grown in NQ2024

AG INNOVATION SHOWCASE
31 OCT - 1 NOV 2024

DAF RESEARCH CENTRE
45 WARWICK ROAD, BOWEN

www.growninnq.com.au

BOWEN GUMLU
GROWERS ASSOCIATION INC.
Collectively we grow

Australian Government
Department of Agriculture, Fisheries and Forestry

Grown In NQ 2024 is supported by funding from the Australian Government Department of Agriculture, Fisheries and Forestry as part of its Support Regional Trade Events Program.

Demonstrations

Disease Control and Healthier Soils *with Metagen*
Bio Degradeable Mulch Film *with Australian Bio-Plastics*
Strip Tillage and Cover Cropping *with Department of Agriculture and Fisheries*
Agriculture Drones *with NQ Aerovation*
Customisable Spray Technology *with Interlink*

Main Stage - Guest Speakers

Innovation Readiness Assessment - Ag Valuate *with Kara-Glenn Worth*
Advanced Vegetable Mechanisation to Maximise Labour and Cost Efficiency *with Julie O'Halloran*
Real-Time Supply Chain Visibility - *with Christian Patterson*
Digital Tools to Manage On-Farm Biosecurity *with Rosalie Daniels (AUSVEG) and Guy Davidson (Onside)*
Digital Automation *with Sharon Chapman*
Soil Health *with Metagen*
Packing Shed Robotics - Live Feed *with Lyro Robotics*
Agtech Resources for Greater Whitsunday *with Jennifer Emmett*
Closing the Loop Between Pest Detection, Decision and Action *with RapidAIM*

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NORTH QUEENSLAND'S LARGEST AGRICULTURE INNOVATION EXPO.

Welcome to the GrownInNQ 2024 Agriculture Innovation Summit, a premier event celebrating the cutting-edge advancements shaping the future of agriculture.

Bowen Gumlu Growers Association in partnership with the Department of Agriculture, Fisheries and Forestry are proud to host this event in Bowen, the Whitsundays region, renowned not only for its stunning natural beauty but also for its thriving agricultural landscape.

Bowen Gumlu Growers Association (BGGA) is a regional industry body that represents the interests of our members, horticultural growers, producers and associated agribusinesses in North Queensland. BGGA's key activities include member services, advocacy, workforce and industry development and the delivery of projects focused on improving on-farm practices, commercial outcomes for farming businesses and the prosperity of our community.

Across this two day event, producers and agribusiness are invited to attend North Queensland's largest innovation showcase, including an industry breakfast, ag tech farm tour and innovation expo including demonstrations and informative presentations from industry experts from across Australia, all aimed at helping growers integrate new technologies and systems to boost efficiency, sustainability and profitability.

You will have the opportunity to explore the latest innovations in agribusiness from precision farming to smart irrigation systems.

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We would also like to thank our generous major sponsor Metagen, and event sponsor NQ Aerovation.

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MEET OUR 2024 GUEST SPEAKERS

Kara-Glenn Worth

Kara-Glenn Worth is a fourth generation primary producer based in Innisfail, Far North Queensland.

With over a decade of experience in stakeholder engagement, community facilitation and agriculture innovation, Kara brings her understanding of agricultural communities to design programs that encourage agtech adoption and innovation for regional producers. She currently works as the Digital Agriculture Innovation Consultant for the Tropical North Queensland Drought Resilience Adoption and Innovation Hub and serves on the Board of Terrain NRM and Freshcare's Industry Collaboration Advisory Committee. Kara has volunteered in the agritech and climate innovation space as a mentor for Tech Girls and Startup Bootcamp, and has a strong interest in regional and remote community development in agricultural communities.

Julie O'Halloran

Julie is a Principal Development Horticulturist and Vegetable Team Leader with the Queensland Department of Agriculture and Fisheries (DAF).

With a background in agricultural extension, Julie has worked in vegetable production systems since 2008. With experience delivering state and national level projects in precision agriculture technologies, Julie currently leads national and international level horticultural RD&E projects including a national vegetable automation and mechanisation program.

As Vegetable Team leader Julie leads a team of 17 RD&E staff. Julie is passionate about supporting industry in the adoption of agtech and the opportunities and benefits for vegetable farming systems.

Sharon Chapman

Sharon Chapman is the founder of ABC Software, a company specialising in on-farm and packhouse software solutions. She was raised on a farm in the fruit bowl region of Hawkes' Bay, New Zealand, began her career in IT in 1983, and founded ABC Software in 1996. Sharon understands horticulture and understands software, and is driven to understand the business of her clients. Offering solutions to help growers and packers automate their information and grow efficiencies is what Sharon does best.

