



Success with Peat-free Growing Media

Transition to Peat Free and Sustainable Practices

Background

- 24 years in growing media
- Sales, marketing, operations & supply chain, and product development
- Sinclair's
 - Retail & Professional - Peat & Peat-free
- Vital Earth
 - Retail & Professional - Peat-free
- Bord Na Mona
 - Retail, Professional & Peat Supply - Peat & Peat-free
- Southern Trident
 - Retail, Professional & Coir Supply - Peat-free



Understanding Peat-Free Alternatives

Peat-free growing media typically comprise of various organic and inorganic materials such as coir, composted bark, wood fibre, composted green waste, and perlite.

It's essential to understand the properties of these alternatives and how they affect the physical structure, water retention, and aeration of the growing medium.



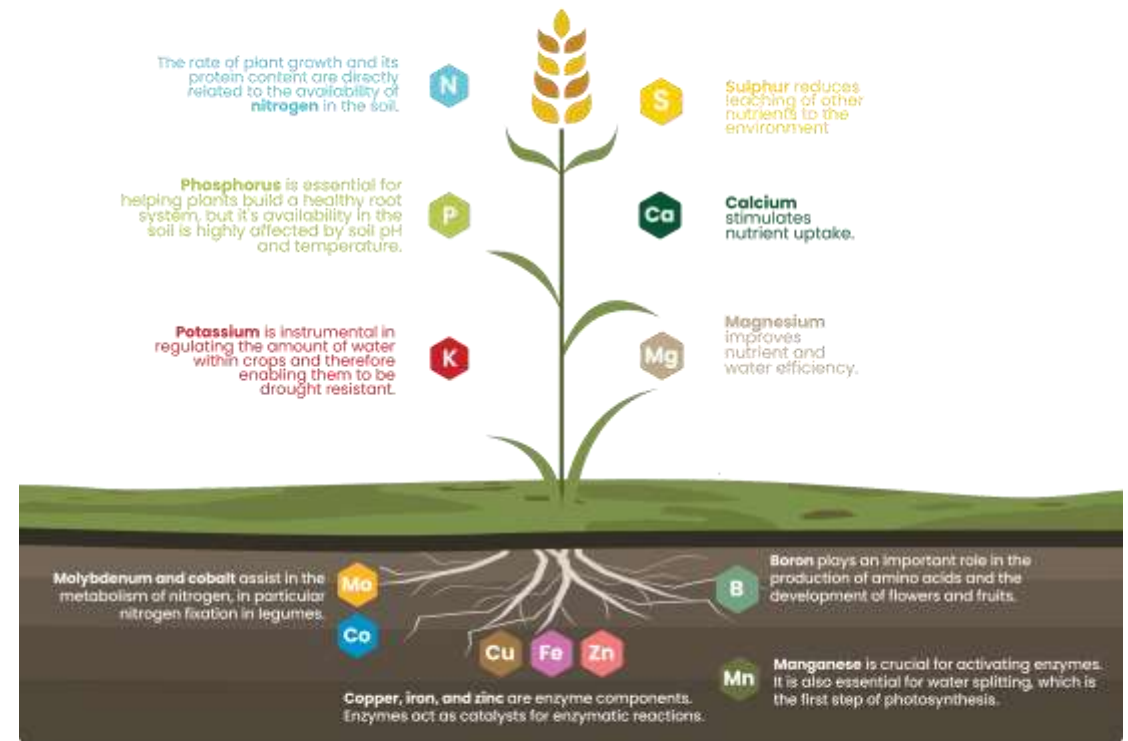
Growing Media Substrate	Pros	Cons
Peat	- Excellent water retention	- Unsustainable (harvesting threatens ecosystems)
	- Good aeration and drainage	- Low in nutrients
	- Naturally acidic pH	- Non-renewable resource
Coir	- Renewable and sustainable	- Distance travelled
	- pH-neutral to slightly acidic	- Need to ensure quality
	- Good water retention	- May require additional nutrients
	- Good drainage	
Composted Bark	- Renewable and sustainable	- Relatively low water retention
	- Good drainage	- May decompose quickly
	- Provides aeration to the root system	- May require supplemental nutrients
Wood Fibre	- Renewable and sustainable	- Good drainage
	- Lightweight and easy to handle	- Low water retention
	- Provides aeration to the root system	- May decompose relatively quickly
Composted Green Waste	- Environmentally friendly	- Variable composition (quality may vary)
	- Contains organic matter and nutrients	- May require screening to remove debris
	- Can improve soil structure when mixed	- Potential for weed seeds and pathogens
	- Renewable and reduces landfill waste	

Balancing Nutrients

Peat-free media may lack some of the natural nutrients found in peat.

It's crucial that organic matter is stable, to provide and not lock up essential nutrients for plant growth.

Regular monitoring of the nutrient levels and pH of the growing medium is necessary to ensure the plants receive adequate nutrition.



Managing Watering Practices

Peat-free growing media often have different water retention properties compared to peat-based media.

It's important to adjust watering practices accordingly.

Overwatering can lead to waterlogged roots, while underwatering can cause plants to become stressed.

Regularly monitor the moisture levels in the growing medium and adjust your watering schedule based on the specific needs of the plants you are growing.

One size does not fit all.

