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CropX launches revolutionaryÂ Evapotranspiration Monitoring for Precision Irrigation in New ZealandÂ

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New Era of Sustainable Irrigation

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CropX, a global leader of digital agricultural solutions, is launching throughout the Australasia region a first-of-its-kind sensor for monitoring the real-time plant water use in a field through evapotranspiration (ET). This new, above-canopy sensor connects to the CropX agronomic farm management system to give its users an unprecedented knowledge of crop water use and needs, allowing for data-driven irrigation scheduling and remote management that maximizes water efficiency.

CropX's Actual ET sensor vastly increases the knowledge of water use at the soil and plant level so that farmers can make well-informed agronomic decisions. Users of the CropX system can reduce irrigation water by up to 50% while still protecting, and even improving, the productivity of their fields.

CropX's agronomic farm management system links sensors in fields and satellite data with cloud-based advanced agronomic analytics. The system delivers field, weather, and crop data and recommendations via mobile or desktop app. CropX's soil sensors collect data that is transformed into helpful visualizations and advisory insights that guide the timing and amount of irrigation, fungal disease crop protection, and planting and harvest dates, while acting as a recording repository for on-farm management activities. In New Zealand, Dairy Holdings, a dairy collective that covers over 20,000 hectares, has used CropX

as a key tool to reduce irrigation use by 30% while improving the quality and quantity of their yield.

The CropX Actual ET sensor can be used alongside soil moisture sensors to gain a complete picture of water use in a field. It can also be an alternative to a soil moisture sensor when rocky soils make an in-ground soil moisture sensor challenging. Regional evapotranspiration values are commonly used by farmers to estimate how much and when to irrigate, but the CropX option offers the first measurement that covers a specific field on a daily basis. This specificity can reveal microclimate differences, crop stage water uptake differences, and can provide an early detection method for crop stress.

The evapotranspiration technology came from CropX's 2022 acquisition of Tule Technologies, a California-based agricultural tech company that developed the patented technology. CropX further has continued to refine the tech and developed a version that can be mounted on a center pivot.

Additional benefits of the evapotranspiration sensor include the reduction on the reliance on weather stations for ET; field-scale insights that offer a clearer view of field water-use dynamics; and seasonal ET data that can provide insights into how factors like temperature swings and droughts impact water use that can help inform irrigation planning and water budgeting for future seasons.