Sharon defines information automation. She considers the attitudes towards, and use of, digital technology in horticulture. She discusses how and what information can be captured on a farm and the opportunities to enhance productivity from the insights this data delivers. Information affords knowledge, which affords efficiencies, which affords growth.

PROGRAM

31 OCT:
FOOD & FARM TOUR

8:00am to 3:00pm

Agronomy Breakfast
Join us for a unique industry breakfast celebrating the flavours of Bowen, featuring inspiring talks from industry experts to kick off the Grown in NQ farm technology tour.

Farm Tour
Showcasing both vegetable and orchard cropping, this tour offers an in-depth look at on-farm automated irrigation systems and introduces you to growers who use cutting-edge digital technology to manage irrigation, monitor weather patterns, track soil conditions, optimize crop health, and ensure compliance—all through a customizable digital app. Discover how growers are tracking the migration of Fall Armyworm to detect early signs of infestation and tailoring spray technology to meet their farm's specific needs. The tour will also feature the latest advancements in agriculture drones, beneficial insects, and high-speed orchard scanning powered by Artificial Intelligence and Machine Learning for yield estimation.

Networking Luncheon
The GrownInNQ 2024 Food and Farm Tour will conclude with an exclusive industry luncheon, featuring a panel session with innovative growers at the forefront of ag tech. You'll also have the opportunity to network with leading ag tech experts and industry professionals.

Tickets $120 per person
Register: admin@bowengumlugrowers.com.au

1 NOV:
AG TECH & INNOVATION SHOWCASE

8:30am to 3:00pm

The GrownInNQ Innovation Showcase is a premier event highlighting the cutting-edge advancements in agricultural technology from across Australia. This expo will feature live demonstrations of the latest innovations, providing hands-on opportunities to see how these technologies can be applied directly to farming operations. Industry experts will deliver insightful presentations, offering valuable guidance on how growers can adopt these new tools and systems to drive efficiency, sustainability, and profitability on their farms. From precision farming and automated irrigation to drone technology and AI-driven crop management, the showcase is designed to equip growers with the knowledge and resources to stay ahead in the evolving agriculture landscape. Attendees will have the opportunity to network with ag tech pioneers, and explore how these advancements can be tailored to their unique farming needs, ensuring a future-ready approach to agriculture.

Free Entry
Pre-registration: www.growninnq.com.au

MEET OUR 2024 EXHIBITORS

Complete Digital Farm Management

Established in 2017, the Farm in One app was developed by HTM Complete with guidance from several of elite farmers and IT experts.

At its core, Farm in One addresses one of the biggest headaches for modern farmers: managing multiple systems and software applications. Traditionally, farmers have had to juggle various control systems to oversee irrigation, track weather patterns, monitor soil conditions, and manage crop health. Farm in ONE simplifies this process by bringing all of these functions onto one platform.

Through an integrated mapping system, farmers can get a bird's-eye view of their entire farm—across multiple locations if necessary. The app displays all blocks and devices, from soil moisture probes to weather stations and pumps, in one comprehensive view. Whether you're operating a single farm or managing several across different regions, Farm in One lets you monitor and control everything in real time. This consolidation of data helps farmers make smarter decisions faster, whether it's adjusting irrigation based on current weather forecasts or scheduling crop treatments to maximize yield. Everything is connected, intuitive, and at the user's fingertips. Its ability to collect, analyse, action, and report farm data in one place makes it an indispensable tool for farmers looking to enhance precision, profitability, and sustainability.

As farming continues to evolve, tools like Farm in One are setting the standard for innovation. By simplifying complex processes and providing greater control over operations, the app empowers farmers to focus on what really matters—growing their crops, conserving resources, and staying competitive in an increasingly demanding world.

Steven Schincariol - BLS Farming, (mango and lemon growers), Dimbulah, Far North Queensland says:

"With automation, we improved our electricity by 30%, changing our traditional irrigation practices and tariff, saving $15,000/month. HTM Fert enabled us to deliver nutrition directly where needed, saving time and hassle. With the help of the HTM team, we changed the fertiliser injection location and mixing design, scheduling the fertiliser with the correct amount required per block and our crops' needs. The Farm in One Spray Schedule showed us hotspots, giving us cost savings in chemical, labour, machinery wear and tear, and diesel. Farm in One records all data, generating audit reports, and the Mapping feature saves us time and money by measuring blocks, mainlines, fences, etc. Farm in One is easy to use and valuable, improving our yields and inputs and giving us extra family time."

