

Innovation of Shallots Ethanol Extract Spray Formula as an Antipyretic in Mice

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Abstract. The use of traditional medicine was an alternative for ancient people to reduce fever, especially in children. Shallots are a multi-functional spice that can function as a traditional medicine. Shallots contain flavonoid compounds which are believed to provide antipyretic effects as inhibitors of the cyclooxygenase (COX) enzyme which plays a role in the formulation of prostaglandins which cause an increase in body temperature. In this research, shallots were formulated in spray form because they are practical and easy to carry anywhere. This study aims to analyze the effect of using shallots ethanol extract spray on reducing body temperature in white mice that have been induced by the Diphtheria, Pertussis, and Tetanus (DPT) vaccine. This research includes quantitative research with an analytical experiment with a Post-Test only control group design with a population of mice given the shallots extract spray formula. This research was conducted by making three shallots extract spray formulas with the composition of each 40 ml preparation containing F₁ shallots extract for 5 ml; F₂ for 10 ml; and F₃ for 15 ml, of these three spray preparations, a temperature reduction test was carried out on mice. The research results of the three shallots extract spray formulas, were effective in formulas F₂ (10 ml) and F₃ (15 ml) for reducing the temperature reduction with mice. The three shallots extract spray formulations that can effectively reduce temperature are F₂ and F₃.

Keywords: Antipyretic, DPT, Shallots, Spray