

# TOMATO TOPICS

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**NEWS and INFORMATION  
FOR THE PROCESSING TOMATO INDUSTRY**

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## **Kagome Announces Leadership Transition Across USA and Australia**

*Article by Kagome Australia Photo Credits Kagome Australia*

Kagome Co Ltd, a global leader in the food industry, has announced a significant leadership transition within its group of companies, approved by its Japan-based Board of Directors. The transition marks a pivotal change for both Kagome USA and Kagome Australia.



**Jason Fritsch**

After more than 30 years of dedicated service, Luis de Oliveira, CEO of Kagome USA, will retire at the end of December 2024. Luis has been a driving force behind Kagome USA's growth, helping to position the company as a leader in its industry. His visionary leadership and deep commitment to the organisation have left an indelible mark, and he will be greatly missed by his colleagues.

Jason Fritsch, the current CEO of Kagome Australia, has been selected to succeed Luis, assuming his new role as CEO of Kagome USA in January 2025. Jason brings over 19 years of experience leading Kagome Australia, where he has earned a reputation for his collaborative leadership style and in-depth understanding of the food industry. Since joining the Boards of Kagome Inc. and Kagome Foods Inc. in January 2022, Jason has gained valuable insights into the US market, which he plans to leverage in his new position.

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Meanwhile, Brad Free will step into Jason's former role as CEO of Kagome Australia, also effective January 2025. Brad, who has been with the company for over 17 years, has most recently served as General Manager of Factory Operations. His extensive background in engineering and operations, coupled with his focus on continuous improvement, positions him as the ideal candidate to continue Kagome Australia's trajectory of growth and success.



**Brad Free**

Kagome has confirmed it will work closely with both Jason and Brad during this transition to ensure seamless leadership continuity. The company has expressed its confidence in their abilities to drive further success across both markets.

This transition marks a new chapter for Kagome as it continues its mission to lead and innovate within the global food industry.

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## Roratos call it a day

*Information and photos kindly supplied by Sandra Robinson*

After forty years in the industry, the Rorato family have indicated that they will no longer grow processing tomatoes on their Jerilderie farm.

After a thorough strategic business review, they have decided to exit the growing and manufacturing of tomato

products due to the various challenges such as staffing issues, high production costs, regulatory constraints and capital replacement costs.



Starting with a contract for 3000 tonnes in 1984, business founders Sergio, Sylvia and Robert Rorato went on to establish the Billabong Produce brand, selling dried tomatoes, passata and other products to home markets.

Billabong’s range included;  
Crushed Passata 3kg & 700g, Puree 3kg, Pizza Sauce 3kg, Pasta Sauce 3kg & 700g, Basil Sauce 700g and Eggplant Pasta Sauce 700g.

The business slowly absorbed nearly all their tomato production, but they continued to supply various processors (Cedenco, SPC, Unilever/Rosella, Ardmona and Letona) right up until last season, when 1600T were sent to Kagome Foods Australia.

Over the years, records show that they grew some 426,000T of tomatoes, with a peak of 22,500T in 2004.

Of the total tonnage, 55% (or around 235,000T) was used in Billabong products. Currently run by Glenn, Allan & Sylvia Rorato with Sandra Robinson and families, the business will now concentrate on farming winter crops, cotton and corn.

As long-term contributors to the APTRC and the industry, they will be missed, and we wish them well in their future farming activities.



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## Ann Morrison's Retirement from Permanent Position at APTRC



After eight years of dedicated service as the Research Manager at the Australian Processing Tomato Research Council (APTRC), Ann Morrison has decided to retire from her permanent position.

Ann's contributions to our organisation have been invaluable, and we extend our heartfelt gratitude for her professionalism, expertise, and unwavering commitment.



While Ann is stepping back from her full-time role, we are pleased to announce that she will continue to support us in a casual role in crucial areas, specifically cultivar screening trials and cultivar selection. Ann's contact details will remain unchanged, so you can continue to reach out to her through the usual channels.

To perform our industry cultivar evaluation trials, APTRC has enlisted the services of the local business, OptiAg. Known to some industry members through other trial projects and with a reputation of meticulous work ethic and professional conduct, we're grateful to have the duo of Mark and Sarah Sargeant join us to help continue this important work.

Over the past couple of months, OptiAg have been working with Ann to benefit from her knowledge and skills to ensure a seamless transition into their new roles as stewards of our cultivar trial program.

You can reach Mark at OptiAg at 0427 488 387 or via email at [mark@optiag.com.au](mailto:mark@optiag.com.au).



We thank Ann for her service and continued commitment to the APTRC and warmly welcome Mark and Sarah to the processing tomato industry.

## 2024/25 Cultivar Trials

The below table outlines the APTRC cultivar evaluation trial program for the 2024/25 season which highlights the cultivars and farm locations. We will be visiting some of these trials at our Boort and Netafim field days during the season, however to visit the sites outside of these times, please contact Matt directly.

