TOMATO TOPICS

NEWS AND INFORMATION FOR THE PROCESSING TOMATO INDUSTRY

ISSN 1038-3522 Winter 2026 VOL. 36 NO. 2

Big Q's...Real Answers
Industry Forum - Panel Review

A panel discussion moderated by Chris Taylor of Kagome brought together Andrew Pollard of Netafim, Stuart McColl of Kagome, Carlos Ramirez of Bayer and Jo Van Niekerk of Boomaroo Nurseries (as seen above *with Chris on the right*).

The panel explored the people, technology and management decisions shaping the future of Australia's processing tomato industry.

Women in Agriculture

Jo Van Niekerk reflected on the changes she has witnessed since beginning her agricultural career.

"When I came into agriculture fresh out of university, there weren't many women around."

Jo said considerably more women were now entering agriculture, particularly through seed companies, compliance, quality and manufacturing. However, Van Niekerk argued that increasing participation must begin with a clearly defined purpose.

"For the processing tomato industry, the first question is: Why do you want more women in the industry? Is it about diversity of thought in the boardroom? Operational capability? Filling workforce gaps? Increasing participation in farming?"

Jo's message was that diversity should be treated as a deliberate business objective rather than simply an aspiration.

"You need to understand your 'why' before you can effectively attract more women."

Irrigation Performance

When Chris Taylor asked where processing tomato growers could improve their irrigation performance, Andrew Pollard first acknowledged the industry's strong international standing. He then identified fertigation and system maintenance as continuing opportunities.

"If I was looking for improvement opportunities, fertigation would be one."

Pollard pointed to the level of investment and precision found in industries such as citrus, where sophisticated fertigation systems monitor and manage nutrients within virtually every irrigation event.

"If you look at industries like citrus, some growers have fertigation systems that cost more than their pump sheds and irrigation infrastructure combined. Everything is monitored and managed very precisely."

www.aptrc.asn.au aptrc.idm@outlook.com PO Box 547, Echuca VIC 3564

Technology alone, however, cannot compensate for poor design or maintenance.

"The other old issue is maintenance... Getting design right up front and maintaining systems properly remains critical."

Stuart McColl approached the issue from the perspective of execution.

"The final result of a tomato crop is essentially what you started with, minus the sum of all your mistakes. Every irrigation mistake takes something away from the final yield."

Despite considerable work in scheduling, forecasting and monitoring, McColl said the industry had not yet found a universal solution.

"We've tried a lot of approaches around scheduling, forecasting and monitoring and we still haven't found a silver bullet."

Australian Growers Vs the World

Carlos Ramirez placed Australian growers among the world's strongest producers, particularly in their capacity to manage difficult conditions.

"Across every country I've worked in, the best farmers share common characteristics: resilience, persistence and an incredible ability to overcome challenges. Australian growers absolutely fit that description."

"Australia's climate, soil variability and production costs create substantial challenges, but they have also encouraged growers to become highly precise, productive and technologically capable".

Gene Editing and GM Technology

The potential role of gene editing generated considerable discussion.

Asked how far Australia was from commercially viable genetically modified processing tomatoes, Ramirez said the technology was progressing faster than public acceptance.

"I'm a strong advocate for technology. The disease and pest pressures we've seen today could potentially be addressed much faster using technologies like gene editing."

Ramirez identified consumer understanding as the principal barrier.

"The science is progressing rapidly, but public acceptance is likely to take much longer, particularly in Australia."

Van Niekerk agreed that consumers would ultimately determine adoption. However, Jo said:

"Increasingly difficult production conditions may require agriculture to look more closely at scientific solutions".

Artificial Intelligence

Artificial intelligence could significantly change irrigation and crop management by combining soil sensors, plant measurements and weather forecasts.

Pollard believes the industry is approaching a substantial technological shift.

"I believe we're right on the edge of a major revolution in irrigation and crop management."

However, he cautioned against assuming AI would deliver gains equal to the transition from flood irrigation to drip.

"Will the gains be as large as the shift from flood to drip? I'm not sure. We don't yet have enough evidence."

www.aptrc.asn.au aptrc.idm@outlook.com PO Box 547, Echuca VIC 3564

McColl added that AI would not overcome fundamental problems with system selection or design.

"AI can help optimise things, but it won't remove the importance of having the right systems in the first place."

What Data Are We Missing?

McColl identified reliable prediction of paddock suitability and yield potential as one of the industry's largest remaining knowledge gaps.

"If we could analyse a field and confidently predict whether it would yield 120 tonnes per hectare or 250 tonnes per hectare, that would be huge."

Better integration of soil health, chemistry and biology could eventually improve paddock selection and investment decisions, but substantial uncertainty remains.

Consumer Vs Production

Ramirez said modern tomato genetics already offer considerable yield and quality potential.

"The challenge is no longer whether good varieties exist. The challenge is understanding how to manage them properly, so they express their full potential."

The panel agreed that consumers often have limited understanding of the investment, risk and management required to produce food.

Van Niekerk said:

"Goodwill towards farmers does not always translate into purchasing behaviour".

"Most Australians want to support Australian farmers in principle, but when standing in a supermarket making purchasing decisions, price often wins."

Jo warned that consumers cannot assume agricultural production will continue regardless of market returns.

"Consumers don't understand that farmers aren't obligated to keep farming. Land can be used for many other purposes. Agriculture needs much stronger education and awareness."

Audience Question – Australian Produce Marketing

An audience question from APTRC's IDM, Matt Stewart highlighted the difficulty of identifying Australian-made products when shopping online and asked whether incentives could encourage consumers to choose Australian products.

Van Niekerk agreed that Australian agriculture needed a stronger and more coordinated market presence.

"Australian-grown food isn't marketed strongly enough."

She said fragmentation between industries and commodity groups made it difficult to create a unified message, but stronger advocacy remained essential.

"Industry bodies such as AUSVEG, NFF and VFF need to step up and advocate more strongly for Australian farmers because growers are too busy farming."

Final Question

Taylor concluded by asking what the disappearance of Australia's processing tomato industry would mean personally and professionally.

McColl's response captured the seriousness of the issue.

"It would be devastating. It would represent a failure to act at the right time. We've seen other industries move offshore and we'd be facing the same situation."

