

## ESSENTIALS

AutoPot Watering Systems are extremely versatile and can be used with the growing medium / substrate of your choice. In growing trials we have cultivated plants in a vast range of substrates from coral to denim and even pumice stone! Whatever substrate you decide to use make sure the mix is absorbent, light, fluffy and free draining. An ideal substrate for use with AutoPot is a 50% mix of perlite or clay pebbles with either soil or coco. The following guidelines and examples may provide a good basis for substrate success.

- For good drainage we recommend a 2.5cm / 1" (maximum depth) layer of pH stable clay pebbles, pea gravel, Growstones or Perlite No.3 in the base of each pot.
- Whether they are used at the bottom of the pot as additional drainage or as part of a mix, clay pebbles MUST be pH stable. Be aware that certain brands are NOT pH stable and will increase the pH of the water in the tray; this will negatively affect plant growth.
- Pay close attention to manufacturers instructions where preparation of media is concerned.
- Always use a good quality soil or coco from a reputable brand. Look for coco that has been buffered and stabilised. If unsure, pot up and pour approx 10ltrs of pH 5.6 water and ¼ strength feed through each pot - this will instantly stabilise the coco. Allow to drain thoroughly before use.
- Peat-based composts will compress if used alone, reducing the oxygen content in the root zone. Mix in perlite/clay pebbles/gravel to lighten the compost and improve aeration.

Consider that, though rich, peat can compress to virtual solidity. On the other hand Perlite will never compress. Try to create a mix that balances richness with aeration.

## SUBSTRATE EXAMPLES & KEY QUALITIES

### COCO / CLAY PEBBLES



Coco represents a natural, free-draining substrate that can be enhanced with beneficial bacteria and fungi to strengthen the root-zone and accelerate plant growth. The porosity and texture of the pebbles aids water retention, drainage and root-zone oxygenation.

### COCO / PERLITE



Irregular, porous and rough surface textures such as those found on perlite granules provide aeration, superb water retention and also excellent drainage. Combined with the natural benefits and microbial enhancements available to coco, such mixes can give great results.

### COCO / GROWSTONES



Growstones are made from recycled glass and are engineered to provide high porosity, improved aeration and better drainage of the root zone, while retaining water well. Growstones are alkaline and must be pH stabilised before use. Coco adds an active element to the mix by supporting bio-activity and, it is claimed, by delivering nutrients in synch with the plants requirements.

### ROCKWOOL / CLAY PEBBLES



As it is derived from rocks Rockwool is inert and doesn't withhold or repel nutrients selectively in the way that some plant-based substrates can. Therefore it will deliver your nutrient solution in its purest form. However it will require buffering or stabilising in advance of use. Pebbles provide drainage and water retention.

### SOIL / CLAY PEBBLES



Soil is an excellent medium for supporting bio-activity and soil-based substrates are available to a vast number of specifications. A complimentary medium is essential in order to provide drainage, aeration, and prevent compression in the root zone. Clay pebbles are an ideal choice.

### SOIL / PERLITE



Combining any one of the huge range of soil-based grow media with perlite can produce a wonderfully diverse, active, and airy mix. Water is retained perfectly whilst still free to drain and the risk of compacting is minimised.