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 which is patented by Smart Tech Ltd. 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 Root Refreshers in action 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.

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 and patented materials.

*HappiRoot is a Trade Marked Product Patented by Smart Tech Ltd., Glasgow.



Environmentally Friendly Controlled Release Watering

Root Refreshers by Europlanters are a new innovative plant watering system which you bury in the growing media right beneath your plant's roots prolonging the time between manual waterings! Root Refreshers watering secret comes from a patented hi-tech water storing polymer called 'HappiRoot'* which is encased in a sealed capillary matting pocket, this valuable

water store is released to the plants when needed. Root Refreshers can be used in pots, planters, hanging baskets and planting beds to extend the period between watering of plants for up to six weeks! Once installed this is the watering solution you can forget!





...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 designed to fit neatly into the bottom of the 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. Ilt of water was added.

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

A further 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 four.

Once fixed to the wall, another half litre of water was added making a total of 2.5 litres, NO FURTHER WATERING took place from the start date of 15th June. After 11 days slight growth could be seen 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 by Europlanters had thrived but the other cones clearly suffered with fewer flowers.

NO DRAIN HOLES were put into the cones and NO WATERING TOOK PLACE FOR 65 DAYS!

What are Root Refreshers?

Root Refreshers by Europlanters are a new product designed to keep 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 and we also offer a bespoke service to cater for every need. Each Root Refresher contains the exact amount of polymer, so there is no time wasted measuring out quantities. The image above shows HappiRoot in a hydrated state.

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, minimal training required

When should I use Root Refreshers?

Root Refreshers can be used for any plant interior or exterior as the water is only released when the plants roots need it. They are especially useful in areas where there is poor access or an automatic watering system cannot be installed. Root Refreshers can be used in conjunction with an automated system, just turn the watering times down and save water!

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

Yes! During drought conditions your plants will stay healthy by drawing on the stored life-giving reservoir of water in the Root Refresher. It's important to note that Root Refreshers will remain moist for some weeks even in the driest of conditions giving up their stored water by an on-going process of diffusion triggered by the low relative humidity in the surrounding compost and roots.



