



## Organic vegetable transplant production

Meeting the industries needs: from substrate to spacing

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**ORC ACKNOWLEDGEMENTS**

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**YEAR**

1994-2003

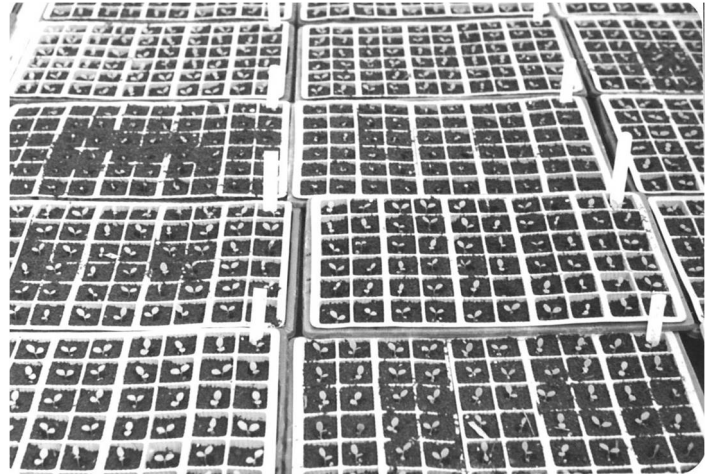
**FUNDING - PROJECT**

**DEFRA**

- Organic transplants / evaluation and development of production techniques (OF0109)
- Overwinter transplant production for extended season organic cropping (OF0144)
- Alternative, non-animal-based nutrients sources, for organic plant raising (OF0308)

In the 1990s organic regulations were moving towards the use of organic vegetable transplants. However, the industry did not have the knowledge of how to produce transplants that would meet organic standards. The need was identified as far back as 1981, when the Organic Growers Association (now the Organic Growers Alliance, OGA) set up trials to test different growing media. Several research projects followed with the first certification of growing media granted to Turning Worms in 1986.

The Organic Research Centre was pivotal in researching and developing vegetable transplant production systems to comply with the new organic standards. Ahead of the removal of the derogation on the use of conventionally produced transplants at the end of 1997, ORC undertook several years of trials working with the industry to develop protocols for transplant production, overwinter production and alternative, non-animal-based nutrients sources.



Briefly, our results using organic transplants at a commercial organic grower's holding suggested that there may be a benefit, under adverse conditions (e.g. pest attack or drought), from using a larger plant. The disadvantage of using a larger cell size is that they make less efficient use of greenhouse propagating space and cost more in use of substrate, transport, and handling. It also means that organic growers may be using proportionally more peat in propagation than conventional growers. Our work on overwinter transplant production found that the effect of cell size (and thus plant density) on disease spread was minimal with both the cell sizes tested having similar spread of disease over 12 – 14 days. This would suggest that cell size is not a suitable method to control the spread of disease in organic transplant production systems.

## FURTHER READING

1. Stopes et al. (2001) [orgprints.org/id/eprint/7973](https://orgprints.org/id/eprint/7973)
2. EFRC (2003) [orgprints.org/id/eprint/9963](https://orgprints.org/id/eprint/9963)
3. The Organic Grower (2007) [tinyurl.com/2uzuyskc](https://tinyurl.com/2uzuyskc) pp. 22-31
4. IOTA Research Review on Organic plant raising (2008) [tinyurl.com/yjh8w467](https://tinyurl.com/yjh8w467)



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