	Early season		Mid season			Mid Season		
	Machine Harvest		Machine Harvest			Screening		
	Go Farms (Boga)	Sawers (Boort)	Campaspe Ag (Hills)	Kagome (Jennisons)	Go Farms (Katunga)	Campaspe Ag (Hills)	Kagome (Jennisons)	Go Farms (Katunga)
Early	<b>H1015 (std)</b>	✓	✓	-	-	-	-	-
	H1281	✓	✓	-	-	-	-	-
	H1301 (std )	✓	✓	-	-	-	-	-
	N 6459 (290)	-	✓	-	-	-	-	-
	SVTM 9018	✓	✓	-	-	-	-	-
	SVTM 9027	✓	✓	-	-	-	-	-
	SVTM 9032	✓	✓	-	-	-	-	-
	SVTM 9300 (Incipit)	✓	✓	-	-	-	-	-
	SVTM9000 std	✓	✓	-	-	-	-	-
	SVTP 9603 (Eventus)	✓	✓	-	-	-	-	-
	Syngenta - Firmus	✓	✓	-	-	-	-	-
	Syngenta - Ifox	✓	✓	-	-	-	-	-
	Syngenta BQ403	✓	✓	-	-	-	-	-
	UG 6617	✓	✓	-	-	-	-	-
Mid season	<b>H3402 (std)</b>	-	-	✓	✓	✓	✓	✓
	H1311 (VHL)	-	-	✓	✓	✓	-	-
	H1657 (VHL)	-	-	✓	✓	✓	-	-
	HM 58811	-	-	✓	✓	✓	-	-
	HM 58841	-	-	✓	✓	✓	-	-
	HM Nava	-	-	-	✓	✓	-	-
	<i>HM 8268</i>	-	-	-	-	-	✓	✓
	<i>HM 7103 (early variety)</i>	-	-	-	-	-	✓	✓
	<i>N 4528 (528) - early season cherry</i>	-	-	-	-	-	✓	✓
	<i>N 507 (early variety)</i>	-	-	-	-	-	✓	✓
	<i>HM 5511 (early variety)</i>	-	-	-	-	-	✓	✓
	N 6441 (279)	-	-	-	-	-	✓	✓
	HM 6856 (Adenda)	-	-	-	✓	-	-	-
	N 6426 (239)	-	-	-	✓	-	-	-
	N 6328 (241)	-	-	-	✓	-	-	-
	SVTM 9023	-	-	✓	✓	✓	-	-
	SVTM 9025	-	-	✓	✓	✓	-	-
	SVTM 9037	-	-	✓	✓	✓	-	-
	<i>SVTM 9334 (Barrick)</i>	-	-	✓	✓	✓	-	-
SVTM 9038 screening	-	-	-	-	-	✓	✓	
Syngenta - Waller	-	-	✓	✓	✓	-	-	
TOP 96877 (Lefroy)	-	-	-	✓	-	-	-	
TOP 96878 (Lefroy)	-	-	-	✓	-	-	-	
UG 29814	-	-	✓	✓	✓	-	-	

## Update on tomato brown rugose fruit virus response

APTRC are continuing to be actively involved in the national biosecurity response following the detection of tomato brown rugose fruit virus (ToBRFV) in South Australia in August. A summary of knowledge to date and the current situation are outlined below:

### Current Situation

The South Australian Department of Primary Industries and Regions (PIRSA) is addressing the detection of Tomato brown rugose fruit virus (ToBRFV) in the Northern Adelaide Plains region. As of now, this virus has been confirmed on three properties in South Australia—two on 14 August 2024 and a third on 30 August 2024, following plant material tracing.



PIRSA is collaborating closely with the affected businesses to manage the outbreak, implementing movement controls and quarantine measures within and around the infected properties to mitigate the risk of spread and cross-contamination. Response activities are currently underway, with samples being tested from other potentially connected properties.

Investigations into the outbreak's source revealed a positive result for ToBRFV in two seedlines imported from Türkiye in late May 2024. Despite having appropriate offshore testing certification indicating negative results for this virus, these seedlines were traced to two of the infected properties, with initial planting in June 2024. PIRSA has contacted these properties and is seeking additional information to trace any remaining seeds or seedlings, although it's important to note seeds are from small seed batches.

The Department of Agriculture, Fisheries and Forestry (DAFF) is further investigating the importation and certification of the seeds. Based on PIRSA's findings, DAFF suspended the acceptance of seed testing certification from any Türkiye laboratory for all seed imports for sowing into Australia from 27 September 2024, adopting a precautionary approach.

### Understanding Tomato Brown Rugose Fruit Virus

Tomato brown rugose fruit virus (ToBRFV) is a highly contagious virus affecting tomatoes, capsicums, and chillies. Infected plants exhibit symptoms such as mosaic patterns, yellowing, and deformities on leaves. Fruits develop brown wrinkled spots, deformations, and uneven ripening, significantly reducing yield and marketability. Different plant varieties may present various symptoms.

First detected in the Middle East in 2015, ToBRFV has since been reported in Europe, the Middle East, China, Mexico, and the USA. The virus is on the National Priority Plant Pest list and is considered a significant threat to Australia's \$5.8 billion vegetable industry and \$2.8 billion plant nursery industry, due to the potential for reduced yield and quality of produce.

ToBRFV poses no known risk to human health but spreads easily through contaminated tools, hands, clothing, and direct plant-to-plant contact, including grafting and cuttings. It can also be transmitted via seeds and irrigation water. Host plants include weeds such as blackberry nightshade, silverleaf nightshade, fat hen, quinoa, petunia hybrids, and buffalo bur.

