# *ABSTRACT*

***FORMULATION AND EVALUATION OF MANGROVE CRAB SHELL CHITOSAN TABLETS (Scylla serrata) FROM CO-PROCESSED EXCIPIENT WITH PEG 4000 RATIO 10% AND 20% AS MELTABlE BINDER (Prepared with Direct Compression Method)***

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*Lifestyle patterns that occur in major cities, especially in Indonesia, affect poor diet, namely foods high in calories, fat and cholesterol, this has an impact on the increased risk of various diseases. One of the diseases caused by changes in lifestyle patterns is hypercholesterolemia. Chitosan can be used as an anti-cholesterol drug at a dose of 55 mg. The shell of the mangrove crab (Scylla serrata) contains chitin (50% - 60%), where this chitin can be converted to chitosan. In this study will be made chitosan tablets as antiolesterol using co-processed excipient by melt granulation method. The advantages of this direct smelting method are simple and economical, because it is not require solvents and can be done quickly. PEG 4000 10% and 20% as binding materials and The tablet printing method used is the direct felt method where the direct felt is an easy method*

*Based on the results of the study, the tablets have met each of the requirements and there are some that do not meet the evaluation test, namely the weight uniformity test where F1 358mg and F2 362mg meet the requirements of no more than two tablets whose weight is more than 10%, the tablet fragility test is F1 0.510% and F2 11% then F1 meets the fragility requirement, which is less than 1% and F2 does not meet the fragility requirement., the tablet hardness test, namely F1 7.3 kgf and F2 7.05 kgf, the test met in the range of 4 – 8 kgf and the tablet crush time test, which was F1 19.17 minutes and F2 14.14 minutes met the requirement, which was less than 15 minutes. However, it does not meet the requirements for the size uniformity test because the tablet diameter is more than 3 times the thickness of the tablet, namely F1 1.0105 cm and F2 1.0125. Then the results of the evaluation were tested statistically using the SPSS Independent T test and the results showed that F1 and F2 did not have a significant difference.*

***Keyword :*** *Chitosan, Co-processed excipient, evaluation, meltable binder, PEG 4000*