



EXECUTIVE SUMMARY

2025–2026 Organic Tomato Grow Trial

South Regional TAFE (SR TAFE), Bunbury Campus, Western Australia • 31 October 2025 – 13 February 2026

Overview

South Regional TAFE (SR TAFE), Bunbury Campus, conducted a 15-week organic tomato grow trial to evaluate President Water's PW75 Structured Water Vortex Generator (SWVG), used alone and in combination with a 432 Hz Scalar Wave frequency generator, against a filtered-water control. Three identical raised garden beds were planted with Ox Heart and Juane Flamme tomatoes:

- Bed 1 – Control: filtered municipal water only
- Bed 2 – Vortex: filtered water + PW75 Vortex Generator
- Bed 3 – Vortex + Scalar: filtered water + PW75 Vortex Generator + 432 Hz scalar frequency generator

Equipment was supplied by President Water; the trial was authored by Pamela Patane and Laurie Barnes of SR TAFE, with an Executive Summary issued separately by President Water Company.

Key Results

All beds were supplied with municipal water, filtered for chlorine and chloramines. Beds #2 and #3 operated with approximately 18% reduced irrigation flow; as a result, performance improvements are even more significant when expressed as yield per unit of water applied, (yield-per-unit-of-water-productivity).

1) Bed #1 – Control

Crop Performance:

- Yield: 17.16 kg (37.8 lbs)
- Brix: 0.50

Note: The lower Brix reading coincided with the onset of leaf-borne disease.

Soil Biology:

- Total Biomass: 1367 µg/g
- Fungi: Bacteria ratio: 0.3:1 (Fungal: 22% | Bacterial: 78%)

2) Bed #2 – PW75 Vortex Only

Crop Performance:

- Yield: 21.15 kg (46.6 lbs)
- Brix: 3.00
- +23.25% increase in total yield
- +50.64% improvement in yield per unit of water applied
- 1.51× more yield per unit of water applied

Soil Biology:

- Total Biomass: 2599 µg/g
- Fungi: Bacteria ratio: 1.3:1 (Fungal: 57% | Bacterial: 43%)

Note: Results were influenced by irrigation disruption during the campus Christmas shutdown period, when one of three emitters became blocked. This was confirmed through soil moisture data and video observation.

3) Bed #3 – Vortex / Scalar System

Crop Performance:

- Yield: 41.38 kg (91.2 lbs)
- Brix: 3.25
- +141.14% increase in total yield
- +194.73% improvement in yield per unit of water applied
- 2.95× more yield per unit of water applied

Soil Biology:

- Total Biomass: 3540 µg/g
- Fungi: Bacteria ratio: 16.7:1 (Fungal: 94% | Bacterial: 6%)

Note: Bed 3 results were affected by intermittent power outages, which periodically deactivated the scalar equipment. During these periods, vortexing continued, but scalar field generation was not active.

Summary Observation

Across both treated beds:

- Increased yield in Bed #2; significant yield increase in Bed #3
- Significant gains in yield per unit of water applied
- Improved crop quality (Brix levels increased from 0.5 → 3.0–3.25)
- Strong shifts toward fungal-dominant soil biology
- Substantially improved water-use efficiency
- Clear differential response between vortex-only and vortex + scalar configurations

Full Metric Comparison

Metric	Bed 1 (Control)	Bed 2 (Vortex)	Bed 3 (Vortex+Scalar)
Total yield (kg)	17.16	21.15	41.38
Yield change vs control	—	+23.25%	+141.14%
Daily irrigation (min)	11	9	9
Water use reduction	—	18.2%	18.2%
Water productivity (kg/hr)	0.88	1.33	2.60
IWUE gain vs control	—	+50.6%	+194.7%
Brix (10 Dec 2025)	0.5	3.0	3.25
Microbial biomass (µg/g)	1367	2599	3540
Fungal : Bacteria ratio	0.3 : 1	1.3 : 1	16.7 : 1

Trial Opening



Jody Spencer (President Water) and Pamela Patane (SR TAFE) at the start of the trial

Trial Setup



All water supplied to every bed was pre-filtered to reduce chlorine and chloramines



PW75 unit with FG-200 scalar generator (432.00 Hz)



Brix testing with refractometer (10 Dec 2025)

Trial Beds – 12 November 2025



Bed 1 – Control



Bed 2 – Vortex Only



Bed 3 – Vortex & Scalar

Trial Beds – 13 January 2026



Bed 1 – Control



Bed 2 – Vortex Only



Bed 3 – Vortex & Scalar

Final Trial Beds – 13 February 2026



Bed 1 – Control (17.16 kg total)



Bed 2 – Vortex Only (21.15 kg total)



Bed 3 – Vortex & Scalar (41.38 kg total)

Trial Closing



Jody Spencer (President Water) and Pamela Patane (SR TAFE) at trial completion

Notable Limitations

- Single replicate per treatment (n = 1 bed per treatment) with no randomization or statistical replication — results are indicative, not statistically validated.
- Bed 1 received 11 minutes of daily irrigation versus 9 minutes for Beds 2 and 3, so water volume and treatment were not independently isolated (a confounding variable).
- Bed 2 was affected by a blocked irrigation emitter during the Christmas shutdown, reducing effective water delivery and likely understating its true performance.
- Bed 3's scalar equipment experienced intermittent power outages during the trial, per President Water's own preliminary notes.
- The trial ran four weeks later than the prior year's planting, limiting season-over-season comparability.
- Scalar frequency and 'water structuring/coherence' effects are not mechanisms with established support in mainstream soil or plant science; the yield and microbial findings reported here should be regarded as preliminary and would benefit from replicated, controlled follow-up trials before drawing production conclusions.

Conclusion

The trial's authors conclude that SWVG and SWVG + Scalar treatments were associated with higher tomato yields, improved fruit quality indicators (Brix, size, color), and greater water-use efficiency compared with the control, with the combined Vortex + Scalar treatment showing the strongest response. Given the single-bed design, irrigation-time confound, and equipment interruptions noted above, SR TAFE recommends further research — replicated across multiple beds and crop types, with standardized irrigation volumes and quantified litres-per-cycle — before broader claims are made.