

Title The impact of dry matter, ripeness and internal defects on consumer perceptions of avocado quality and intentions to purchase

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Abstract

Insights into the relative importance of various aspects of product quality can be provided through quantitative analysis of consumer preference and choice of fruit. In this study, methods previously used to establish taste preferences for kiwifruit (Harker et al., 2008) and conjoint approaches were used to determine the influence of three key aspects of avocado quality on consumer liking and willingness to purchase fruit: dry matter percentage (DM), level of ripeness (firmness) and internal defects (bruising). One hundred and seven consumers tasted avocados with a range of DM levels from ~20% (minimally mature) to nearly 40% (very mature), and at a range of fruit firmness (ripeness) stages (firm-ripe to soft-ripe). Responses to bruising, a common quality defect in fruit obtained from the retail shelf, were examined using a conjoint approach in which consumers were presented with photographs showing fruit affected by damage of varying severity. In terms of DM, consumers showed a progressive increase in liking and intent to buy avocados as the DM increased. In terms of ripeness, liking and purchase intent was higher in avocados that had softened to a firmness of 6.5 N or below (hand-rating 5). For internal defects, conjoint analysis revealed that price, level of bruising and incidence of bruising all significantly lowered consumers' future purchase decision, but the latter two factors had a greater impact than price. These results indicate the usefulness of the methodology, and also provide realistic targets for Hass avocado quality on the retail shelf.