

Peat-free and peat-reduced plant care



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Caring for Plants Grown in Peat-Free and Peat-Reduced Mixes



As the UK's commercial growers transition away from peat, there will be a learning curve for plant area staff to ensure that plants supplied remain in pristine condition for shoppers. Healthy and inspirational plants are a joy to shoppers, and something we all take real pride in; the good news is that knowledge is building all the time on how to grow superb quality plants in peat-reduced and peat-free growing media. This guide brings together some of what the UK's commercial growers have learned into a short set of tips for plant area staff in garden retailers.



What materials are replacing peat in the growing media that commercial growers use?

On the whole, peat is being replaced by wood-based materials such as bark or wood fibres and coir (which is the grounds from coconut husk). Plants imported from Europe may also be using rice husks or other materials. Three properties these materials have in common when compared with peat is that they are freer draining, biologically active, and less able to retain nutrients, particularly if over-watered. That means that whilst plants are with retailers, they need to be cared for differently than plants grown in peat. But that's not insurmountable, and doesn't need to affect things like plant guarantees, which HTA consumer research has shown have a significant positive impact on shoppers' willingness to purchase. If you want to find out more about these materials, then free elearning is available from either the HTA or Garden Centre Association on this topic. So how do plants need to be cared for differently? The following tips should have a real impact on the health of plants in your store, supporting sales and just as importantly helping make sure shoppers succeed with the plants they take home.

Irrigation of Plants in Store

As we noted, peat alternatives like wood fibres and coir are freer draining. But that doesn't mean they don't retain water at all; they do, and over-watering can of course harm plants and also wash nutrients from the growing media. Watering patterns with peat-free or peat-reduced growing media can be different to peat-based growing media. On balance, what growers and retailers are finding is that irrigation needs to use less water more often than with peat-based growing media; more water per se isn't necessarily required. The following tips can help with effective irrigation:



Quite often peat-free or peat-reduced growing media can look dry on the surface, but actually still contain moisture. It can pay to either lightly rub back the surface of the growing media to check if there is moisture in the container, or to lift the plant and check the base of the container and its weight. This can give a good idea of whether or not the plant your checking (and its neighbours in the same batch) need watering.



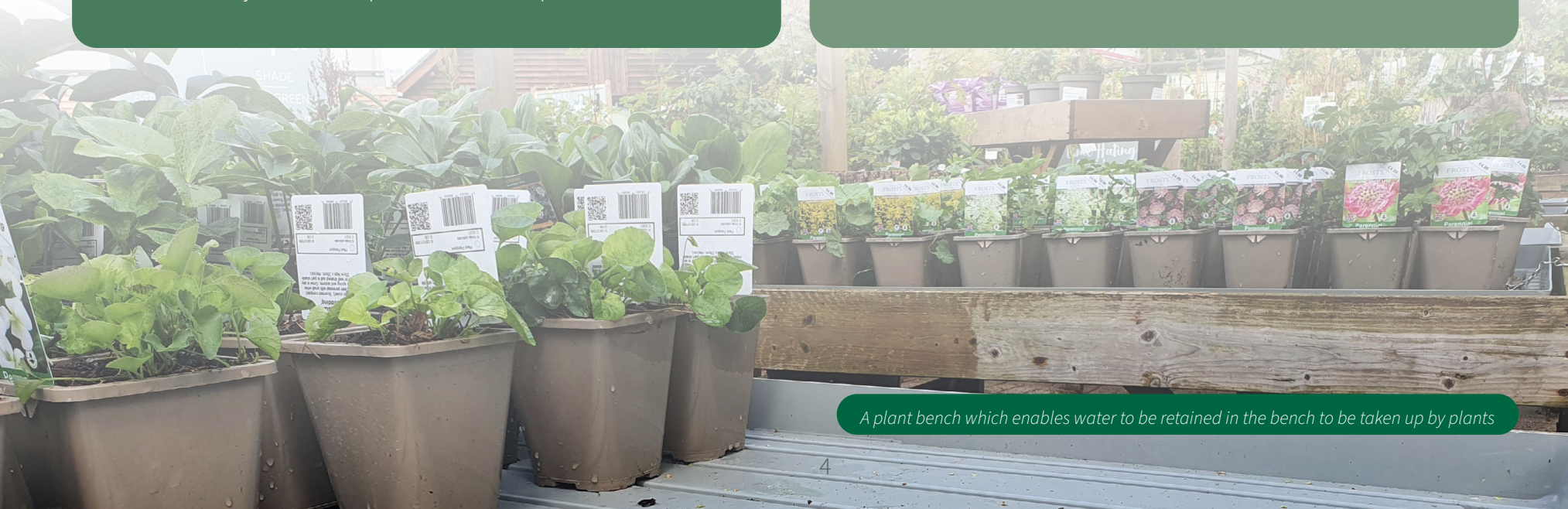
Irrigation of Plants in Store



One of the things that growers are increasingly finding is that trusting the plants to do some of the work can be effective. Sub-irrigation, where the plant takes up water at its own pace from below, can help avoid over-watering. In a retail environment, ebb-and-flow or flood benches can not only provide this, but also reduce water and nutrients waste and associated costs by retaining water that the plants can take up later. When using ebb and flood beds it is important to use them correctly; flood the bed, allow the plants to take up the water they need then drain down, and don't leave the pot sat in water for long periods. The use of capillary matting on plant benches can help ensure a steady and even uptake of water to plants on a bench.