In closing, Taylor emphasised the commitment of those working throughout the supply chain and the need for continued advocacy.

www.aptrc.asn.au aptrc.idm@outlook.com PO Box 547, Echuca VIC 3564

2026 APTRC Forum Turns Research Into Direction

The 2026 APTRC Annual Forum opened by APTRC Chair, Charles Hart, brought 48 members of the industry together at Rich River Golf Club on 29 May for a program spanning research, agronomy, water, processing, technology and the future competitiveness of Australian production. The evening dinner attracted 34 members and partners for a social evening of fine dining.

The message across the day was clear: productivity gains remain available, but they will depend on disciplined local testing, stronger collaboration and a clear commitment to maintaining a viable domestic industry.

TM20000 and beyond — Matt Stewart
Matt reviewed the research commissioned through TM20000 and challenged the industry to judge projects by whether they ultimately changed decisions in the paddock. Previous work reinforced the importance of avoiding waterlogging and crop stress, matching drip-tape design to soil wetting patterns, monitoring irrigation performance and building a stronger understanding of soil disease.

The proposed TM25001 project will carry this work forward through practical trials, field days and collaboration, while placing greater emphasis on AgTech, artificial intelligence and autonomous systems.

Reflex and Dual Gold herbicide trials — Stuart McColl (Kagome) and Len Ibbotson (Syngenta)
The herbicide trials delivered a practical result for growers: The main outcome was that Reflex, applied alone provided very good broadleaf weed control and was safe for tomato plants.

Rainfall between application and transplanting improved activation and performance. Adding Dual Gold, Stomp and other products broadened the weed spectrum, but also increased the risk of crop checking, twisting and leaf damage. Importantly, no Reflex or Dual Gold residues were detected in fruit at harvest. Further replicated work is required before the more aggressive combinations can be confidently recommended.

Water in our region — Mark Bailey (GMW)
Mark Bailey's seasonal outlook showed that the industry enters 2026/27 with limited reserves and water availability increasingly dependent on winter and spring inflows.

Eildon was at 41% capacity in late May, compared with 59% a year earlier, while Hume was at 24%. Carryover will be particularly important under dry scenarios, with continued low inflows likely to keep Murray and Goulburn high-reliability allocations below 100%. The presentation reinforced the value of early water planning rather than relying on allocations improving later in the season.

www.aptrc.asn.au aptrc.idm@outlook.com PO Box 547, Echuca VIC 3564

Portugal and Spain study tour — Matt Stewart (APTRC), Matt Nihill (Nutrien) and Darcy Kirchhofer (Kagome)
The study tour explored two countries with large, export-driven markets, operating with highly integrated links between growers, processors, researchers and seed companies.

Key observations included higher plant populations, intensive fertigation, the widespread importance of Fusarium race 3 resistance, harvester yield monitoring and strong feedback between factory quality results and paddock decisions.

Although there were several tangible, directly applicable learnings from the tour, the central lesson was not to copy European systems outright, but locally test promising varieties, populations, harvest monitoring concepts, machinery modifications and field-to-factory data systems under Australian conditions.

PC drip irrigation — Nick O'Halloran (AgVic)
Pressure-compensated drip systems demonstrated its capacity to reduce application variability within and between irrigation blocks, particularly when operating pressures fluctuated.

However, the technology is not a substitute for sound design and management. Pipe sizing, valve settings, flushing, chlorination and system monitoring remain critical.

The strongest recommendation was to measure flow and pressure when systems are installed, continue monitoring as they age and use pressure transducers downstream of valves to identify problems before they affect crop performance.

Processor update — Brad Free (Kagome)
Brad Free delivered a forceful assessment of the pressures facing Australian food manufacturing. Kagome's analysis showed how higher domestic gas, fuel, labour and compliance costs can leave local processors competing against imported paste that is being produced with cheaper Australian energy.

The presentation linked processing tomatoes to broader questions of food security, import standards and national manufacturing policy. Its central argument was that growers and processors cannot remain competitive through productivity gains alone if the policy and energy environment continues to favour imported products.

www.aptrc.asn.au aptrc.idm@outlook.com PO Box 547, Echuca VIC 3564

University of Melbourne research — Niloofar Vaghefi

Now Hanyue Feng's PhD studies have ended, Niloofar gave a summary of current research status in soilborne disease with the aim of building a clearer picture of the pathogens affecting Australian crops.

Some of the major findings were that our *Fusarium oxysporum* is unique to Australia. Its isolates reduced tomato root biomass, while rotation crops were found to carry Fusarium without visible symptoms. Also, the fact that pathogenic *Pythium* species were also isolated from soil and irrigation water suggests they may interact with *Fusarium*.

Future priorities include broader testing, assessing resistance, & developing a rapid diagnostic panel for soilborne pathogens.

Laser weeders and tractor automation — Sam Webster (Carbon Robotics)

Carbon Robotics presented its second-generation LaserWeeder and autonomous tractor technology as alternatives to herbicides, hand labour and soil-disturbing cultivation. The company reported substantial reductions in chemical use and labour requirements from Australian and New Zealand users, alongside improved crop consistency and yield.

While the capital requirement remains considerable, the presentation demonstrated how artificial intelligence and precision robotics are moving rapidly from development into commercial horticulture—and why their suitability for Australian processing tomatoes warrants investigation.

Katrina Mills (Kagome) displaying just some of the products made with Kagome's Australian produce

www.aptrc.asn.au aptrc.idm@outlook.com PO Box 547, Echuca VIC 3564

Have your say on the Water Act Review

The Australian Government is seeking public input into an independent review of the Water Act 2007, the legislation underpinning water resource management across the Murray-Darling Basin.

The Act was introduced following the Millennium Drought and provides the framework for cooperation between the Commonwealth and Basin states. It also governs the collection and sharing of national water information used to support water-management decisions.

Recommendations will be provided to the Australian Government **by 28 February 2027**.

Growers, water users and industry organisations are invited to comment on how effectively the Act is operating and raise relevant national or Basin-related issues. Submissions can be made by completing the online survey or uploading a written response. **Submissions close at 11.59 pm AEST on 31 August** 2026.