AI, Machine Learning & Machine Vision

Green Atlas is dedicated to assisting tree-crop growers in managing the life-cycle of each and every fruit, on every tree, across their entire orchard.

They combine innovative, field-proven hardware and software that allows flower and fruit counts to be quickly and accurately mapped, from ground level, over entire orchards.

Leveraging a decade worth of world-leading University research, and the application of AI, Machine Learning and Machine Vision, growers and agronomists can access an unprecedented level of detail, unmatched by manual methods. In-field and timely data now allows crop management to be tailored to the needs of each and every tree.

The Power of Robotics for Packing

Lyro's advanced robots, equipped with a cutting-edge pattern packing system, are designed to handle the unique challenges that come with packing natural products. Whether dealing with the delicate variations in size and shape of fruits and vegetables or a diverse range of everyday goods, the system adapts to create optimal packing patterns for each item.

Specialising in box optimisation for transport, the company's solutions ensure that natural products are packed securely and efficiently, reducing waste and maximizing value across the entire supply chain. Their focus on precision and adaptability is transforming the way natural products are handled and delivered.

Disease Resistance and Carbon Gains

More than 10 years ago, grower-focus on local issues resulted in the founding of the Queensland owned biotech company, Metagen. Ever since, growers in the dry tropics have been working in conjunction with Metagen to develop tools to improve soil and plant health. Many have recognised the advantages of leveraging natural resources through biostimulation, including disease suppression, system resilience and nutrient efficiency. Having a more robust cropping system when adverse conditions are encountered means getting a crop to market when others cannot.

For example, collaboration with Metagen has enabled corn producers in the dry tropics to increase yields, while more than doubling nitrogen-use efficiency, and increasing phosphorus-use efficiency by 6-fold. The subsequent reduction in fertiliser inputs lowered their cropping carbon footprint by 59 %, or 1.19 t/ha of carbon equivalent, for every crop cycle.

Over time, the partnership between growers and the Metagen team has resulted in the addition of a product development pipeline, production plant and a dedicated innovation team based in the Lockyer Valley. Growers using Metagen solutions in the Lockyer have been most impressed by the improved disease suppression, particularly by increased resistance to fusarium infection.

The value of collaboration between growers and the Metagen team has recently been recognised internationally with Syngenta committing to a joint research project, specifically focusing on nitrogen efficiency in cotton and wheat in Queensland and NSW. Achieving improved resistance to verticillium infection and reducing the carbon footprint through nutrient efficiency are high priorities for cotton growers, and at Metagen we are striving to achieve these goals in the near future.

Photo caption: Metagen Treated - Fusarium

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THE SOIL HEALTH COMPANY

Here is Adrian and his 4 numbers.

40% above industry **yield**

55% of industry standard **nitrogen**

20% of industry standard **fungicide** use

18 years of abundant **phosphorus** through microbial release

Now you know what's behind that smile.

Contact: shane@metagen.com.au
0419 656 251

Natural Solutions

Natural bio control products enable you to become more sustainable and adopt alternatives to chemical pest controls.

Moving to an integrated pest management system means your farming system will be safe and sustainable for you and for the environment.

By adopting a non-toxic integrated pest management system, you will see cost savings in your farming business, and healthier crops and soil on your farm.

Is Your Farming Business AgTech Ready?

The Tropical North Queensland Drought Resilience Adoption and Innovation Hub (TNQ Drought Hub) is rolling out AgValuate, a groundbreaking innovation readiness assessment tool developed by producers, for producers. This tool is designed to help farmers, producers and land managers evaluate their business strategies through a user-friendly, question-based format.

Through a comprehensive analysis, AgValuate maps out a farm's journey to adopting innovative practices across social, economic, environmental, and technological themes. Delivered in an easy-to-understand format, the analysis offers insights across the business into both current operations and future aspirations.

Kara-Glenn Worth, the TNQ Drought Hub's Digital Agriculture Innovation Consultant said "It can be hard to know where to start when it comes to introducing technology into your business. We've designed AgValuate to help fill this gap, giving producers a meaningful and actionable plan for growth and investment through technology and education."

Kara-Glenn added, "The collaborative design of AgValuate drew upon the expertise of James Cook University researchers, local producers and NRM industry bodies to form a comprehensive starting point for innovation uptake."

The Hub will continue to work with producers to roll out AgValuate and gather feedback.

