ABSTRACT

HOW STORAGE TEMPERATURES AFFECT VITAMIN C LEVELS IN PROCESSED FOODS AS PAPAYA

Agnes Wahyu Norma Pratiwi

Candied is a processed food obtained after draining fruit from a sugar solution. Sweets have more water content and a more attractive appearance and have a long shelf life. Candies are usually made from hard fruit such as kolang-kaling, mango, kedondong, salak, and papaya. The content of Vitamin C in fruit and food will be damaged due to the oxidation process by the outside air, especially when heated. This study was conducted to determine the difference in levels of Vitamin C in papaya directly compared with levels of Vitamin C in candied papaya. This study used the UV-Vis Spectrophotometry method by examining the levels of Vitamin C in direct papaya and candied papaya fruit with variations in room temperature and cold storage temperature for 24 hours. The absorbance measurement of the sample was carried out at a wavelength of 265.5 nm. The results of this study indicate that variations in storage temperature affect the levels of Vitamin C. The percentage decrease in levels of Vitamin C at room temperature and cold temperatures is 16.15% and 5.33%, respectively.

Keywords: Vitamin C, UV-Vis Spectrophotometry, Papaya Fruit, Candied Papaya.