

Peat-free growing media for Organic Systems: Propagation and field trials

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Lettuce, Chinese cabbage and Spring cabbage were sown on 2 August 2013 in nine peat-free growing media under commercial conditions. The trays were laid out in a randomized block design with four replicates of each combination. These were assessed for germination and usable plants, plant size, ease of pulling from the tray and need for feeding. Plants from each of the composts were planted out on three organic holdings to assess how well they established.

GROWING MEDIA

Code No.	Manufacturer	Description
1	Carbon Gold	Seed Soil Association approved
2	Carbon Gold	All purpose Soil Association approved
3	Anon.	Test mix with organic fertilizer
4	Fertile Fibre	Seed mix Soil Association approved
5	Jiffy	Test mix with organic fertilizer. EU 834/2007 compliant
6	Klasmann	Delfland peat-free mix Soil Association compliant
7	Melcourt	Sylvamix Natural Soil Association approved
8	Melcourt	Sylvamix Potting; Non-organic *(not designed for veg propagation)
9	Bulrush	Professional peat-free multipurpose Non-organic

RESULTS

Lettuce

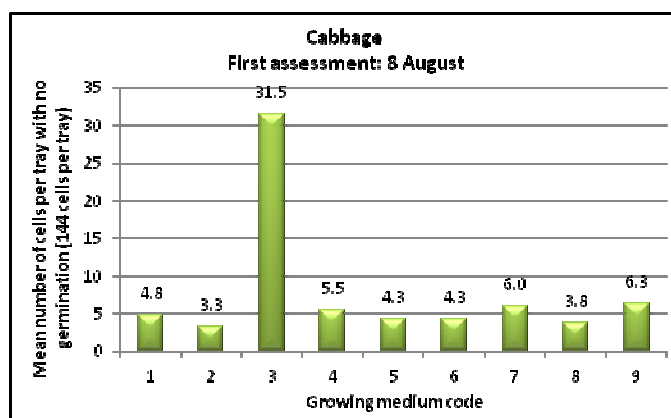
- Germination was significantly poorer for No.3 at the 95% confidence level and required feeding.
- Nos. 4, 7 and 8* produced lush growth

Chinese Cabbage

- Nos. 1 & 3 had significantly worse than average germination, and Nos. 4 & 8 significantly better, at both assessments (at the 95% confidence level).
- All media produced good plants, but 1, 2, 3 & 6 required feeding.

Cabbage

- Germination was significantly poorer for No.3 at the 95% confidence level.
- Nos. 4, 7, 8* & 9 grew cabbage plants that were too big and soft (especially 8* & 9).
- Nos. 1, 2, 3 & 6 required feeding (but this is normal practice for brassica plants).



Chinese Cabbage 13 Aug, in order of decreasing number of empty cells/small plants, from left to right.

Conclusions

All the media grew plants that could be pulled from the trays in 23 days apart from No.1 (just lettuce) and No.3 (all three species). No.5 gave good plants of all three species without feeding. To look at Delfland's blog and find out more about the trial visit <http://organicplants.co.uk/blog/peat-free-trial/>

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