitable heat mat can be used under the easy2Propagate tray to help maintain warmth to delicate young plants, if required.

**Connection** - Multiple easy2Propagate units can be simultaneously fed from a single reservoir. Each propagator can be added as an extension from the main feeding line in a matter of minutes. easy2Propagate incorporates AutoPot AQUAvalve technology so each propagator functions entirely independently of the others, there is no recirculation of water or nutrients, no plumbing is required for waste as the units utilise every drop. Growth in each propagator can commence or cease without impacting other propagators in the system.

Such propagation systems are often created with the use of Danish trolleys and a header reservoir/tank. The Danish trolleys can be used to incorporate lights and/or heat mats and will help maximise growing space. If Danish trolleys are not an option then multiple propagators may still function in a system. Whatever the arrangement, ensure the reservoir is positioned above the highest propagator.

After plants have been potted up and have grown larger the easy2Propagate can continue to be utilised without the dome in order to provide ultra-low maintenance feeding.



AutoPot Global Ltd, Unit 5, 108 Hawley Lane, Farnborough, Hampshire, GU14 8JE, UNITED KINGDOM Tel: +44 (0)1276 534900