ABSTRACT

MURNIYANTI JUNITA YUSUF. 2015. Formulation and evaluation of *effer vescent* granules of dry powder of ginger *(Zingiber officinale* .Rosc.) With various concentrations of Na CMC as a binder. KTI. D-III program of Pharmacy, Department of Pharmacy, Faculty of Health Sciences and Sport, State University of Gorontalo. Supervisor I: Hamsidar Hasan S.Si., M.Sc., Apt and Supervisor II: Robert Tungadi S.Si., M.Sc., Apt.

Ginger is one of the plants that have gingerol compounds that have antioxidant activity is quite high which is widely used as a drug such as strep throat. Utilization of red ginger *(Zingiber officinale* .Rosc.) Is used as a mixture of food and beverages that can be formulated in *effervescent* dosage form. This study aims to formulate and evaluate the dry powder of red ginger *(Zingiber officinale* .Rosc.) Into the dosage form *of effervescent* granules. Making the beverage is made in three *effervescent* granule formula of red ginger *(Zingiber officinale* .Rosc.) With different concentrations of Na CMC as a binder (FI) 0.5%, (FII) 1%, (FIII) 1.5%, and the variation the ratio of sodium bicarbonate and acid (citric acid and tartat acid) derived from the ratio citric acid: acid tartat: Na bicarbonate (1: 2: 3.4) with various concentrations of citric acid (FI) 11.56% (FII) 11.40%, (FIII) 11.17%, acid tartat (FI) 23.12%, (FII) 22.8%, (FIII) 22.34% and Na bicarbonate (FI) 39.3%, (FII) 38.78%, (FII) 37.96%, which then became the preparation *of effervescent* and *effervescent* granules that are evaluated include organoleptic test, test water levels, flow rate test, test and test time silent corner soluble. Results of the evaluation showed that the formula 3 is an *effervescent* granule formula that has the best treatment. Parameters tested include hedonic test analysis results of 50%, 3% water content test, test flow rate of granules 7.32 g / s, resting angle of 7.32 ° test and test time 20 minutes 15 seconds late ,

Keywords : *Effervescent,* As. Citrate, As. Tartat, Na.bikarbonat, Na CMC, ginger.