- Public consultation is now open via the **Have Your Say** page

Climate Outlook

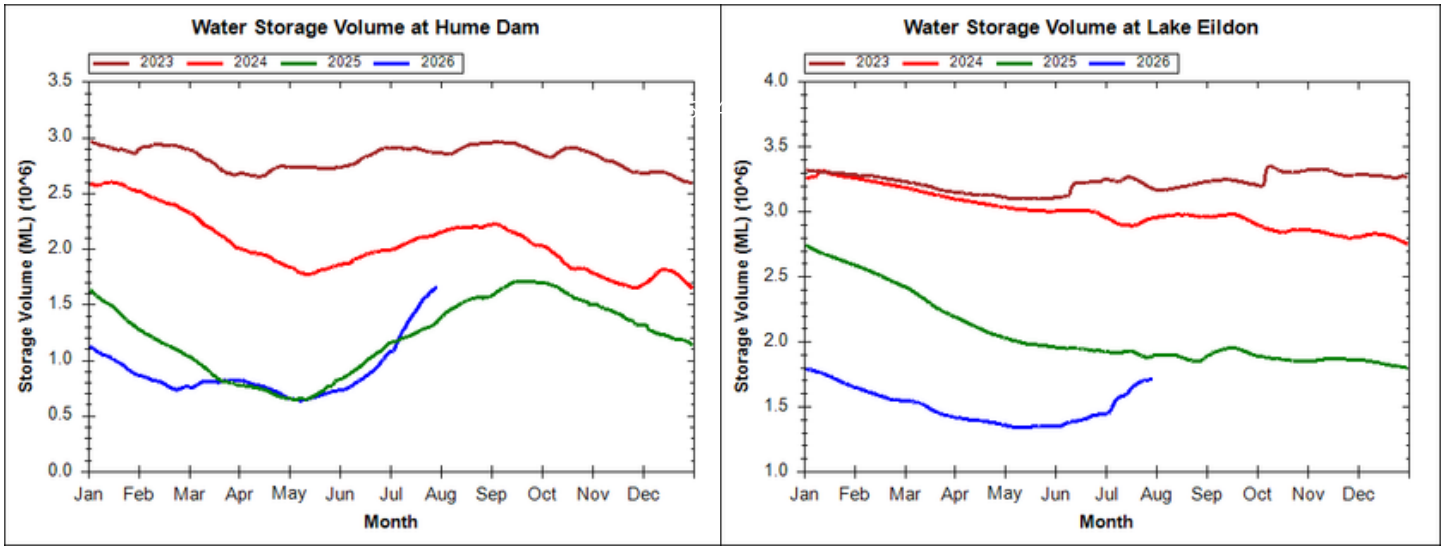
The Bureau of Meteorology's August to October outlook points to below-average rainfall across northern Victoria and southern New South Wales. The chance of below-average rainfall is generally 60–80%, with parts of south-east Australia also facing an increased risk of unusually low rainfall.

Daytime temperatures are likely to be above average, with an increased chance of unusually warm conditions across south-east Australia. Overnight temperatures are also likely to be above average, with the probability exceeding 80% across much of Victoria and parts of eastern New South Wales.

The Bureau reports that El Niño is underway and is likely to persist until at least summer. A positive Indian Ocean Dipole may also develop during winter and continue into spring, although there remains uncertainty about its timing and strength.

