

## ABSTRACT

**Nurul Izzah H.L. Pasi. 2015. "Formulation and Evaluation of physical stability of Lime extract gel (*Citrus aurantifolia*)." Scientific Paper. Study Program of DIII Pharmacy, Department of Pharmacy, Faculty of Health Sciences and Sports, State University of Gorontalo. The principal supervisor was Mohamad Adam Mustapa. S.Si., M.Sc. and Co-supervisor was Nurain Thomas, S.Si., M.Si., Apt.**

Lime (*Citrus aurantifolia*) is known as plant which is rich of vitamin C where the content of vitamin C has function to obstruct the skin hyper pigmentation. This research aimed at formulating and evaluating lime extract physical stability in form of gel supply by using HPMC concentration variation as gel basic. In this research, it was made 3 formulas in which each formula contained of the same components namely lime extract as active material, propylene glycol as humectants, trietanolamin as wetting agents, methyl paraben as preservative and HPMC which the concentration is varied; 1%, 1,5%, and 2%. All formulas were evaluated through organeoleptic test, homogeneity test, pH test, and Viscosity test of supply in 6 cycles. The research result showed that based on the evaluation, the formula with 2% concentration of HPMC had good physical stability and it did not have significant difference.

**Keywords: Lime (*Citrus aurantifolia*), Gel, Physical Stability Evaluation**