The virus remains viable in seed, plant waste, and contaminated soil for months. Once a crop is infected, eradication can only be achieved by destroying all infected plants and materials. The global distribution of ToBRFV is attributed to the movement of seeds. Notably, potatoes are not known to host or be affected by the virus. AUSVEG has prepared this [downloadable fact sheet](#) on ToBRFV, with further information about the disease and best practice biosecurity.

## Movement controls and market access

As a precautionary measure, some jurisdictions have implemented movement restrictions on and the movement of host material (including tomato, capsicum and chilli seeds, seedlings and fruit) from South Australia.

Current control orders can be found at the following links:

[Queensland](#)

[New South Wales](#)

[Western Australia](#)

[Tasmania](#)

From 24 August 2024, New Zealand suspended the import of Australian tomatoes. On 6 September 2024, New Caledonia announced an import suspension of tomatoes, capsicums and chillies from Australia. DAFF is working closely with its trading partners to ensure the outbreak in South Australia has minimal impact on Australian exports.

## Biosecurity requirements and reporting

We encourage all growers to remain vigilant and ensure all staff and visitors comply with on-site biosecurity practices, to protect their businesses from potential risks.

Biosecurity advice to growers:

- Practice “Come clean, Go clean.”
- Ensure all staff and visitors are trained and compliant with your farm biosecurity practices;
- Disinfect tools, propagating material and equipment where appropriate;
- Wash and disinfect packaging, bins and pallets as required;

Monitor crops for symptoms of ToBRFV;

Report suspect detections to the national Exotic Plant Pest Hotline on **1800 084 881**. This will put you in touch with your state or territory’s biosecurity agency. For further information on [the response to this virus visit outbreak.gov.au](#) or [pir.sa.gov.au/tobrfv](#).

## Advice for exporters

Exporters with any questions or concerns about the export of commodities known to be a host of the virus, can contact the Department of Agriculture, Fisheries and Forestry by emailing [horticultureexports@aff.gov.au](mailto:horticultureexports@aff.gov.au).

For further information on international trade and exports, visit [www.agriculture.gov.au](http://www.agriculture.gov.au)

## Response arrangements

The Consultative Committee on Emergency Plant Pests (CCEPP) provides technical and scientific advice in response to exotic plant pest and disease incursions. The Committee is chaired by Australia’s Chief Plant Protection Officer and comprises the Chief Plant Health Managers from each state and territory, other specialists from government, Plant Health Australia, and representatives from affected industries.

For this incident, affected industries that are signatories to the Emergency Plant Pest Response Deed include:

- **Australian Processing Tomato Research Council**

- **AUSVEG**

- **Greenlife Industry Australia**

The National Management Group (NMG) consists of Chief Executive Officers from government agencies responsible for agriculture and affected industry organisations. NMG makes decisions on whether to support national eradication programs for pest or disease outbreaks under the Deed. NMG considers recommendations provided by the consultative committee before making decisions on whether a pest or disease is technically feasible to eradicate and cost beneficial to do so.

The Deed is a formal legally binding agreement between Plant Health Australia, the Australian, state and territory governments, and national plant industry bodies representing specific cropping sectors. The EPPRD covers the management and funding of nationally agreed responses to emergency plant pests.

For **any further information** on the processing tomato industry and ToBRFV, please contact **Matt Stewart**, Industry Development Manager, APTRC on 0400751100 or [aptrc.idm@outlook.com](mailto:aptrc.idm@outlook.com)

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## Climate update

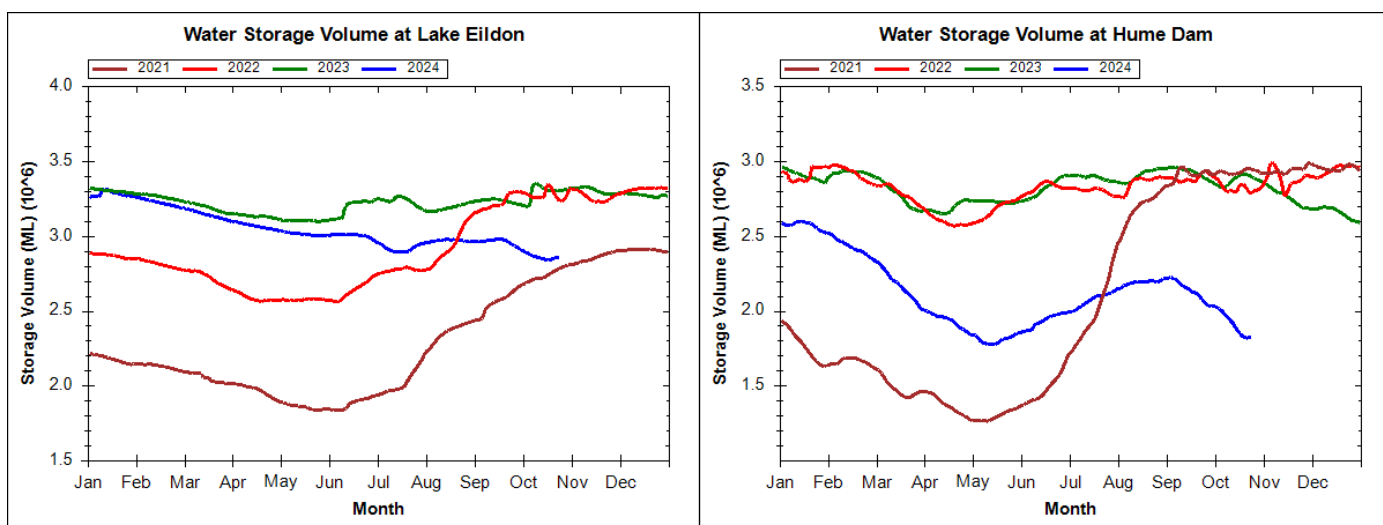
As we enter Spring, most climate drivers remain neutral, although there are signs that another La Niña event may develop. If so, then predictions are that it will be weak and relatively short-lived. It should be noted that global ocean temperatures continue to be at record high levels, and these may impact climate predictors in unknown ways.