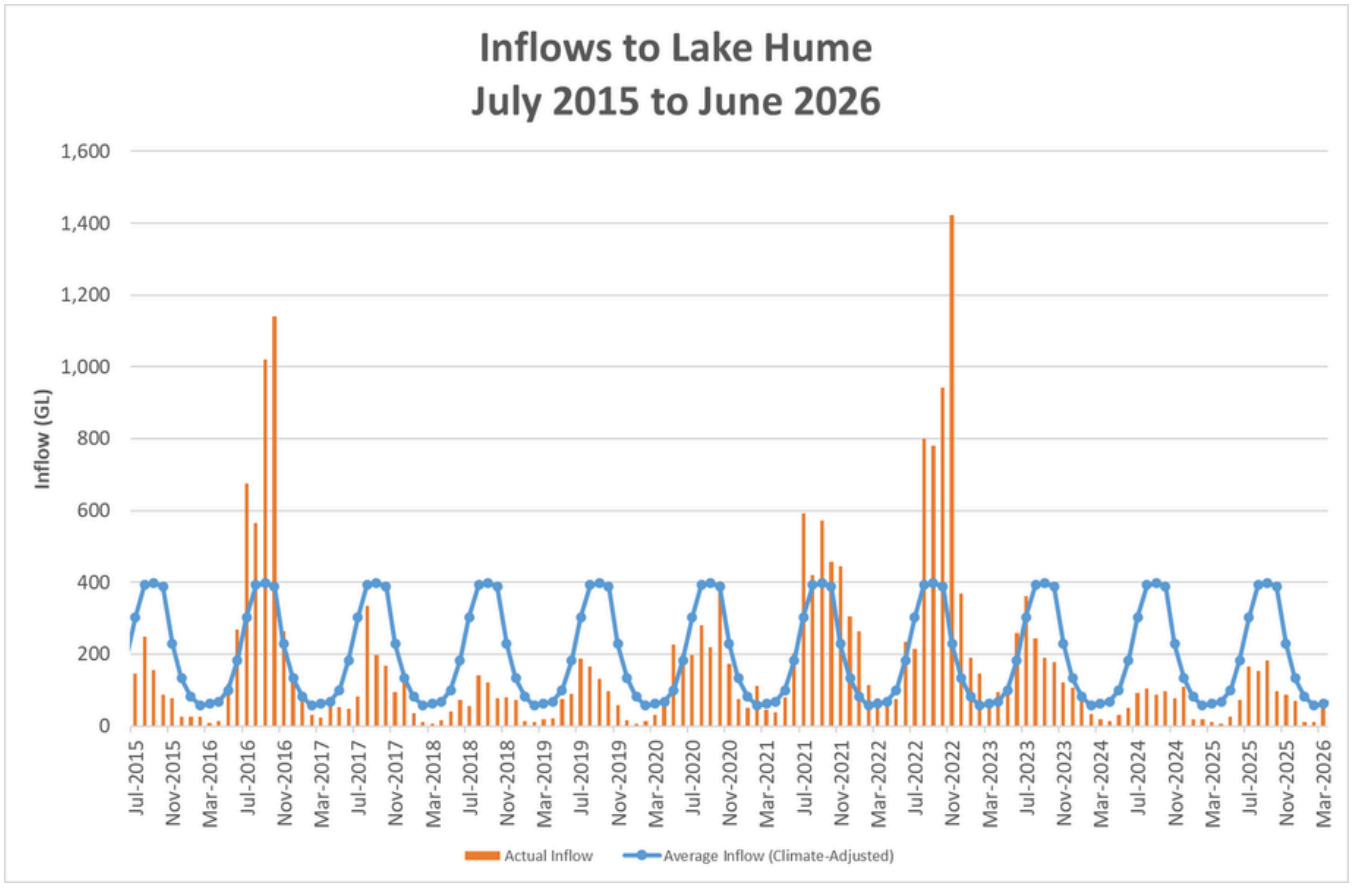
Source: BOM

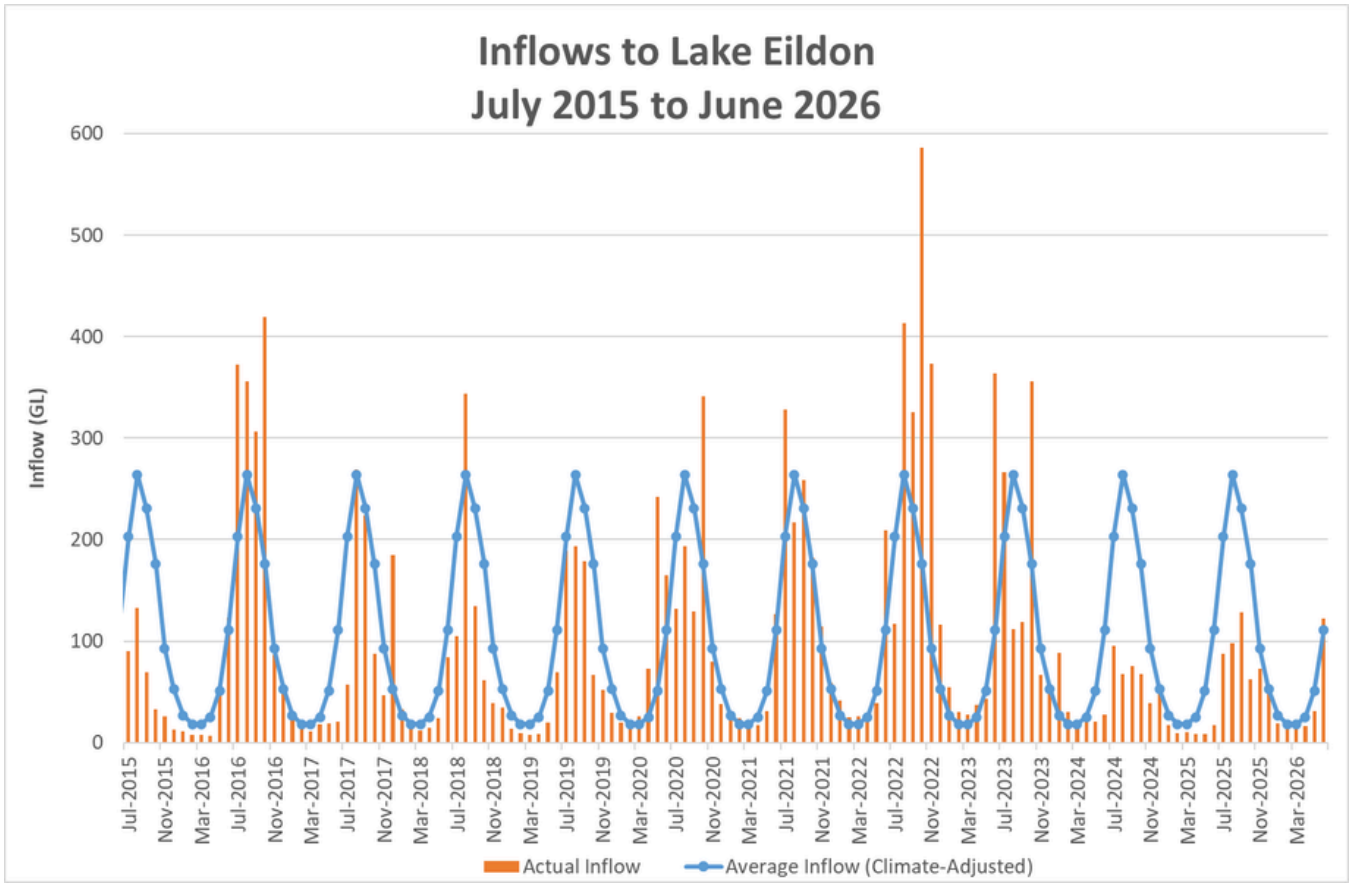
Water Storage Levels Goulburn-Murray Water



www.aptrc.asn.au aptrc.idm@outlook.com PO Box 547, Echuca VIC 3564

Water Inflows (Supplied by Goulburn-Murray Water)





www.aptrc.asn.au aptrc.idm@outlook.com PO Box 547, Echuca VIC 3564

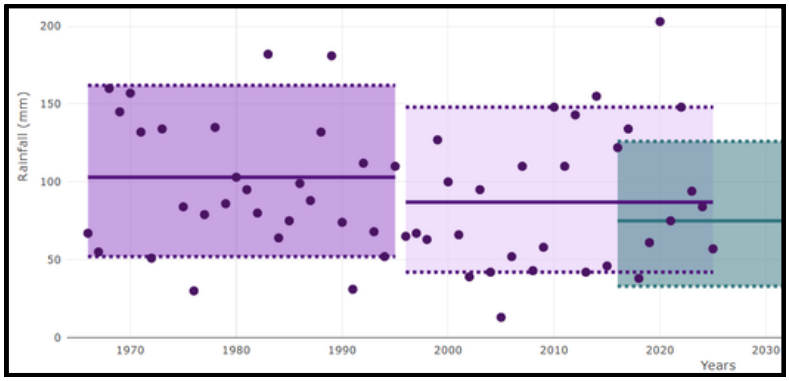
New drought insights added to My Climate View

My Climate View now includes new information showing how drought conditions are changing across Australia. The update provides location-specific insights into drought intensity, time spent in drought and the occurrence of combined hot and dry conditions. It draws on observations from the past 60 years and includes projections of how these conditions may change in the future.

