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Enhancing Peat-Free Growing

A comprehensive guide to Soil Testing



Soil testing holds the key to optimising plant health and productivity in a peat-free environment. This integral part of modern horticulture provides a wealth of information about soil health, fertility, and overall condition, highlighting nutrient deficiencies, EC levels and pH imbalances.

In the journey towards peat-free growing, soil testing is no longer an optional step but an essential practice. It provides a scientific basis for understanding soil behaviour, enabling informed decisions that support optimal crop yields and environmental responsibility.

Understanding soil testing
The soil testing process begins with the collection of representative soil samples. These samples are sent to a laboratory for detailed analysis. A comprehensive report is then produced, outlining essential nutrient levels, pH values, electrical conductivity and overall soil fertility. Many reports also include recommendations for nutrient amendments to help maximise plant nutrition, health and productivity.

The vital role of soil testing in peat-free growing
The transition to peat-free growing media presents unique challenges. While peat-free substrates are more sustainable, they often display different physical and chemical characteristics compared with traditional peat, including variations in water-holding capacity, nutrient availability and pH stability. Soil testing is therefore particularly valuable in peat-free systems.

Regular soil testing helps identify nutrient imbalances and pH issues at an early stage. For example, some peat-free media tend to have higher pH levels than peat, which can restrict nutrient availability. Detecting and addressing these imbalances early allows for targeted fertilisation and soil amendments, improving crop performance while controlling costs and reducing environmental impact.

Testing your inputs for peat-free growing
Several types of analysis are especially relevant for peat-free horticulture.

Water analysis, using borehole or mains water, helps determine baseline nutrient content and overall water quality.

Compost analysis measures levels of key nutrients such as nitrogen, phosphorus and potassium, supporting more accurate nutrient planning.

Drip and drain analysis, used primarily in hydroponic systems, assesses nutrient uptake by comparing the feed solution with drainage output.

pH testing measures soil acidity or alkalinity, a critical factor influencing nutrient availability and uptake.

The importance of professional soil testing
To ensure accuracy and reliability, professional laboratories or trusted testing services should be used for soil and input analysis. Working closely with experienced laboratories ensures timely results, detailed analysis and informed recommendations. This partnership supports growers in navigating the challenges of peat-free horticulture while safeguarding crop health and productivity.

Regular soil testing remains a cornerstone of successful, sustainable horticulture. It equips growers with the insights needed to manage crops effectively in a peat-free environment. Through consistent testing and thoughtful interpretation of results, growers can move confidently towards a more resilient, productive and sustainable approach to peat-free growing.

Peat-free Resource
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