







BPPC. Adopting responsibly sourced growing media blends (PO 019d)

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What are we hoping to achieve?



Aim: A series of demonstration trials to identify and address the key nursery cultural practices permitting the adoption of responsibly sourced peat-reduced and peat-free growing media blends on bedding and pot plant nurseries

Evaluate irrigation and liquid feed requirements **Identify** any adjustments required to container filling machine practices

Systems: Propagation, pot/pack bedding, pot plant production

Trial details



Treatments:

- Three proprietary peat-free substrates
- Nursery standard product (control)
- Non-replicated, non-randomised trial

Cultivation:

- 64 plants/species/treatment
- Transplanted week 39 (29 Sept)

Species:

- Calathea roseopicta 'Silvia' (rose painted Calathea)
- Ficus benjamina 'Exotica' (weeping fig)



Nutrient analysis of unused media



| рН | EC @ 20C | Ammonia-N | Nitrate-N | Total N | P | K | Mg | Cl | SO ₄ |
|-----|----------|-----------|-----------|---------|-------------|-------|------|-------|-----------------|
| | uS/cm | mg/l | mg/l | mg/l | mg/l | mg/l | mg/l | mg/l | mg/l |
| 6.5 | 442 | 4.8 | 92.0 | 96.8 | 25.9 | 352.7 | 27.4 | 91.5 | 369.5 |
| 6.8 | 647 | 122.7 | 116.2 | 238.9 | 60.5 | 432.9 | 13.6 | 84.6 | 571.4 |
| 6.2 | 239 | 8.1 | 20.6 | 28.8 | 25.5 | 223.7 | 1.7 | 180.9 | 73.0 |
| 5.5 | 221 | 21.7 | 10 | 31.7 | 17.9 | 81.4 | 44.6 | 13.4 | 402.4 |

Mechanisation



| Density | kg/m3 | 233 |
|--------------------|-------|-------|
| Dry Matter | % | 80.1 |
| Dry Density | kg/m3 | 186.6 |







| Density | kg/m3 | 408 |
|-------------|-------|-------|
| Dry Matter | % | 43.1 |
| Dry Density | kg/m3 | 175.8 |

| Density | kg/m3 | 427 |
|--------------------|-------|-------|
| Dry Matter | % | 56 |
| Dry Density | kg/m3 | 239.1 |



| ensity | kg/m3 | 343 | |
|-------------|-------|-------|--|
| Dry Matter | % | 53.4 | |
| Ory Density | kg/m3 | 183.2 | |

Mechanisation (blue)





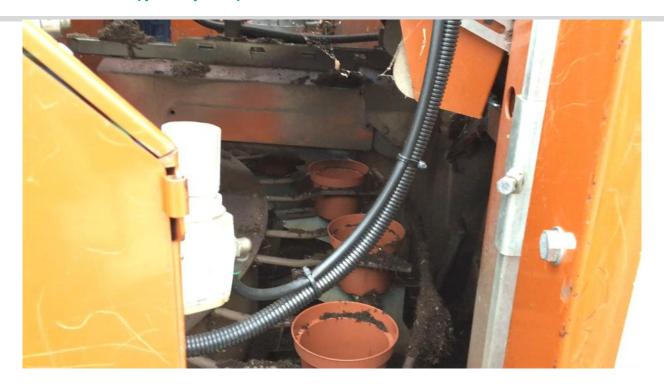
Mechanisation (purple)





Mechanisation (purple)





Future trials



Earley Ornamentals, Thirsk.

Propagation

Workshop: Wednesday 9th February

Two further trials on pot / pack bedding tbc

Thanks...



- Luke Lloyd, Laura Marner and the Hills Team
- Growing Media Manufacturers
- BPOA
- AHDB Horticulture
- ADAS Colleagues
- Chloe Whiteside