Nevertheless, the current long-range forecast for October to December shows that above average rainfall is likely across large parts of Australia's eastern two-thirds, and that warmer than average days and nights are likely to very likely across most of Australia.

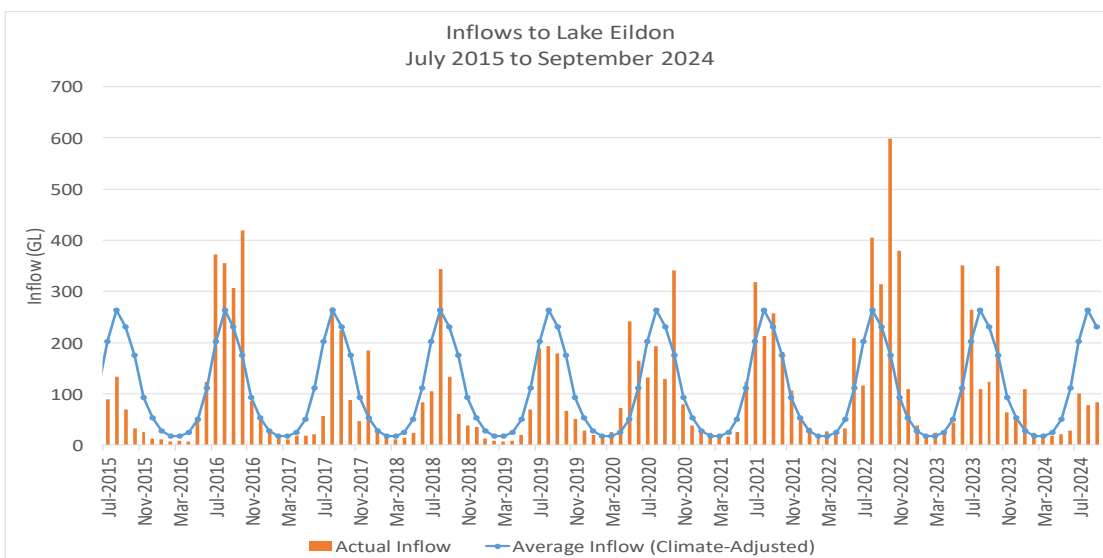
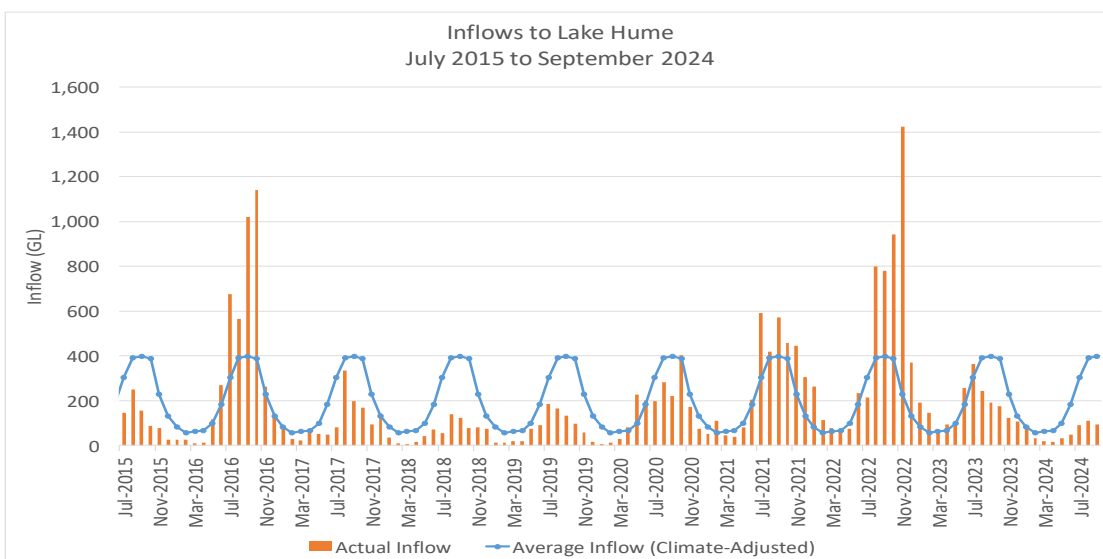
Source: Bureau of Meteorology

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## Water storage levels (Supplied by Goulburn-Murray Water)



## Water inflow (Supplied by Goulburn-Murray Water)



### Beyond our Fields — External Updates & Articles

#### Information on hiring overseas workers

The Department of Home Affairs has dedicated Business, Industry, and Regional Outreach (BIRO) officers to provide information on migration to businesses wanting to hire overseas workers. The Employer Hub page recently went live.

From [this page](#) you can find information on the different types of visas, the skilled occupation list, sponsorship and the steps for hiring overseas workers, checking visa holder work rights, understanding employer responsibilities, and a contact form for connecting with the BIRO network.