Above all, it's important to check plants at least daily. When the weather's hot, and especially where certain plants are more susceptible to the effects of drought, they should be checked more often. Reductions in stress to plants can also be achieved by shading screens if these are available. Of course, that's easier said than done when you also have to keep a constant pace of re-stocking benches and helping shoppers; at peak times, it's definitely worth prioritising the irrigation plants that are more prone to the effects of drought in hot sunny weather and making sure the team have a plan in place to manage this as a team.



A plant bench which enables water to be retained in the bench to be taken up by plants

Feeding of Plants in Store

As we noted, peat alternatives are less able than peat to retain nutrients and are biologically active, which can lead to nitrogen lockup. This is where the activity of soil organisms breaks down organic matter such as wood-based materials that have a high carbon to nitrogen ratio, a process which results in lower levels of nitrogen for plants to access. There's also the risk that over-irrigation of plants can leach out nutrients. All of this is less of an issue for stock that turns over rapidly and may only be in store for a few days – pack bedding in a sunny May for instance. But for stock that's slower-moving, especially towards the end of the season, the following tips can help ensure plants retain their health and vigour in store.



Using an off-the-shelf liquid fertiliser with a good nitrogen content once a fortnight or applying a granular feed top-dress can be very effective. That's especially likely to be so for plants which have been in stock for more than a few weeks, perhaps towards the tail-end of the season from June onwards. If the plants' leaves show signs of yellowing, this can be a sign of nitrogen deficiency, and the use of fertiliser is likely to prove helpful.



Ask your supplier about the Controlled Release Fertilisers (CRFs) they use. Many commercial growers, particularly suppliers of plants such as shrubs, trees, and perennials, work on the basis that their plant may be with the retailer for weeks or even months. They are likely to be using CRFs in their growing media to give their plants the best possible chance of looking great for longer in the retail environment. It's in growers' interests to have you succeed with their plants, and it's almost certain that if you ask they'll tell you what CRFs they've used and how long you can expect them to last. That can help you to plan whether or when to start feeding the plants. That's not only going to help you keep your plants healthy, but potentially save you costs on feeding unnecessarily.



It's an easy one, but avoiding over-watering really helps sustain nutrient levels in the plant's container. Checking the weight of the container as well as looking at the growing media below the surface and at the base of the container to see whether a plant needs watering is a double-win.

Managing Pests and Diseases

There is limited evidence either way on whether plants produced in peat-free or peat reduced growing media are any more or less susceptible to plant pests and diseases than those produced in peat. Poor care will, of course, stress a plant irrespective of what medium it is grown in, and the preceding tips on irrigation and feeding will help care for plants. Some biological processes are more likely to be active in peat-free growing media, which may serve to suppress certain root diseases. The freer draining characteristics of these growing media also mean that the plants are less likely to be affected by moss, liverwort or weed growth in the containers. All that said, the following tips should help protect plants grown in peat-free and peat-reduced from pests and diseases:



Ask your grower about what biosecurity measures they have in place on their production nursery. The Plant Health Management Standard provides a good description of 'what good looks like' in plant production. Some growers may be part of a certification scheme such as the HTA's OHAS scheme or schemes run by MPS, or PlantHealthy. These are good signs that the plants supplied will have been through a biosecure supply chain.



Regularly inspect the plants you have on your benches or other display areas. If plants are or appear to be diseased, remove them from the bench and isolate them from others. This not only protects neighbouring plants from infection, but also ensures that shoppers are not put-off from purchasing by the sight of plants that are clearly past their best.

Thank you

Thank you for taking the time to read this guide, we hope you have found it useful, and please do feel free to take and adapt some or all of it into staff training or briefing materials for colleagues.

This is one of a series of guides and information available from the HTA and the Garden Centre Association (GCA) to help plant retailers get the most out of plant retailing; you can find other resources and materials as follows on hta.org.uk/plant-retail-success

RESOURCE	SUMMARY
Retailing peat-free growing media elearning	Five elearning courses have been produced with the GCA covering: what Peatlands are and why they're important; The Responsible Sourcing Scheme for growing media; helping shoppers choose the right growing media for the right purpose; reassuring peat users about peat-reduced and peat free alternatives; understanding main ingredients used as peat alternatives. The courses are designed for retail staff who work with shoppers in the plant area.
Information videos on caring for plants grown in peat-free	Videos produced by the GCA and RHS to help either retail staff or the general public succeed with plants grown in peat-free growing media
Guide for retailers: ranging quality growing media	A short written guide for retail buyers on how to work with manufacturers when ranging growing media products
Using Garden Plant Protection Products Safely elearning	A course jointly produced by the HTA and CropLife to provide retail staff with the knowledge needed to provide information to consumers, as is required by the Sustainable Use Directive.
Caring for plants grown in peat-free and peat-reduced mixes	This guide for staff in retail plant areas has been prepared with commercial growers, and shares tips and advice on ensuring plants grown in peat-free or peat-reduced mixes thrive and stay healthy and saleable.
Guide to maximising link sales from plants	This guide is based on real-life merchandising examples and statistical analysis of over 7 million garden centre transactions. It provides common-sense insights into ways of maximising profit and customer success from each transaction.
Shopper eye-tracking research	This research uses eye-tracking technology to see the plant area as the shopper sees it. It contains ten key insights, illustrated with video footage, which help improve merchandising effectiveness in the plant area, as other zones in the garden centre.