

## ABSTRACT

### **FORMULATION AND EVALUATION OF EFFERVESCENT CHITOSAN GRANUL SUSPENSION IN MANGROVE CRAB (*Scylla serrata*) AS A CHOLESTEROL SUPPLEMENT USING CITRIC ACID AND TARTRIC ACID BY THE WET GRANULATION METHOD**

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*Crabs only consume about 20% of their body weight, so 80% is in the form of crab shell waste. Crab shells have a content that will have high economic value if converted into chitosan compounds. Chitosan has the benefit of lowering cholesterol levels because chitosan can bind fat and inhibit fat absorption by the body. Chitosan at a dose of 55 mg has been proven effective in lowering cholesterol level. Chitosan synthesis was obtained by removing three major components, namely protein through deproteination and calcium carbonate by demineralization and acetyl groups by deacetylation. In the angle of repose test, the F1 results obtained an average of 22,600 while the F2 was 26,500. The flow rate test obtained an average result of F1 25.68 g/sec and F2 34.66 g/sec. The water content test obtained an average F1 result of 0.6% and F2 of 2.3%, the particle size distribution test obtained results for F1 of 6.1% and F2 of 2.4%. The dispersion time test obtained the results of F1 2.59 minutes and F2 1.39 minutes, for the high froth test obtained results of F1 3.3 cm and F2 4.6 cm, pH test result obtained F1 6.33 and F2 6.4 viscosity test results obtained F1 1.55 mPa.S and F2 1.84 mPa.S. From several tests, F2 has better results than F1, as evidenced by the results of faster flow time, smaller % fines, and faster dispersion time.*

**Keywords :** *chitosan, Scylla serrata , granule, wet granulation, effervescent.*