Source: AUSVEG

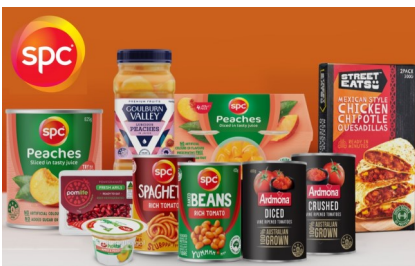


## Australia: SPC reveals global plans following three-way merger

16/10/2024 - François-Xavier Branthôme

*Australia's food and beverage industry has a new FMCG giant, with SPC Global, The Original Juice Company (OJC), and Nature One Dairy merging to create a new company under the leadership of former Asahi Beverages Group CEO and current SPC Director, Robert Iervasi.*

On 03 October, 2024, SPC Global (SPC) and The Original Juice Company (OJC) have announced plans to merge with the powdered milk business Nature One Dairy to create an Australian-based and owned food and beverage company with significant scale.



Australian brand SPC, the national largest producer of fruit, tomato, baked beans and spaghetti processing, packaging, and canning, boasts brands such as SPC, Ardmona, Goulburn Valley, ProVital, Pomlife, the Good Meal Co, and Street Eats. The Original Juice Company is an Australian food processing company specializing in chilled fruit and vegetable juices. Nature One Dairy is a Singapore-registered, Australian-founded dairy company that manufactures and sells infant formula, nutritional formula and milk powder products.

OJC announced to the Australian Stock Exchange that it will acquire SPC and Nature One Dairy via a binding merger implementation deed and share sale agreements subject to several conditions including approval by OJC shareholders in November 2024.

Former Asahi Beverages Group CEO and current SPC Director Robert Iervasi has been appointed the Managing Director of the merged business, which will own and operate three business divisions, namely SPC, The Original Juice Co. and Nature One Dairy.

*Iervasi said: "SPC Global is excited to be joining with OJC and Nature One Dairy and come to market with a leading food and beverage platform. With our market-leading packaged fruit, canned tomatoes and baked bean products, we are excited to expand with OJC both domestically and globally, and see significant synergy potential in bringing the two producers together. Proud of our 100-plus year history and our Shepparton roots, SPC looks forward to working with the OJC team to accelerate growth and leveraging the combined platform to enhance distribution of our products. The addition of Nature One Dairy also allows us to diversify and reach more consumers every day through our international channels."*



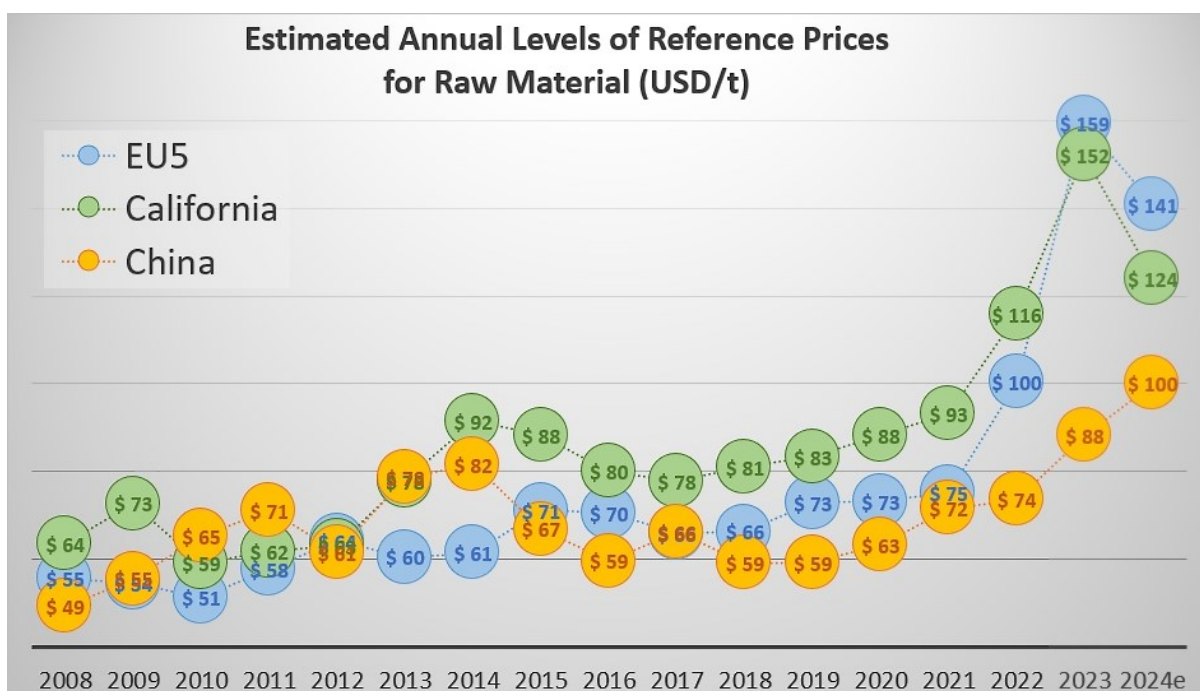
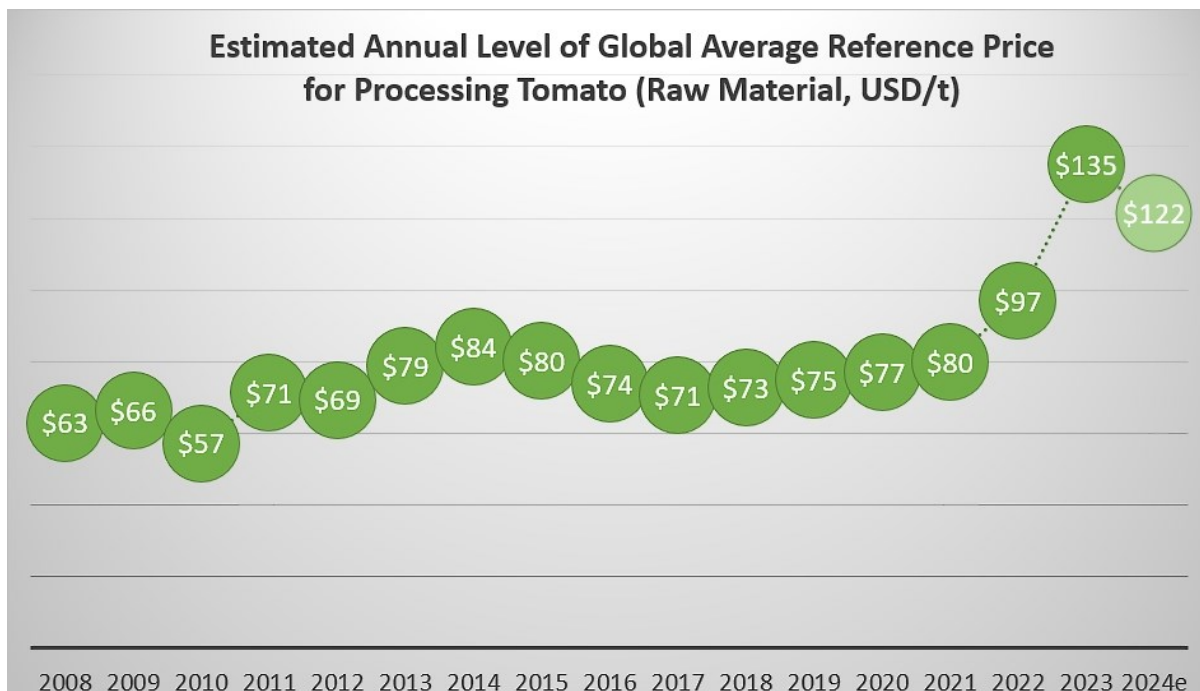
After completion of the transaction, which is expected in November 2024, the Combined Business (SPG) is expected to deliver more than \$400 million of revenues and more than \$29 million of EBITDA in FY25.

