

New Zealand's TOMRA Food reveals new R&D programs to determine optimal fruit growth

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TOMRA Food has revealed the first details about its Research Orchard, the only facility of its kind run by a manufacturer of sorting and grading solutions. The Research Orchard occupies a 2.5-hectare (6.2-acre) plot in Waikato, New Zealand, next to the company's 5,100-square-meter Field Research Center, which opened in 2022.

TOMRA Fresh Food's Field Research Manager, Richard Pickard, explained: "The orchard's purpose is to monitor the flowering and fruiting of plants at each stage, adding to our understanding of the core commodities handled by our sorters and graders. We will assess fruit defects, quality issues, and key characteristics such as flavor, sweetness, and firmness. This complements our Fruit Science program, which for ten-plus years now has been researching how the chemical and physical properties of fruit correlate with fruit quality and sorting requirements."

OMRA Food possesses what is believed to be the world's largest library of fruit data, acquired from hundreds of thousands of fruit samples and analyzed for factors such as flavor, firmness, storage potential, defects, and the influence of weather conditions. It is this strong scientific foundation of fruit knowledge that the Research Orchard will build on.

TOMRA Fresh Food's Commodity Science Team Lead, Brittany Jaine, commented: "For scientific studies, we need high-quality data plus an understanding of the full history of each piece of fruit we analyze. The Research Orchard provides a controlled source of fruit, where we know all pre- and post-harvest conditions, such as climate, irrigation, sprays, and handling. From this base, we can draw accurate conclusions with confidence."