fargro®

Enhancing Peat-Free Growing

Drip & Drain Analysis



Drip and drain analysis involves testing both the water entering the growing system (the drip) and the water leaving it (the drain). By comparing these results, growers can better understand how water, nutrients, and the growing media interact, and how this affects plant health and growth.

Monitoring nutrient uptake
Comparing the nutrient content of the drip and the drain allows growers to assess how efficiently plants are absorbing essential nutrients. If nutrients are detected in the drainage water, it indicates they are not being taken up, enabling growers to adjust feeding programmes accordingly.

Optimising water use
Peat-free growing media often have different water-holding capacities compared to peat-based substrates. Analysing the drain helps growers identify whether crops are being over- or under-watered, ensuring optimal hydration and root performance.

Understanding EC levels
Electrical conductivity (EC) provides insight into salt levels within the growing media. Comparing EC readings from the drip and drain can highlight salt build-up, allowing growers to take corrective action before plant health is compromised.

Maintaining the ideal pH range
Peat-free substrates can buffer pH differently to peat-based media. Monitoring pH in both the drip and drain helps growers detect changes that may affect nutrient availability, ensuring the growing media remains within the desired pH range.

Detecting contaminants
Contaminants can occasionally enter the system through irrigation water or fertilisers. Analysing both input and output water supports early detection of unwanted substances, allowing growers to address issues before crops are affected.

Assessing growing media performance
Drip and drain analysis provides a real-time assessment of how peat-free growing media performs under commercial growing conditions. This information can inform future media selection or highlight where amendments may be required.

Reducing resource wastage
Understanding which nutrients and inputs are utilised by the crop, and which are lost through drainage, allows growers to fine-tune irrigation and fertilisation strategies. This improves efficiency, reduces costs, and minimises environmental impact.

Supporting crop health and consistency
Regular monitoring of drip and drain solutions provides a complete picture of the root-zone environment. Identifying and correcting imbalances early helps prevent growth issues or disease, supporting healthier and more consistent crops.

As growers transition to peat-free growing media, a deeper understanding of the plant, water, and media relationship becomes increasingly important. Drip and drain analysis is a valuable tool that supports informed decision-making, helping improve crop yield, quality, and long-term sustainability.

Author: Sean Whitworth, Fargro Senior Growing Media and Fertiliser Specialist

HEAD OFFICE 01903 726 100 ESSEX 01206 735 467 EMAIL ASK@FARGRO.CO.UK www.fargro.co.uk