Hussein Rifai, who will be chairman of the combined group, said that the transaction is a critical step in advancing the global strategy that has guided SPC since its divestment from Coca-Cola Amatil (CCA). It aligns with SPC's long-term vision of transforming SPC into a global leader in the food and beverage sector.

**Sources: [foodprocessing.com.au](http://foodprocessing.com.au), [c-store.com.au](http://c-store.com.au), [mi-3.com.au](http://mi-3.com.au), [spc.com.au](http://spc.com.au)**

## The 2024 season: processing tomato prices down 11%

After two years of exceptional increases, the overall average reference price for processing tomatoes fell by around 11%, which nonetheless places it at a level that is 16% higher than the preceding three years.



According to information gathered by the WPTC from national supply chains and to the figures presented for the 2024 season at the World Processing Tomato Congress in Budapest (June 9-12, 2024), the average worldwide field-gate value of a metric tonne (t) of tomatoes is around **USD 122**, or just under **EUR 112** (val. June 2024), pending finalisation of the north Italy price, still under negotiation.

The value of raw tomatoes for the coming season has dropped by USD 13 (10.6%) compared to last year's record level of USD 135, but is still 44% higher than the overall price for the previous three years (USD 85/t on average, from 2020 to 2022).

This indicative value represents the weighted price (excluding various premiums and incentives) for quantities scheduled in the main processing basins, in California, Chile, China, Egypt, France, Greece, northern and southern Italy, Portugal and Spain, for tomatoes intended for the production of concentrated purées, i.e. around 33.9 million tonnes or 71% of the quantities expected for the coming season.

As it stands, the total value of the projected harvest worldwide is around USD 5.8 billion.

*Sources: Tomato News, AMITOM, WPTC*

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## How sensors are revolutionizing tomato farming practices

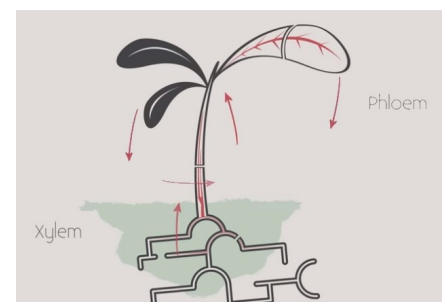
Tomatoes are a high-value irrigated crop in the global market, and yields are often restricted by unfavourable conditions, including climate, soil, and water availability. Sensor technologies have been developed and installed across the world to help farmers assess growing conditions, such as water and nutrient availability, soil pH, temperature, and topology.

The optimal soil moisture content for tomato plants is between 60% and 80%. The ideal air temperature for maximum tomato yield ranges from 24 to 28 degrees Celsius. Outside this temperature range, plant growth and productivity are impacted.

