ABSTRACT

PT. Sinar Sosro is the first company that serves ready-to-drink tea beverages in Indonesia and the World that was legally opened on 17 July 1974 by Soegiharto Sosrodjojo. The internship activity was conducted in the research and development department from January until May 2023, where activities such as physicochemical analysis, microbiological analysis, accelerated shelf life and stability testing, and also benchmarking of products were conducted in order to gain real work experience. Other than that, the main objective of the internship was to make a product in hopes that it can be used as another variant of PT. Sinar Sosro product, where the stability evaluation was done. In this project, the stability of strawberry kiwi soda was evaluated during 4 weeks of storage, while also comparing the analysis results between the samples stored at room temperature and chiller on each week, in terms of CO_2 concentration, Brix, pH, color, titratable acidity, vitamin C content, and also the sensorial properties of the products. The experiment was conducted by following the procedure made by PT. Sinar Sosro, except for the vitamin C content analysis, which was done using the uv-vis spectrophotometer at 265 nm. The result shows that the strawberry kiwi soda stored for 4 weeks at room temperature and chiller remains stable in terms of the CO_2 concentration, Brix, pH, L value, and acidity ($p>0.05$). However, there were several significant differences noticed in the vitamin C content, a* and b* values, along with the sensorial properties of the strawberry kiwi soda ($p<0.05$). Other than that, the comparison between samples stored at room temperature and the chiller shows that storage temperature significantly affects the CO_2 concentration, color, and also the vitamin C content in samples ($p<0.05$), where the samples stored at room temperature have lower CO_2 concentration with stronger yellow color, and lower vitamin C content compared to the samples stored in the chiller.

Keywords: Strawberry, Kiwi, Stability, Vitamin C, Physicochemical Analysis