

Title            Quality characteristics and consumer responses for Scired apples  
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### **Abstract**

Consumer-driven, retailer-dominant food markets demand that new product developers and suppliers better understand fruit quality attributes within a market-related context. However, there is often difficulty in translating consumer preferences for products into guidelines for suppliers. We evaluated consumer responses to appearance and taste of a new apple cultivar Scired to determine consumer preferences based on red colour and Brix. Fruit samples were evaluated one month after harvest by sixty consumers in individual tasting booths. Consumers evaluated appearance under daylight-adjusted lighting and indicated their likelihood of purchase of each of 5 red colour classes of apple (1=pale, 5=dark). However, taste was evaluated under red lighting to minimize the risk that expectations based on colour may influence consumer responses. Consumers indicated their overall liking of each of four Brix classes of fruit (11.6-14.6%) as well as indicating ideal intensities of sweetness and acidity relative to their own ideals. All responses were made on unstructured 150-mm line scales anchored by appropriate intensity labels. Consumers were most likely to purchase bright (3) red apples. All other colours were less likely to be purchased, with very dark red apples eliciting the poorest response from consumers. Ninety percent of consumers indicated fruit with Brix more than or equal to 12.6% was acceptable, but only the 14.6% Brix apples came close to ideal for sweetness. In comparison, 47% of consumers rated fruits with <12% Brix unacceptable with 37% of these consumers describing the fruits as bland. For apple cultivars with red appearance and sweet, low acidity taste such as Scired, determination of consumer responses to fruit red colour and Brix may provide useful guidelines for suppliers to maximize market acceptability. The results indicate Scired should be selectively harvested to a bright (3) red colour and attain minimum Brix of 12.6% at outturn.