

Queensland's AgriTech revolution: innovation driving sustainable farming

06 June 2025 | News

Queensland is rapidly emerging as a global leader in AgriTech



Queensland is rapidly emerging as a global leader in AgriTech

The Australian state of Queensland is well known for its ancient, natural wonders including the Great Barrier Reef. Queensland is rapidly emerging as a global leader in AgriTech, harnessing cutting-edge technology to enhance productivity, sustainability, and resilience in agriculture. With a \$22.66 billion production value, the state's agricultural sector is undergoing a transformation fueled by innovation, investment, and collaboration.

Several AgriTech innovations from Queensland are gaining global recognition.

Advancing biosecurity in aquaculture

Queensland company, Genics, exports its biosecurity solutions to shrimp farms worldwide, helping aquaculture industries improve disease prevention.

The standout AgriTech innovator is transforming biosecurity in aquaculture, by providing advanced diagnostic solutions to detect diseases in shrimp and other seafood, helping farmers prevent outbreaks and improve stock health. Their technology enables early detection, reducing losses, and ensuring sustainable seafood production.

Their smart technology is now being extended to pork and other industries with promising results.

Genics currently export their tech to more than 40 countries, including Vietnam, Indonesia, the United States and South America.

Harnessing lightning for agriculture

First Nations company, Rainstick has combined ancient Indigenous Australian wisdom with modern technology. The company from Far North Queensland is working with producers and scientists to improve global food security.

Rainstick has created a seed treatment built on a 10,000-year-old practice borne of the positive effects of lightning strikes on the way plants grow.

By treating seeds with Variable Electric Field Treatment (VEFt), they're revolutionising crop growth by using bioelectricity to enhance seed resilience and yield, while reducing environmental impact.

Smart livestock monitoring

Livestock management has been simplified by Queensland company Ceres Tag, who has expanded its satellite-enabled livestock tracking technology to global markets, providing farmers worldwide with real-time monitoring solutions.

The company revolutionised the industry with the world's first smart ear tag that connects directly to satellites. The device is solar powered and tamper proof providing real-time geospatial tracking, which allows farms to monitor their animals' location, movement, and health.

The tech prevents theft, enhances biosecurity, and efficiently monitors animal welfare.

AI-driven analytics provide the opportunity for informed herd management, which reduces costs and improves efficiency, especially in environments with limited access.

The future of AgriTech in Queensland

When it comes to technology, advances in the field of food production and farming, can have the most significant and enduring impact on the world.

With continued investment and collaboration, Queensland's commitment to precision agriculture, sustainability, and technological innovation ensures that farmers can meet growing food demands while protecting natural resources.

As Queensland's AgriTech sector expands, the fusion of traditional farming expertise with cutting-edge technology will shape the future of agriculture – not just in Australia, but globally.