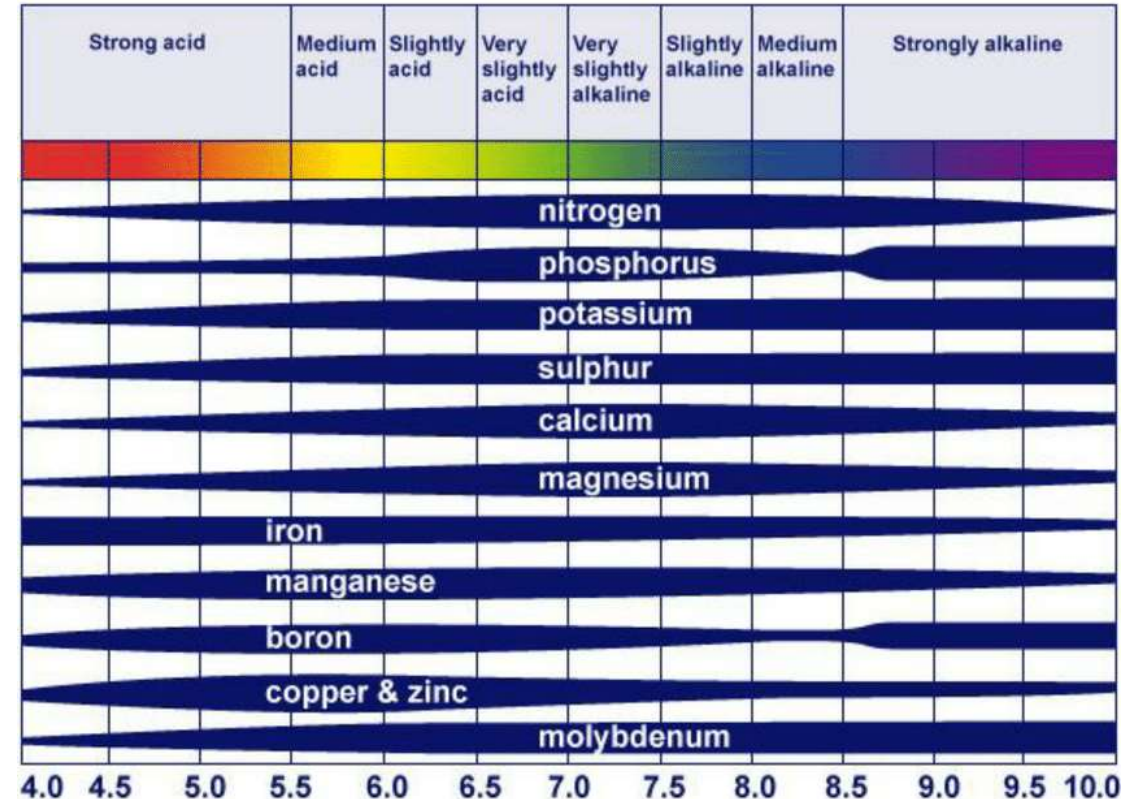


Monitoring pH Levels

Peat-free growing media can have different pH levels compared to peat-based media.

Regularly monitor the pH of the growing medium to ensure it falls within the appropriate range for the plants you are growing.

Adjust the pH, to create an optimal growing environment.



Responsible Sourcing

- Measures substrates environmental impact
 - Water
 - Energy
 - Habitat & Biodiversity
 - Renewability
 - Pollution
 - Resource Use Efficiency
 - Social Compliance

- For more information contact
 - Andy Smith
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 - 01507 602427





Boultons of Moddershall

Growing quality nursery stock for
over 100 years...

Our nursery in numbers...

500ft+

Above sea level

125yrs

Established

10acres

4Ha total area

4500m

Protected growing area

500,000

Wholesale nursery plants





The move to peat free



Ahead of the times

Boultons began peat-free cultivation in 2005, seeking effective peat-free alternatives for container growing.



Other factors

When considering peat-free composts, we need to take into account the site location, drainage and irrigation.



Still testing

We continually trial new peat-free mixes. As the range of plants grown has increased we are finding that one compost does not suit all varieties.

Compost

- How consistent are the ingredients of the mix?
- How user-friendly is it? (Dust, smell, handling characteristics are all important).
- Does the compost have customer appeal / look like peat? Pale coloured ingredients in mixes can look dry and lead to overwatering.
- How stable is the compost? Is it liable to 'slump' in the pot during the growing cycle.



Irrigation

pH of irrigation water seems to have a larger impact on compost pH in peat free media.

We have found that Irrigation frequency and duration needs to be adapted for peat free growing. 'Little and often' seems to be the rule.

The volume of water used on site has not gone up over the recent years, and we have observed that run-off has reduced.

Retailers and their customers need educating in how to monitor moisture in the compost (the finger test?) to avoid over or under watering pots.





Plant propagation



In-house propagation

We propagate an increasing range of plants. Driven by listening to customer requirements



Cuttings & seeds

We produce plants using cuttings, seeds and division techniques.



Reliable supply

Boultons can ensure the young plants are peat free from the outset.



Pre-forma & pre-fill mixes

We use peat free pre-forma and reusable loose fill trays.



Recyclable pots

We switched to recyclable pots in 2020. We reuse pots where appropriate and recycle our waste compost and plastic



Q&A Session

Steve Harper – Southern Trident

Andrew Dobson – Boultons of Modershall