

Abstract:

A systems approach was used to measure the inherent variation in fruit quality that manifests during the postharvest life of kiwifruit. Quality changes were followed in a large number of fruit after sorting, storage and during shelf-life. In the same study, an effort was made to estimate the potential marketing and consumption period during the postharvest life of kiwifruit produced in the co-operative of Episcopi of Macedonia-North Greece. Measurements of firmness and soluble solids content showed great variability. By implementing probability distribution plots and by placing tolerance (upper and lower) limits for quality attributes (firmness, soluble solids content) it is possible to estimate the actual period of time for purchase quality (Q_p) and consumption quality (Q_c). To capture full market price for kiwifruit, retail distribution must sell before Q_p reaches its minimal acceptable level. The present postharvest handling system appears to have developed primarily to serve the distributors and handlers, not to satisfy consumers. The analysis showed that greater emphasis should be given to meeting the consumers needs in terms of quality attributes (Fm and SSC). Means to ameliorate the variability of internal quality attributes are discussed. This problem for kiwifruit marketing challenges postharvest scientists to develop techniques to segregate the fruit at harvest non-destructively on the basis of internal quality attributes, thus minimising variation and satisfying the consumer.