### Sensors used in tomato cultivation

Several technologies have been developed, mainly based on proximal and remote sensing approaches, for precision water management. To determine plant water content, sensors have been designed to measure the physiological condition of the plant and its surrounding environment. For instance, a sensor based on terahertz radiation combined with psychrometry can determine the leaf pressure volume.

Sensors used to determine plant water content are based on multiple tools and techniques that include electrical impedance spectroscopy, near-infrared (NIR) spectroscopy, ultrasonic techniques, and leaf patch clamps. Soil moisture sensors and electrical conductivity sensors are used to detect soil structures, salinity, and conductivity. Some of the plant sensors used to improve tomato farming are discussed below.

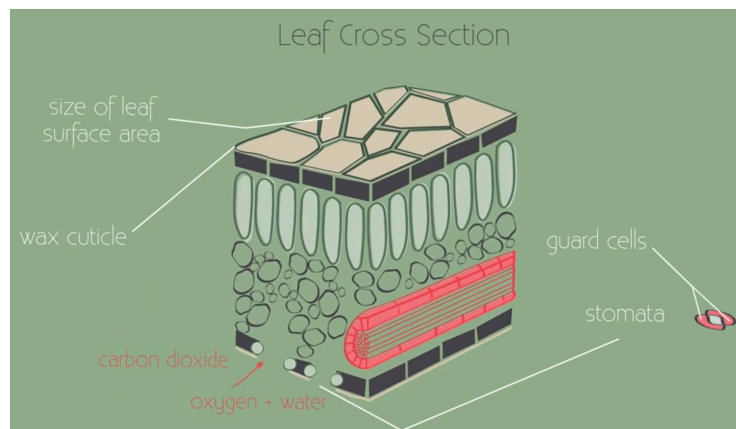


### Xylem sap pH sensor

It is important to monitor plant biomarkers in xylem sap because it provides essential information that can help prevent crop losses. However, it is not only difficult to determine these biomarkers, but regular monitoring of xylem sap could be an expensive strategy.

Professor Jim Haseloff and his team at the University of Cambridge have recently developed a low-cost

electrochemical sensor to monitor pH in xylem sap. This sensor can be directly implanted into the xylem of a tomato plant and incorporates a heating system to ensure homogeneity. The final design enabled the deposition of nanometrically thin films (sensors) into the xylem that can detect a range of analytes in a cost-effective manner.



Notably, this sensor can continuously monitor pH in xylem sap for at least ten hours. It can be coupled with another sensor (the Wio Terminal device) which enables the measurement of environmental temperature, humidity, and volatile organic compound (VOC) concentrations.

All data are wirelessly sent to a server and processed.

### Soil moisture and temperature sensors for automated watering systems

Tomatoes require a customised watering system for optimal yield and the application of effective sensors has enabled the optimal use of water resources and maximized crop yield.

A recently designed soil moisture sensor comprises two conducting plates. When these plates are exposed to the conducting medium, i.e., water, the electrons from the anode will migrate toward the cathode. This electron movement generates an electric current that can be detected through a voltmeter, thereby detecting the presence of water in the soil.

In some cases, soil sensors are coupled with a thermistor that can measure temperature and humidity simultaneously. Data from these sensors are processed and a single-wire bi-directional data output is generated, which is fed into an automatic flushing system. When temperature and humidity data reach a specific threshold, the water pump is automatically turned on or off.

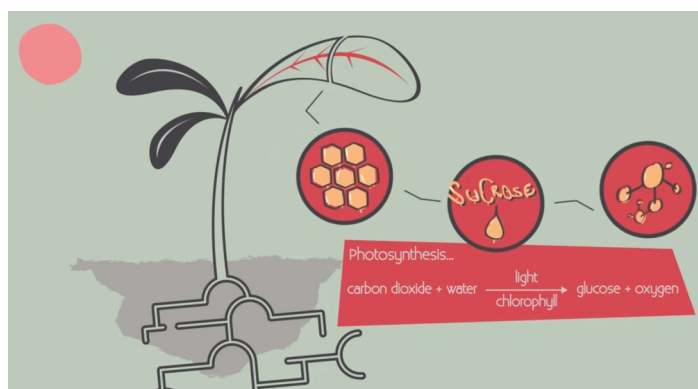
### Bioristor - a bioelectronic sensor

Bioelectronics are used to monitor plants' physiological processes and their morphological traits.

Recently, an in vivo Organic Electro Chemical Transistor (OECT)-based sensor has been developed, which is popularly known as a bioristor. This sensor

has been used to assess alterations in the composition of the sap flowing in both the xylem and phloem in growing tomato plants. It can function in real-time and in vivo, without interfering with plant functions.

Since the bioristor can be directly implanted within the plant stem, it provides in vivo observations of a plant's physiological mechanisms associated with ion movements under stress conditions, such as drought, salinity, vapor pressure deficit, and an increase in relative air humidity. Bioristor is also used for pathogen detection and pest management as well as to monitor the water status of a plant.



*Source: Tomato News*

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## Impacts of drought and heat stress on tomato plants

### Future-Proofing Tomato Production to Climate Change

A novel British study promises to push the boundaries of scientific knowledge around the impact of heat and drought on tomato health and explore the potential of an innovative biostimulant technology to improve tomato resilience to climate change and reduce the carbon footprint of production.

