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Controlled comparisons between soil and hydroponic systems reveal increased water use efficiency and higher lycopene and β -carotene contents in hydroponically grown tomatoes

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Published in:
Scientia Horticulturae

DOI:
[10.1016/j.scienta.2021.109896](https://doi.org/10.1016/j.scienta.2021.109896)

Publication date:
2021

Citation for published version (APA):
Verdoliva, S., Jones, D., Detheridge, A., & Robson, P. (2021). Controlled comparisons between soil and hydroponic systems reveal increased water use efficiency and higher lycopene and β -carotene contents in hydroponically grown tomatoes. *Scientia Horticulturae*, 279, Article 109896.
<https://doi.org/10.1016/j.scienta.2021.109896>

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Supplementary material



Supplemental Figure 1. Details of the pruned truss showing only 4 tomatoes per truss.

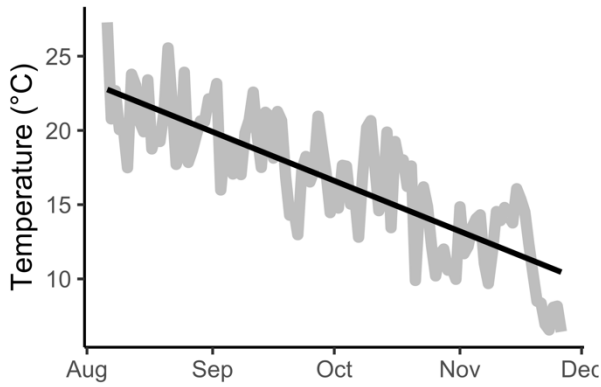
Supplementary Table 1. Bulrush compost composition

pH	EC	NH₄⁺	NO₃⁻	K⁺	Mg⁺	Ca⁺	Na⁺	P	SO₄²⁻
4.2	μS/cm 44	mg L ⁻¹ 12.2	mg L ⁻¹ 3.5	mg L ⁻¹ 2.5	mg L ⁻¹ 0.3	mg L ⁻¹ 0.6	mg L ⁻¹ 12.7	mg L ⁻¹ <1	mg L ⁻¹ 21.8

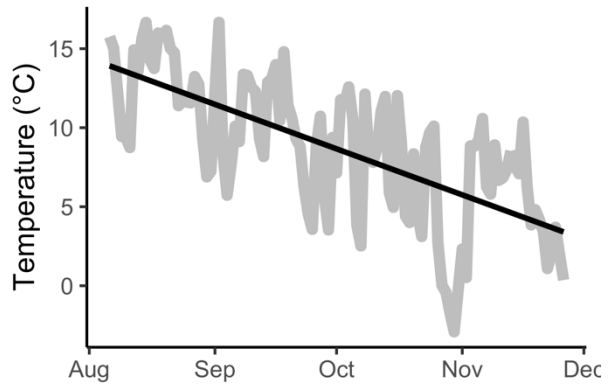
Supplementary Table 2. Nutrients provided to plants growing in three different systems by nutrient supplementation to bulrush compost and as nutrient solution in two soilless growth systems (deep-water and drip-irrigation).

Nutrient	Application rate (mg L⁻¹)
Nitrogen	200.8
Phosphorous	31.0
Sulphur	64.0
Potassium	235.0
Calcium	200.0
Magnesium	48.0

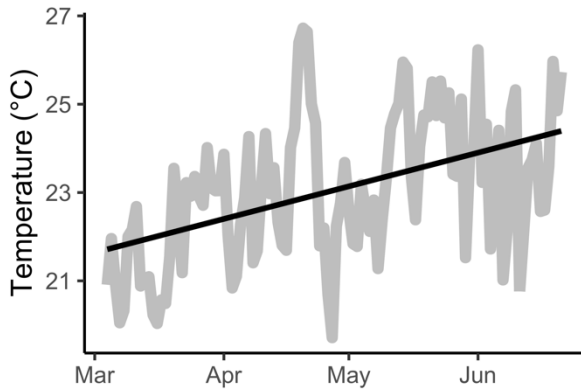
A Average Temperature 2018



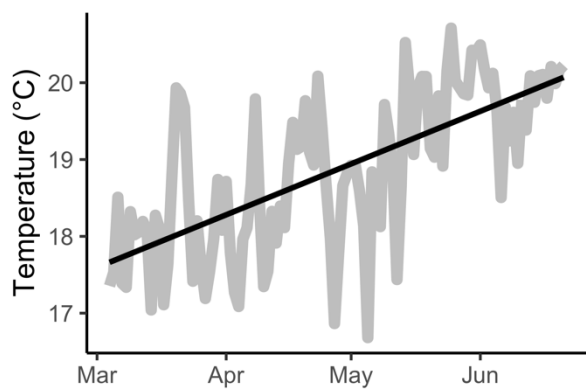
B Daily Min Temperature 2018



C Average Temperature 2019



D Daily Min Temperature 2019



Supplementary Figure 2. Daily average (A) and minimum (B) temperatures from a tomato growth experiment in a polytunnel (2018); and daily average (C) and minimum (D) temperatures from a tomato growth experiment in a glasshouse (2019).