Developed by CSIRO and the Bureau of Meteorology in consultation with farmers and advisers, My Climate View helps agricultural businesses understand historical and projected climate conditions for their location and support longer-term planning. The tool was developed through the Climate Services for Agriculture program, with funding from the Australian Government's Future Drought Fund.

Below - tomato excerpts from "My Climate View"

Time spent in compound hot-dry events	1996–2025 total	2050s total	Approx. change by 2050s
Time spent in compound hot-dry events is the total number of months across each past and future 30-year period when rainfall is below decile 5 and temperatures are above decile 5 simultaneously relative to baseline conditions, for three months or longer. Baseline rainfall and temperature conditions use historical data from 1986 to 2005.	**50 months**	**93 months**	↑ 43 months more



New restrictions for paraquat and diquat products

The APVMA has finalised its review of paraquat and diquat, introducing substantial changes affecting products such as Spray.Seed®, Gramoxone® and Reglone®.

While the active ingredients have not been completely withdrawn, permitted rates and use patterns have been significantly reduced. New requirements also include restrictions on application equipment, stronger PPE provisions, revised re-entry periods, additional drift controls and, in some situations, closed mixing and loading systems.

For vegetable production, key changes include:

- Diquat remains registered as a blanket spray in specified vegetable crops.
- Paraquat uses are now largely limited to fallow establishment, clean seedbed preparation and certain non-crop situations.

Paraquat and diquat mixtures are restricted to specified spot-spraying uses in vegetable crops.
A 24-month transition period allows existing products carrying old labels to be used according to those labels.

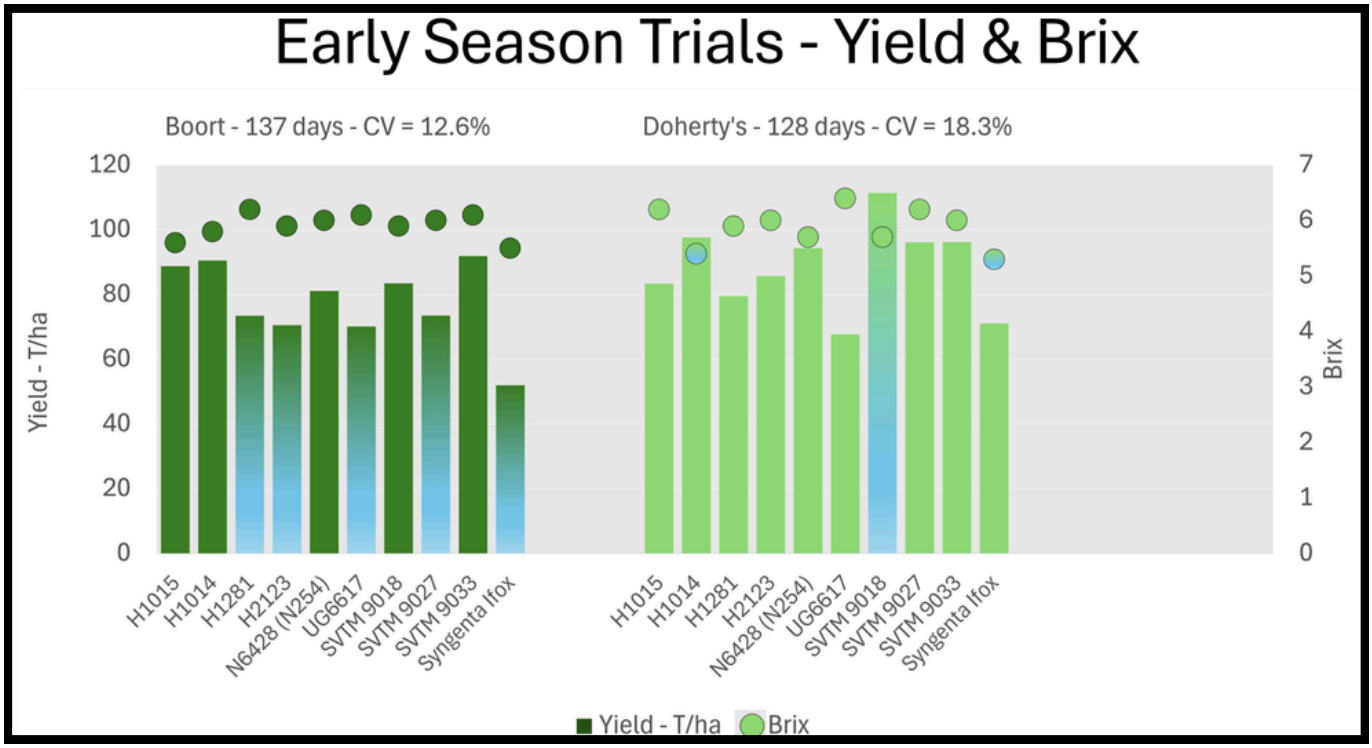
Products manufactured and packaged after 23 June 2026 must carry revised labels.
Growers should check the approved label applying to their specific product before use, as requirements differ between formulations and uses.

