

Abstract:

This paper deals with the link between effects of storage conditions on metabolic rate on one hand and the effects on external quality aspects on the other hand. Mechanistic models are used as a first step in interpreting experimental data to determine the likelihood of the possible underlying mechanisms and to direct future research to elucidate these mechanisms at a physiological and biochemical level. Even though details of the underlying processes are still to be unravelled, the simplified approach of directly linking metabolic rate to the rate of quality breakdown is proven to be successful in describing the effects of modified atmosphere on external quality attributes through their known effects on metabolic rate.