

ABSTRACT

SUSPENSION FORMULATION OF EFFERVESCENT CHITOSAN GRANULES MANGROVE CRAB (*Scylla serrata*) WITH VARIATION OF PVP K-30

Luthfiah Hanif

Mud crabs contains chitosan in their shells. Chitosan is synthesized through three stages, namely demineralization, deproteination, and deacetylation. After that chitosan was evaluated, the results of % yield is 70%, deacetylation degree 77,89%, ninhydrin showed a purple color, moisture content 4.67%, and ash content 0.4502%. Chitosan has effectiveness as an anticholesterol but has poor solubility in water. The solubility property of chitosan itself is slightly soluble in water. Therefore, chitosan can be made in pharmaceutical preparations, namely effervescent granules suspension. This study aims to formulate an effervescent granule suspension of chitosan with various concentrations of PVP K-30 as a binder. The method of making effervescent granules was carried out by wet granulation. Effervescent granule suspension is formulated with PVP K-30 concentrations of 1%(F1) and 3%(F2). The effervescent granules obtained were carried out an organoleptic evaluation before reconstitution, moisture content, flow rate, angle of repose, particle size distribution, % fines, dispersion time, foam height, pH test, viscosity, organoleptic evaluation after reconstitution and hedonic by 20 panelists. Then the evaluation results were tested statistically using the SPSS Independent T-test. From the statistical test results, there was a significant difference between F1(1%) and F2(3%), that is the organoleptic test parameters for taste by 20 panelists. Based on the research result, F2 (3%) is better than F1(1%) because it shows good flow, smaller angle of repose, pH close to neutral, and faster dispersion time.

Keywords: *Chitosan, PVP K-30, Effervescent Granule Suspension, Physical Characteristics*