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**ANALISIS KADAR VITAMIN C DALAM SARI NANAS DAN INFUSED WATER BUAH NANAS (*Ananas comosus L*) DENGAN VARIASI SUHU DAN LAMA PERENDAMAN MENGGUNAKAN SPEKTROFOTOMETRI UV-VIS**

**ABSTRAK**

**Latar Belakang:** Buah nanas merupakan tanaman yang mengandung vitamin C, yang dikenal sebagai antioksidan penting bagi tubuh. *Infused water* adalah air putih yang diberi tambahan irisan buah atau sayuran segar dan didiamkan beberapa saat. Pada penelitian ini bertujuan untuk menganalisis kadar vitamin C pada *infused water* buah nanas dengan variasi suhu dan lama perendaman.

**Metode:** penentuan secara kuantitatif kadar vitamin C sari buah nanas dan *infused water* buah nanas dengan metode spektrofotometri UV-Vis. Analisis data menggunakan *software* SPSS versi 25.

**Hasil:** Hasil uji kuantitatif penetapan kadar vitamin C sari nanas sebanyak  $4,332 \pm 0,096$  mg/100gr, kadar vitamin C dalam *infused water* suhu ruang dengan lama perendaman 3 jam, 6 jam dan 12 jam berturut-turut sebanyak  $0,744 \pm 0,005$  mg/100gr,  $0,888 \pm 0,023$  mg/100gr dan  $1,162 \pm 0,015$  mg/100gr, serta kadar vitamin C *infused water* suhu kulkas dengan lama perendaman 3 jam, 6 jam dan 12 jam hasilnya berturut-turut sebanyak  $0,695 \pm 0,012$  mg/100gr,  $0,841 \pm 0,019$  mg/100gr dan  $0,982 \pm 0,020$  mg/100gr. Kadar vitamin sari nanas lebih tinggi dibandingkan *infused water* buah nanas. Hasil uji SPSS dengan uji *Post Hoc Test* menunjukkan 2 nilai signifikansi nilai signifikansi  $>0,05$  dan signifikansi  $<0,05$ .

**Kesimpulan:** Uji *post hoc* menunjukkan 2 nilai signifikansi, yaitu terdapat perbedaan signifikan antara kadar vitamin C yakni *infused water* dengan lama perendaman 12 jam penyimpanan suhu ruang dibandingkan suhu kulkas, dan tidak ada perbedaan yang signifikan antara kadar vitamin C terdapat dalam *infused water* penyimpanan suhu ruang yang dibandingkan suhu kulkas dengan lama perendaman 3 dan 6 jam.

**Kata kunci:** nanas, *infused water*, vitamin C, waktu perendaman, suhu.

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**ANALYSIS OF VITAMIN C LEVELS IN PINEAPPLE JUICE AND  
INFUSED WATER OF PINEAPPLE (*Ananas comosus* L) WITH  
VARIATIONS IN TEMPERATURE AND SOAKING TIME  
USING UV-VIS SPECTROPHOTOMETRY**

**ABSTRACT**

**Background:** Pineapple fruit is a plant that contains vitamin C, which is known as an important antioxidant for the body. *Infused water* is plain water that is added with slices of fresh fruit or vegetables and allowed to stand for a while. This study aims to analyze vitamin C levels in pineapple fruit *infused water* with variations in temperature and soaking time.

**Methods:** Quantitative determination of vitamin C content of pineapple juice and pineapple *infused water* by UV-Vis spectrophotometric method. Data analysis using SPSS software version 25.

**Results:** The results of quantitative tests determine the vitamin C content of pineapple juice as much as  $4.332 \pm 0.096$  mg/100gr, vitamin C levels in room temperature infused water with a soaking time of 3 hours, 6 hours and 12 hours respectively as much as  $0.744 \pm 0.005$  mg/100gr,  $0.888 \pm 0,023$  mg/100gr and  $1,162 \pm 0,015$  mg/100gr, as well as vitamin C levels in refrigerator temperature infused water with a soaking time of 3 hours, 6 hours and 12 hours the results were  $0,695 \pm 0,012$  mg/100gr,  $0,841 \pm 0,019$  mg/100gr and  $0,982 \pm 0,020$  mg/100gr respectively. Pineapple juice vitamin levels are higher than pineapple fruit infused water. The results of the SPSS test with the Post Hoc Test test showed 2 significance values of significance  $>0.05$  and significance  $<0.05$ .

**Conclusion:** The post hoc test shows 2 significance values, namely there is a significant difference between vitamin C levels in *infused water* with a 12 hour soaking time at room temperature storage compared to refrigerator temperature, and there is no significant difference between vitamin C levels in *infused water* stored at room temperature compared to refrigerator temperature with a soaking time of 3 and 6 hours.

**Keywords:** Pineapple, *infused water*, vitamin C, soaking time, temperature.