Variability and predictability of Malaysian export-grade starfruit properties

ABSTRACT

The properties of commercially-graded B10 cultivar starfruit (Averrhoa carambola) namely length, diameter, mass, volume, the five colours values (L, a*, b*, C, h°), firmness, total soluble solids (TSS), titratable acidity (TA) and pH were measured. Coefficients of variation (CV), correlation and property tolerances were evaluated to develop a relationship between the non-destructively measurable external properties and the non-destructively immeasurable internal properties. The length, diameter, mass and hue were found to have low CV levels. Mass appears to have a very strong correlation with volume while hue has a strong correlation with firmness.

Keyword: Fruit quality; Predictability; Starfruit; Variation coefficient