Optimal tomato growth, fruit set, and yield occur at day/night temperatures of 21°C-29.5°C and 18.5°C-21°C, respectively. As reported by Ryan Avery, Global Head of Processing for Bayer Vegetable Seeds at this year's World Processing Tomato Congress, temperatures are rising in regions further from the equator, and in agricultural areas affected by drought, groundwater is being consumed faster than it can be replaced. Added to the environmental challenges are consumer opinion and new regulations – all factors outside growers' control and posing significant risk for future tomato production.

### Innovative Research and Development

The new study is led by the start-up SugaROx (a spin-off from Oxford University and Rothamsted Research) and the scientific institute Fera Science Ltd (Fera). At the heart of their project lies two core capabilities: a game-changing technology for crop biostimulation and a state-of-the-art digital phenotyping facility.



Traditional biostimulants, extracts from algae/plants and acid-based formulations from organic waste, are mixtures of ingredients. SugaROx is developing single-molecule formulations based on biochemically functional active ingredients (AIs) inspired by plant molecules. 'We target critical bottlenecks in plant biochemistry and physiology with our AIs. That allows us to direct key metabolic processes that affect yield and resilience in plants', explains Dr Cara Griffiths, SugaROx's CTO and co-founder. 'Our first AI is a modified version of trehalose-6-phosphate (T6P), a sugar that stimulates carbon use and allocation via interaction with SnRK1 (Sucrose Non-fermenting Related Kinase 1)', complements Cara. 'We use a modified version of T6P for effective AI delivery and uptake after a canopy spray'.

The technology used by SugaROx was originally developed for wheat, and evaluation field trials completed over the last 3 years show potential to boost yields by up to 15% under drought conditions. By comparison, most traditional biostimulants deliver yield gains of 2-5% for farmers.

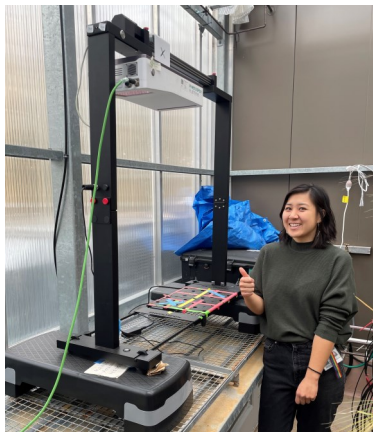
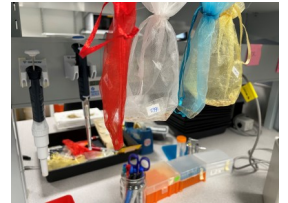
In the new study, SugaROx decided to partner with Fera to access state-of-the-art R&D facilities. Fera's capabilities include the Phenospex PlantEye Technology, which can be used to produce 3-D scans of plants, while using multispectral imagery to detect early stages of plant stress (e.g. changes in NDVI - **Normalized Difference Vegetation Index**).

The Fera team will expose miniature tomatoes to heat and drought stress, and compare the yield and resilience responses of plants treated with the T6P biostimulant to control plants (i.e. receiving no biostimulant). As well as physiological responses (e.g. changes in chlorophyll levels), it may be possible to correlate stress levels with biochemical markers, such as plant amino acids (e.g. proline). Using controlled environment chambers to generate the necessary stress, phenotyping equipment can generate vast quantities of data on each plant, so small changes in plant response can be detected. In turn, this can facilitate better targeting of these biostimulants.

*Press Release: Picture copyright: British Tomato Growers' Association*

## TomH2O – Effect of hot water treatment on tomato seed germination and vigour

Hot water treatment (HWT) of tomato seed for the processing tomato industry has been widely adopted in Australia based on a recommendation from agricultural research extension projects across the USA and Canada, where hot water treatment was shown to lower microbial infection. However, the consequences of treatment on germination quality and seedling vigour, especially after any period of post treatment storage is unknown.



Understanding the broader consequence of HWT on seed and seedling performance is critical to the Australian processing tomato industry.

The Australian Processing Tomato Research Council (APTRC) approached the University of Melbourne (UoM) to address this knowledge gap. The experiments will be conducted by Tania Zhang, Research Assistant, (seen here in picture) who is currently employed at the UoM and possesses the skills and expertise to complete the project. She will work under the guidance and supervision of Alex Fournier-Level, group leader of the Adaptive Evolution Lab at the UoM. The project will help industry better understand the impacts of hot water treatment on seed germination and early vigour.

### UPCOMING EVENTS

**Boort and Boga Region Field Day;** followed by dinner at the Mystic Park Hotel

**When:** Wednesday December 11th, 2024; Self Drive Format

The **Boort and Boga Field Day** will be preceded in the morning, by an **In-Field Irrigation Maintenance Demonstration** for Farm Managers, Agronomists and Advisors (run by Nick O'Halloran from AgVic).

**Where:** Graeme & Michelle Lawrence's Farm

**Netafim Field Day,** followed by a family inclusive dinner & MiniGolf—Rich River Golf Club, Moama

**When:** Friday January 17th, 2025

**APTRC Forum 2025,** at the Rich River Golf Club, with Dinner to follow.

**When:** Friday May 16th, 2025

**Tomato News Conference** will take place online on **Wednesday 4 December from 4pm CET**. Get in touch with [contact@tomatonews.com](mailto:contact@tomatonews.com) with your suggestions for topics & speakers.

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