

Predicting Fruit Quality after Storage, is it Possible and Practical with our Current Knowledge?

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Abstract. A large proportion of internationally traded high-value avocado fruit is sold on markets quite distant from the areas of production. Fruit therefore have to be stored and transported in such a manner that quality is not compromised. Despite reasonably sophisticated packaging, storage and transport, many avocado-producing countries are characterized by seasons of either good or poor fruit quality. Being able to predict physiological quality prior to storage would aid in the orderly marketing of better quality fruit.

A tentative start in researching the prediction of fruit quality after storage has been made in South Africa. Initially, the study has been limited to one disorder, mesocarp discoloration or gray pulp. Initial work has concentrated on developing a database of inter- and intraplant variation, as well as major area differences. Using canonical discriminate analysis, it is hoped to limit the number of potential variates to four or five. The pros and cons of a number of potential variates are discussed and some speculation as to the most promising is presented.