

Title Is dry matter a reliable quality index for 'hayward' kiwifruit?
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Abstract

Dry matter (DM) measurement at harvest is being proposed as a quality index for 'Hayward' kiwifruit because it includes both soluble solids (mainly sugars) and insoluble solids (largely structural carbohydrates and starch). From two seasons' data, in-store consumer acceptance was well related to DM. However, in a harvest season when kiwifruit exhibited high ripe titratable acidity (RTA), RTA also played an important role in consumer acceptance. In both seasons, regardless of RTA, consumers 'liked' kiwifruit that had DM $\geq 16.1\%$. In the 2008 growing season, when RTA was high (RTA $\geq 1.2\%$), a high DM (≥ 16.1) was needed to satisfy consumers. However, with RTA $< 1.2\%$, a lower DM ($\geq 15.1\%$) was required allowing a large proportion of the kiwifruit to satisfy a high percentage of consumers. Many of the DM survey kiwifruit samples had a DM content exceeding 15.1%, but DM varied among vineyards and seasons. DM did not change during cold storage. Thus, DM is a reliable candidate for a quality index, but RTA should also be considered.