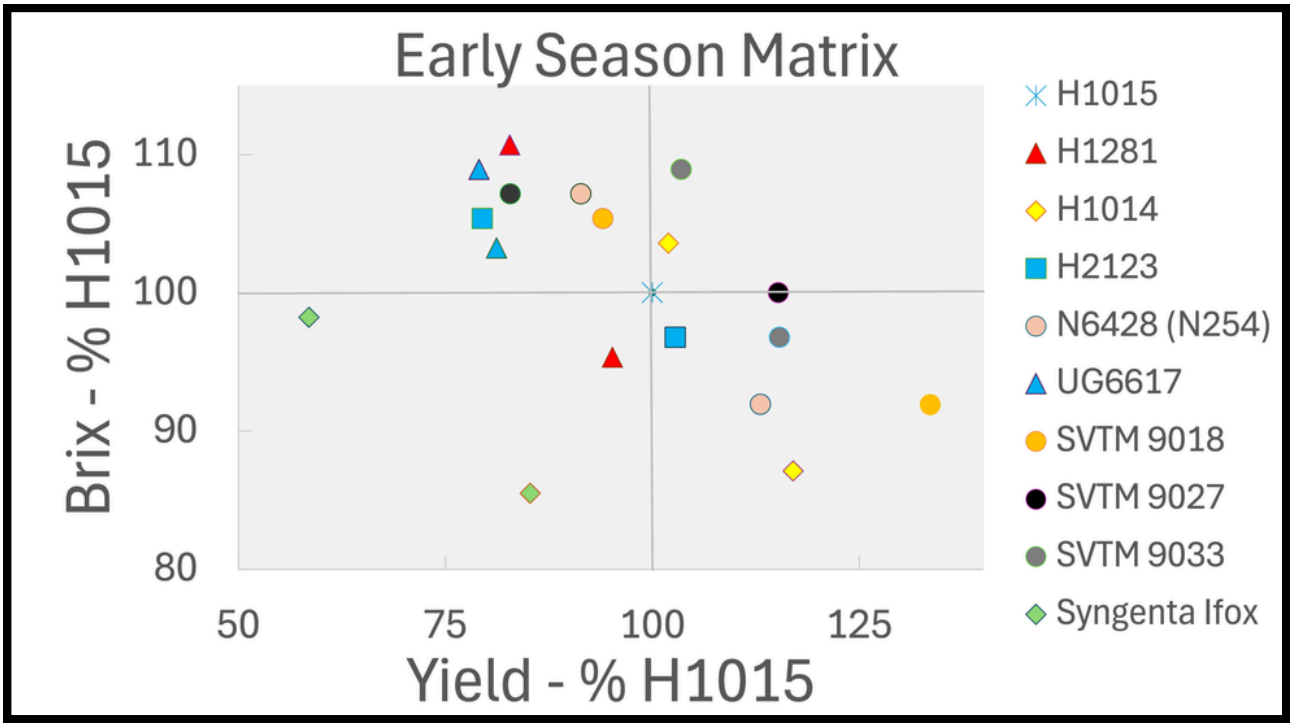
Adapted from an agrichemical update published by AUSVEG on 7 July 2026.

www.aptrc.asn.au aptrc.idm@outlook.com PO Box 547, Echuca VIC 3564

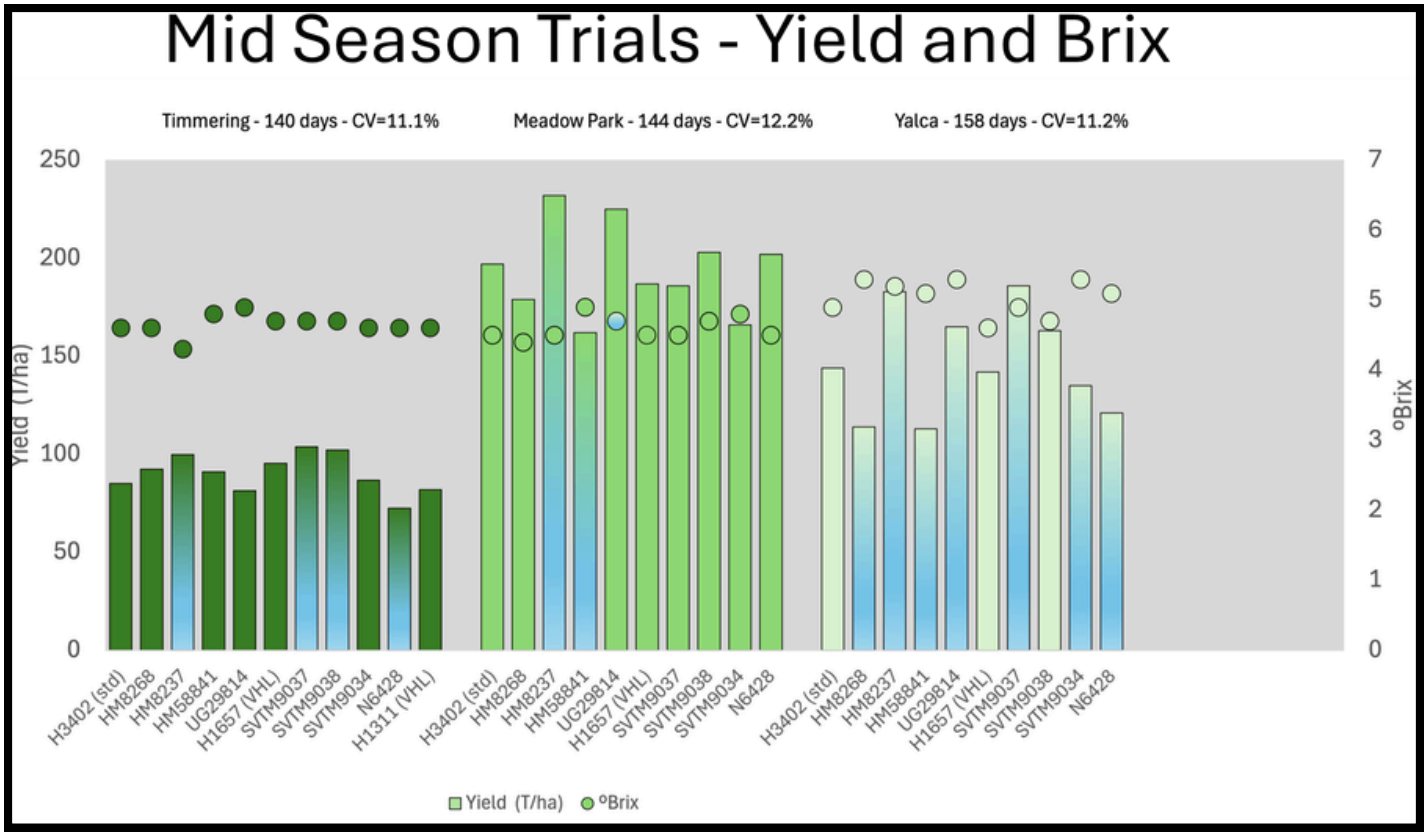
Cultivar development — Mark Sargeant (OptiAg)

