

Title Effect of maturity stages on chemical properties
Author J. Adisak and J. Jintana
Citation Souvenir Programme, 7th International Pineapple Symposium 2010. 13-15 July, 2010, Persada Johor International Convention Centre, Johor Bahru, Johor, Malaysia. 126 p.
Keyword Pineapple; sugar; maturity

Abstract

The effect of maturity stages on chemical properties and sugar contents of pineapple (*Ananas comosus* cv. Smooth Cayenne) fruits were studied. The fruits were harvested at 110, 120, 130, 140, 150 and 160 days after full bloom (DAFB) in rainy season crops during June-August 2009. The fruits were evaluated on total soluble solids (TSS), titratable acidity (TA), TSS/TA ratio, pH and sugar contents. The results showed that changing of TSS, TSS/TA ratio and pH were increased with harvesting time. The daily ratios of increases were 0.375 %Brix for TSS, 0.219 for TSS/TA ratio, and 0.0064 mg/100 mg for pH, respectively, whilst the TA ratio decreased at 0.0014 with harvesting time. During the harvesting period of 110 - 160 DAFB, the chemical properties slightly changes and the sugar contents composed of sucrose (9.2 - 11.76%), fructose (2.13 -3.24%) and glucose (2.11 - 2.88%). The proportion of sucrose, fructose, and glucose were 5.5: 1.3: 1.1, respectively. It was found that harvesting period had an effect on rate of daily changes in sugar contents of pineapple.