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**Color Stability and Antioxidant Activity of Red Roselle (*Hibiscus Sabdariffa L.*)
Calyx Infuse**

ABSTRACT

The roselle flower (*Hibiscus sabdariffa L.*), is known as a potential functional food source because of its antioxidant and antibacterial properties. Apart from that, it is also used as a natural dye because of its red color. Antioxidant compounds in roselle flowers include neo-chlorogenic acid, chlorogenic acid, cryptochlorogenic acid, routine, and isoquercitrin. The high content of these antioxidant compounds often causes color instability. For this reason, this research will analyze the effect of temperature and long storage on color changes and the antioxidant activity of a red roselle flower infusion. Storage conditions are carried out with three temperature variations, namely cold temperature (2–8 oC), cool temperature (8–15 oC), and room temperature (15–30oC), with a long storage of 8 days. The stability parameters used are color changes and activity as an antioxidant. Color changes were measured using a chromameter, while the antioxidant activity was measured by the IC50 value using the DPPH method. The principle of this method is that a purple color change reaction based, which fades, and then the inhibitory intensity against DPPH is measured using UV-Vis spectrophotometer. It was found that the color values have significant differences visible from the first day storage at the room temperature (30oC), cool temperature (11oC), and cold temperature (6 oC). So, there was an influence of temperature and long storage on the color change of boiled red roselle flower calyx. A significant decrease in activity was seen on the first day storage at room temperature (30 oC) and third day storage at cool temperature (11 oC). Meanwhile, at cold temperatures (6 oC), there was no significant effect on the reduction in activity from boiling red roselle flower calyx for up to 8 days of storage

Answer the Questions Below with the Correct Answer!

1. What is the abstract about?
2. Why the study is important?
3. How does the researcher conduct the study?
4. What is the result of this study?
5. What is the benefit of Roselle Flower?

A. Fill in the Blank by Using the Appropriate Word Provided on the Box!

Was talking	While	Structured	Is going to take	Is talking
Taught	Came	Will take		

1. Mr. Faruk _____ us how to mix medicine.
2. She stepped on a nail _____ walking around the construction site.
3. Curriculum vitae should be short, clear, and _____
4. Alexander _____ his driver's test next week.
5. When I _____ into busy office, the secreatry _____ on the phone with a customer.

~ Good Luck ~