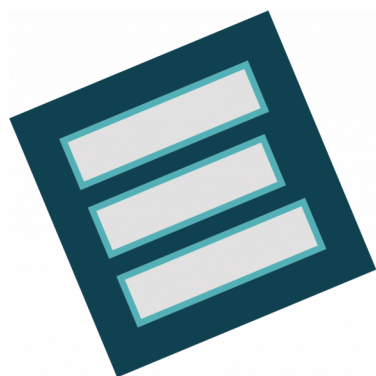




Root
Refreshers

by



Europlanters

Root Refreshers by Europlanters are innovative water-retaining units designed to keep plants and trees consistently hydrated between maintenance periods. Made from high-quality capillary matting and a unique water-retaining polymer with aerating properties, they create a built-in reservoir that roots can draw from as the soil dries out. Perfect for planters where growing media dries quickly, Root Refreshers come in a range of shapes and sizes - each pre-measured with the exact amount of polymer for convenience.

- **Lower Maintenance**

Extends the period between watering!

- **Low Cost**

Cheaper to install than tanks or automatic watering systems!

- **Water Saving**

Absorbs up to 20 times its weight in water!

- **Environmentally Friendly**

Contents are bio degradable and reusable!

- **Lightweight**

Easy to transport!

What are Root Refreshers?

Root Refreshers by Europlanters is modern technology that keeps plants and trees continually hydrated at a constant rate between maintenance periods. They are made from the highest quality capillary matting specifically chosen for its ability to absorb water along with a unique water retaining polymer with aerating properties, together they optimise the refreshment of a plant's roots when needed.

Root Refreshers are perfect for plants confined to planters where growing media often dries out quickly, as the soil dries out the plants can draw from the water reservoir.

Root Refreshers come in a wide range of recommended shapes and sizes to cater for your every need.

Each Root Refresher contains the exact amount of polymer, so there is no time wasted measuring out quantities.

Root Refreshers in action

A six week experiment was carried out by Europlanters using Root Refreshers to test the effectiveness of the water retaining cushions. The Root Refreshers were placed into the bottom of cone shaped hanging baskets, each cushion contained a 100g of polymer which is uniquely designed to absorb in excess of 1lt of water.



The Root Refreshers were placed in the base of the planter with 2 strips of capillary matting. 1lt of water was added.

5 litres of multi purpose compost was added and a further 1lt of water.

10 litres of compost was used with the following plants: 4 Petunia Surfinia and 2 Geranium.

As seen in the photos, four cones were used for the study, wall mounted at a height of 2.7m facing south-easterly.

Two cones acted as a control where the Root Refreshers were replaced with Hydroleca, the same amounts of water were used for all 4 cones. Once fixed to the wall, another half-litre of water was added making a total of 2.5 litres for each cone, **NO FURTHER WATERING** by any person took place from the 15th June, the start date of the experiment.

After 11 days, growth could be seen in all cones, but more noticeable, were the flowers in the Root Refreshers cones. After a little natural rain, all the cones were doing well.

By 19th July all the plants were growing and showing flowers, although there were slight signs of wilting in the sun. After mid-July we had two weeks of hot, dry weather which took its toll. It became obvious in August that the 2 cones which had Root Refreshers had thrived but the other cones clearly suffered with fewer flowers.



15 June



26 June



19 July



18 August

No drain holes were put into the cones and NO WATERING BY ANY PERSON TOOK PLACE FOR 65 DAYS!

Why should I use Root Refreshers?

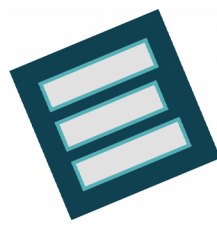
- Less frequent watering needed so reduces maintenance costs
- Water Conservation, excess water is saved and released as the plants need it, saving up to 50% of water usage
- Keeps plants hydrated and healthy, even during a drought
- Lightweight and easy to transport
- Contents are biodegradable and non toxic
- Easily installed

When should I use Root Refreshers?

Root Refreshers can be used with any type of plant, indoors or outdoors, as they only release water when the roots need it. They're especially useful in hard-to-reach areas or where automatic watering isn't possible, like roof terraces and balconies. They can also be used alongside an automated system - just reduce watering times to save water!

Will Root Refreshers keep plants hydrated and healthy during a drought?

Yes! Root Refreshers help keep plants hydrated and healthy during drought by storing a reservoir of water that plants can draw on. Even in the driest conditions, they stay moist for weeks, slowly releasing water through diffusion when the surrounding compost and roots need it most.



Europlanters

F.A.Q. ABOUT ROOT REFRESHERS

Are Root Refreshers filled with a swelling gel?

In short, no. Root Refreshers contain a material called HappiRoot a neutral product based on polyoxyethylene (invented by Professor Neil Graham). When swollen with water HappiRoot has a porous structure where channels allow free water to be stored, and air to circulate. HappiRoot does not and is not intended to replicate the behaviour of other water swelling materials.

What is the main difference between HappiRoot* and swelling gels?

HappiRoot expands approximately ten times, whilst swell gels expand hundreds of times. HappiRoot retains its structure allowing the free flow of water and air, and at the same time provides a honeycomb structure to support and encourage root growth, whereas swelling gels become a sticky mass (like mud or clay) which does not allow for the free flow of air and water, the HappiRoot in Root Refreshers by Europlanters retains its structure with internal pores and spaces for free water and air.

Have they been tested?

Each product that makes up Root Refreshers by Europlanters has been extensively tested by the inventors to ensure optimum results, along with our own experiments – See the Root Refreshers in action experiment by Europlanters.

We will continue to use our Root Refreshers in house and push them to extremes!

Can Root Refreshers save costs?

Yes, when using a liquid fertilizer the polymer will also lock in the nutrients of the feed and release it when the plant takes water, reducing the amount of fertilizer washed away when watering, saving money. The materials used for Root Refreshers have also been carefully selected to ensure optimum results and the cost of each Root Refresher is far less expensive than most other irrigation systems. As they collect and retain rain water, they save water too!

Are Root refreshers easy to store?

Yes, Root Refreshers are easy to store as a little goes a long way! Transporting is easy too as Root Refreshers are lightweight and compact.

Are Root Refreshers environmentally friendly?

The HappiRoot Polymer inside Root Refreshers is biodegradable over time in direct sunlight and it's a non-toxic product.

Are Root Refreshers British Made?

Root Refreshers are manufactured in Britain using the highest quality patented materials.

**HappiRoot is a Trade Marked product*