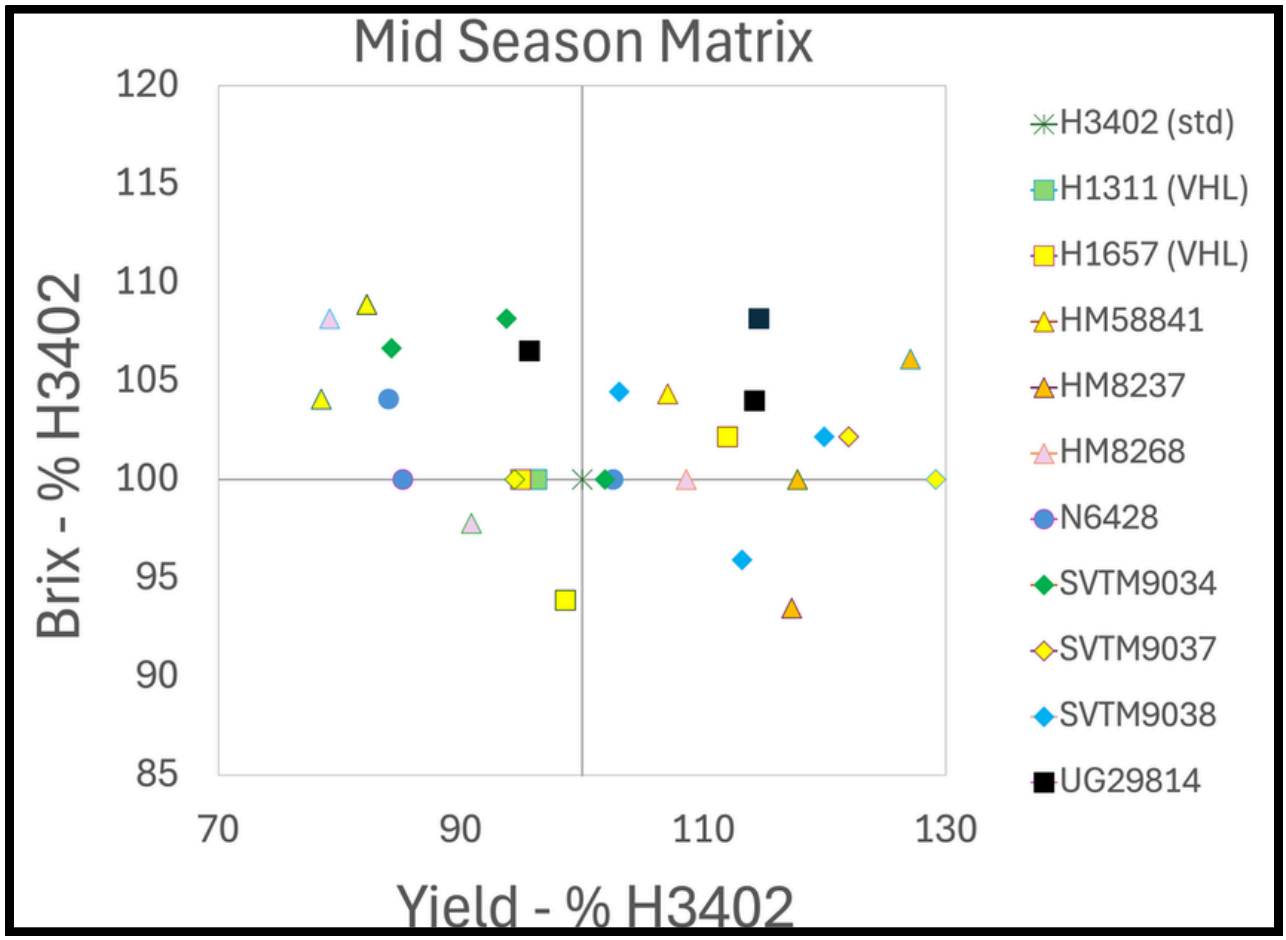
The Cultivar Trial Program tested 21 cultivars across five commercial trial sites, supported by grafting trials at Timmering and Yalca. Results again showed that cultivar performance varied considerably between locations, reinforcing the need for multi-site and multi-season evaluation rather than selecting varieties from a single result.





www.aptrc.asn.au aptrc.idm@outlook.com PO Box 547, Echuca VIC 3564





www.aptrc.asn.au aptrc.idm@outlook.com PO Box 547, Echuca VIC 3564

Grafting Trials Vs Ungrafted - Yield Results

The grafting work was particularly encouraging: grafted plants achieved yields comparable with standard crops at half the planting density, although performance varied substantially between rootstocks.

Multifort combined with UG16112 produced 141 t/ha on old ground and 228 t/ha on fresh ground.

Rootstock	Scion	**Timmering** -Old ground (T/ha)	**Yalca** – Fresh ground (T/ha)
Multifort	H3402	105 b	181 a-d
Multifort	H1311	89 bcd	152 cd
Multifort	UG16112	141 a	228 a
Multifort	SVTM9032	87 bcd	191 abc
Shincheonggang	H3402	74 cd	152 cd
Shincheonggang	H1311	66 d	137 d
Shincheonggang	UG16112	79 bcd	208 ab
Shincheonggang	SVTM9032	81 bcd	164 bcd
H3402 – **un-grafted**		98 bc	205 ab
H1311 – **un-grafted**		92 bcd	-

www.aptrc.asn.au aptrc.idm@outlook.com PO Box 547, Echuca VIC 3564

MONTEREY: 16th World Processing Tomato Congress & 18th ISHS Symposium on Processing Tomato

The global processing tomato industry gathered in Monterey, California, from 7–10 June for the 16th World Processing Tomato Congress and 18th International Society for Horticultural Science (ISHS) Symposium on Processing Tomato.

Held at the Monterey Conference Center, the event brought together more than 400 growers, processors, researchers, industry organisations and commercial representatives from over 30 countries. The Congress was jointly organised by the California Tomato Growers Association, California League of Food Producers and World Processing Tomato Council, in partnership with ISHS.

Strong Australian representation
Once again, Australia was well represented! Attendees included APTRC Chair Charles Hart and his wife Lesley, along with myself; Stuart McColl, Chris Taylor, Brad Free and Brandy Reid from Kagome Australia; growers Tim Sawers, Graeme and Michelle Lawrence, David Chirnside and Louis Chirnside; and Steven Thomas from AgNVet.

Australian challenges in context
As part of the ISHS program, APTRC co-facilitated a round table of presentations and discussions with Zach Bagley from the California Tomato Research Institute.

Stuart McColl presented the Australian perspective, identifying soil health and soil-borne diseases, field variability and varieties as the three leading challenges facing our industry.