This project received funding from that Australian Government's Future Drought Fund and has been designed by the Tropical North Queensland Drought Resilience Adoption and Innovation Hub in partnership with James Cook University.

The Smartest Trap Around

Whether you're looking to detect Fall Army Worm, Fruit Fly, Codling Moth and/or Macadamia Nut Borer, RapidAIM offer a complete pest monitoring solution in the palm of your hand. The mobile app displays pest activity in a clear and intuitive way, logging spray events in orchards and farms showing when pest management actions are working.

Digital Solutions as Easy as ABC

ABC Software provide easy-to-use, horticulture-specific software solutions to growers and packers. Founder and CEO Sharon Chapman is thrilled to be part of the Grown in NQ Exhibition where she'll be talking digital technology in horticulture, breaking down the 'tech' into plain English, and discussing what information can be captured on a farm, and the opportunities to enhance productivity this provides. She'll be catching up with the Pirrone Brothers who are implementing ABCgrower for their on-farm labour and inventory management, ABCpacker in the shed, and digital spray diary ABCspray.

With productivity, traceability, and compliance critical in today's environment, more organisations are turning to digital solutions.

Wim van Niekirk, Managing Director of Widem Farming in Dimbullah, north of here says:

"One of the key benefits we've gained from using ABCgrower is driving productivity by showing our workers what they've achieved in a day - it really incentivises them! We also have immediate visibility of unproductive workers and can take appropriate action. We see the results directly affecting our bottom line."

Another favourite is block cost reporting. Sam Hobbs, Operations Manager at Darlings Fruit says:

"I can pull out my phone to look at costs for a block at anytime. ABCgrower – it's awesome!"

Photo caption: ABCgrower in use at Tumut Grove, Colignan VIC. Inset: Sharon Chapman.

Automated Irrigation Systems

Exhibitors at the GrowninNQ Innovation Day are leading the way in providing automated irrigation solutions to help farmers maximise their productivity while conserving valuable resources.

Designed to control the amount of water delivered to crops, our Irrigation experts can help you reduce waste and enhance efficiency. These systems use advanced sensors to monitor soil moisture levels, weather conditions, and crop needs, enabling you to control and adjust water delivery in real-time.

Customisable to suit all types of irrigation systems, including furrow, overhead, or drip irrigation, an automated irrigation system allows for remote control, ensuring efficient water usage and optimal crop growth.

INTERLINK

ULTIMATE CROP PROTECTION

AUSTRALIAN SPRAYERS, MADE BY AUSTRALIANS!

CUSTOM SPRAYERS TAILORED TO YOUR FARM!

As an Australian-owned business, we excel in crafting custom-designed sprayers tailored to the unique needs of our farmers.

For more information visit: www.interlinksprayers.com.au

OR SCAN THE QR CODE

Agriculture Drone Training and Solutions

At NQ Aerovation, the focus is on delivering personalised drone technology solutions that align with the specific needs of each client. Whether it's selecting the right drone equipment, undergoing pilot training, or integrating UAV services into existing operations, our experienced team (who are also experienced agriculture drone aviators) ensure that every investment is well-informed and perfectly suited to the task at hand. It's about providing solutions that enhance business performance, not just selling technology.

Furthermore, your after sales care and support team is based locally here in Bowen, North Queensland, to help you maintain and service your investment to keep you off the ground and getting results.

NQA's Director and Chief Remote Pilot Luke Jurgens said drones are revolutionising agricultural practices, improving efficiency and profitability.

"Over the last three years, we've collaborated closely with growers across Queensland to explore the potential of drone technology in enhancing their operational efficiency and profitability. This technology is fast and efficient, capable of mapping crop health, targeted or blanket application of liquid chemical or granular products, seeding, and effectively spreading beneficial insects," Mr Jurgens said.

"Given the demonstrated necessity of this technology, growers are eager to integrate drone technology into their operations, leading to a significant demand for skilled remote pilots."

Recognising the importance of skilled operation for safety and efficiency, NQ Aerovation offers CASA-certified remote pilot training and certifications, including XAG and DJI Agriculture Drone Type Endorsements across Queensland.

The training programs are designed to cater to all experience levels, ensuring that students not only gain the technical skills required for drone operation, but also a deep understanding of the safety and environmental standards governing the industry.

