ABSTRACT

EFFECT OF STORAGE TEMPERATURE ON VITAMIN C LEVELS IN SIAM ORANGE JUICE

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Oranges have a very high vitamin C content. One of the processed citrus products is orange juice. The orange juice storage process can be stored in three different storage conditions, such as at room temperature (29°C), refrigerator temperature (13°C), and freezer temperature (-5°C). Vitamin C in juice is very easily oxidized both during processing and during storage. The purpose of this study was to determine the effect of storage temperature on vitamin C levels in processed orange juice. This research method uses the UV-VIS Spectrophotometry method, the sample in this study is a Siamese variety citrus fruit which has characteristics that are not the same as other oranges because it has thin skin, smooth and slippery surface, shiny, short fruit stalk, ovoid fruit seeds., soft flesh and sweet taste. Samples were taken randomly by looking at the quality of the fruit. Research by determining the levels of vitamin C samples of Siamese orange juice using the UV-VIS Spectrophotometry method was carried out at a predetermined maximum wave of 265.5 nm. From this study, the percentage decrease in Siamese orange juice with storage treatment at room temperature and cold temperature with a waiting time of 24 hours was 25.80% and 23.34%, respectively.

Keywords : Vitamin C, Siamese Orange, UV-VIS Spectrophotometry