

## **ABSTRACT**

### **FORMULATION AND EVALUATION OF CHITOSAN TABLETS FROM SHELLS OF MANGROVE CRAB (*Scylla serrata*) WITH THE DIFFERENCE OF CO-PROCESSED EXCIPIENT PRIMOGEL 4% AND 8% AS DISINTEGRANTS (Prepared with Direct Compression Method)**

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*Crabs contain the highest percentage of chitin (70%) among crustaceans, insects, worms and fungi. According to research, mud crab shells contain chitin compounds that can be converted into chitosan as an ingredient for making anti-cholesterol tablets. In this study, mangrove crab shell chitosan was obtained by deacetylation and then the chitosan tablets were made into 2 formulas, the first formula using coprocessed excipients with 4% primogel and the second formula using co-processed excipients with 8% primogel. Then the tablet printing process was carried out using the direct compression method with the aim that the chitosan was stable and not damaged. After the tablets were printed, the tablets were evaluated and the results showed that the formula only met the requirements for the tablet weight uniformity test, tablet friability test, tablet hardness, tablet disintegration time and did not meet the tablet size uniformity requirements. Then the results of the evaluation were tested statistically using the SPSS Independent T Test. The test results show that there is no significant difference between F1 and F2. Thus, it can be concluded that chitosan from mud crab (*Scylla serrata*) shells can be formulated into tablet preparations from co-processed excipients by direct compression method. And there was no significant difference between Primogel content of 4% and 8% as a disintegrant to the characteristics of chitosan tablets from the shells of mud crab (*Scylla serrata*). So in the next research, it can be done using Primogel concentration which is further different to see its effect on the chitosan tablet to be made.*

*Keywords : tablet, *Scylla serrata*, primogel, direct compression*