Aerial Release of Bait Sachet's in Sugar Cane

To address the current issue of how rat bait sachet's are being deployed in the sugar cane industry, NQ Aerovation are developing a prototype to modify agriculture drones to aerial release rat bait sachet's. Currently, tennis rackets are used to hit the rat bait sachets into the fields; or with a helicopter and by hand deployment to reach deeper parts of the field.

NQA is developing a deployment prototype device that tests the measuring of the number of bags deployed via drone per hectare as per the manufacturer specification and with guidance from the Sugar industry.

Precision Pollination

Bee Innovative is an Australian AgTech company whose mission is to protect and unlock the natural super-power of precision pollination. "We increase crop yields, improve crop quality and value while protecting our vital pollinators."

For more than 30 years Bee Innovative have worked with bees and understand their critical contribution to farm crop value, regional economies, the ecosystem and global food security. Bee Innovative's unique 'BeeDar' technology enables farmers and growers to harness the natural superpower of honey bee pollination to farm smarter and for higher returns.

Precision pollination enables increased yields and improves produce quality by tracking bee movements and pollination activity in near real-time and alerting farmers to areas of poor pollination.

Quick, safe and easy to deploy, 'BeeDar' also provides an early-warning for poor pollination in time to recapture production that would normally be lost.

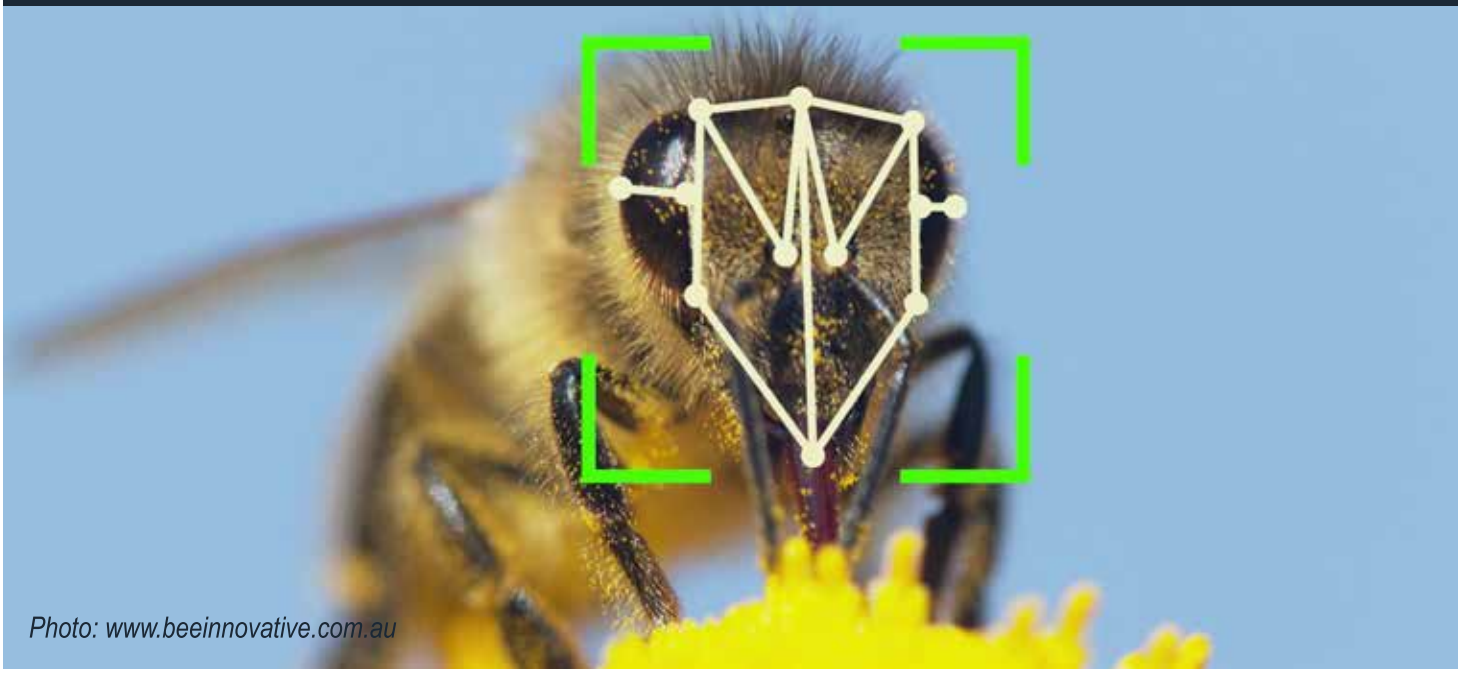

Photo: www.beeinnovative.com.au

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