

Title Some Physical Characteristics, Mechanical, Sound and Physiological Properties of a Young Coconut Fruit

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Abstract

The purpose of this research was to determine some mechanical and physiological properties of a young coconut fruit. Mechanical properties were obtained by slow compression test upon fruit components with the universal testing machine. Physiological properties of the related fruit were obtained by conventional physiological measurements on total soluble solid and acidity of coconut juice, and dry matter of coconut flesh as well. Experiment was performed with Nam Hom variety, three maturity stages (i.e. immature, mature and overmature) and forty replications for each maturity.

Results showed that rupture force of the exsocarp decreased while that of the mesocarp increased regarding maturity stage. Flesh dry weight and juice total soluble solid increased while the juice acidity decreased which complies with the fruit nature. Quantitative details were given in the paper.