For the APTRC, participation in the round table discussions has already led to further co-operation with USA tomato industry colleagues that is helping to strengthen our understanding of soil diseases.

Post Congress Tour
The post congress tour was diverse and took attendees to Morningstar's Liberty processing plant, the Heinz seed facility and even a mixed tomato farm that was below sea level and needed constant pumping just to keep the place from flooding.

www.aptrc.asn.au aptrc.idm@outlook.com PO Box 547, Echuca VIC 3564

EU clears path for gene-edited crops

The European Parliament has approved new rules for crops developed using New Genomic Techniques (NGTs). Plants with simpler genetic changes will be regulated similarly to conventionally bred varieties, while those involving more complex alterations will remain subject to stricter GMO-style controls.

Supporters—including Heinz Seeds—say the change will accelerate development of varieties with improved resistance to climate stress, pests and diseases. Critics remain concerned about seed patents, market concentration and limited consumer labelling. NGTs will remain prohibited in organic production, while NGT seed must be clearly labelled. Detailed implementation rules will be developed over the next two years.

Read the Tomato News article HERE

Drone spray swaths may be less uniform than they appear

Drone spraying offers potential, but new two-dimensional imagery shows that actual spray swaths can be far less predictable than manufacturer specifications or single-point calibration tests suggest.

Research reported by Dr Kevin Falk on Sprayers 101 used a DJI T50 to apply clopyralid over soybean plots, with imagery capturing the spray response continuously along a 50-metre section. Although the drone followed a straight flight path, the effective swath varied in width, its edges wandered and the downwind boundary was affected by drift.
Falk described the resulting pattern as "an irregular coastline", rather than the clean, uniform band operators might expect.

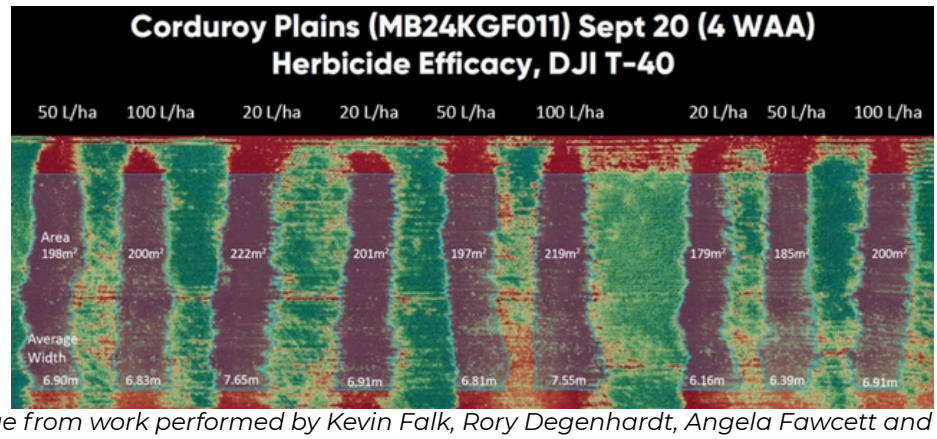


Figure 1 – Image from work performed by Kevin Falk, Rory Degenhardt, Angela Fawcett and Neil Spomer, as presented at the 2025 Canadian Weed Science Society annual meeting in Vancouver, BC.

Why does it matter?

Traditional tools such as water-sensitive paper remain useful, but only capture spray deposition at individual points. They may not reveal changes occurring along the full length of a pass.
Irregular swaths increase the likelihood of gaps, overlaps and uneven application rates.
The trials also found greater swath variability at faster speeds and lower water volumes. Slower flight and higher water volumes generally produced more consistent deposition, while even light winds of around 5 km/h influenced the swath. As Falk cautions, "your drone may be subtly lying to you."

Practical considerations

Operators should calibrate over a meaningful distance and under representative conditions—not rely solely on advertised swath widths. Tighter pass spacing, adequate water volumes, slower flight speeds and validation under light wind conditions may help improve consistency.

*Adapted from "The Hidden Shape of a Drone's Spray Swath: What 2-D Imagery Reveals" by Dr Kevin Falk, published by Sprayers 101 on 14 April 2026. Read the full article **HERE**.*

www.aptrc.asn.au aptrc.idm@outlook.com PO Box 547, Echuca VIC 3564

Know the rules when spraying with drones

Agriculture Victoria is reminding agricultural drone operators that strict licensing and chemical-use requirements apply. Agriculture Victoria recently prosecuted a drone operator following a spray-drift incident, highlighting the importance of compliance.

Drone spraying is only permitted where the product label or an APVMA permit allows aerial or spot spraying. All application instructions—including water rates—must be followed. Operators must also hold the required licences from both CASA and Agriculture Victoria.

Useful Links:

- Drone spraying requirements
- Licensing requirements
- Agriculture Victoria reminder
- Recent spray-drift prosecution
- Chemical Industry News subscription

For advice, email chemical.standards@agriculture.vic.gov.au or call 136 186.

UPCOMING EVENTS

APTRC December I K Caldwell/AgNVet Sponsored Field Day - 2026

When: Friday 11th December 2026
Where: Final Details to be confirmed closer to date.

APTRC January Oriba/Netafim Sponsored Field Day and Family Dinner - 2027

When: Friday 15th January 2027
Where: Final Details to be confirmed closer to date.

APTRC Annual Processing Tomato Forum - 2027

Put it in your calendar - hear the year in review and latest developments in the processing tomato sector.

When: Friday 14th May 2027 11:00am start
Where: Rich River Golf Club, Moama NSW
Included: Delegates dinner to follow at RRGC

Hort Connections 2027

When: Monday 7 June - Thursday 10 June 2027
Where: Melbourne Convention and Exhibition Centre

ACKNOWLEDGMENTS:
This project [Australian Processing Tomato Industry Development and Extension (TM20000)] is funded by Horticulture Innovation Australia Limited with co-investment from Australian Processing Tomato Research Council Inc. and funds from the Australian Government.
"Tomato Topics" is a quarterly newsletter compiled and edited by the Industry Development Manager, APTRC Inc., Opinions expressed in "Tomato Topics" are not necessarily those of the APTRC unless otherwise stated.

www.aptrc.asn.au aptrc.idm@outlook.com PO Box 547, Echuca VIC 3564