ABSTRACT

FORMULATION AND EVALUATION OF CHITOSAN TABLETS FROM MUD CRAB SHELL (Scylla serrata) USING CO PROSSESED EXCIPIENT LACTOSE PVP K-30 AND CORN STARCH 8% AND 10% AS DISINTEGRANTS

(Made With Direct Print Method)

Erin Anasta Syafrilla

Chitosan from mud crab shells has been proven to be effective in reducing cholesterol levels, which is more effective (82.05%) than commercial chitosan from shrimp shells (74.37%). Therefore, chitosan needs to be formulated into tablet preparations to make it easier to consume as an anticholesterol. The ingredients used as co-processed excipient in this formulation are PVP K-30 1% as a binder, and corn starch 8% and 10% as a crushing agent. The tablet manufacturing method used is the direct compression method. After being compressed, the tablet will be evaluated which includes a weight uniformity test, a size uniformity test, a hardness test, a friability test and a disintegration time test. Then the results of the evaluation will be tested statistically using the SPSS Independent T Test. From the evaluation results, it can be concluded that the chitosan obtained from the shells of mud crab (Scylla serrata) can be formulated into tablet preparations using co-processed excipient lactose-PVP K-30 Corn starch 8% and 10% by direct compression method. The results of the evaluation of chitosan tablets from the shells of mangrove crabs (Scylla serrata) met the requirements for weight uniformity and tablet hardness tests. And did not meet the respective requirements for the tablet size uniformity test, tablet friability test, and tablet disintegration time test. So in the next research, it can be done by using the concentration of corn starch which is further different to see its effect on the chitosan tablets to be made.

Keywords: Scylla serrate, chitosan, tablet, corn starch, direct compression