

ABSTRACT

THE EFFECT OF VARIATION IN LEVELS OF CITRIC ACID AND TARTIC ACID ON FORMULATION OF EFFERVESCENT GRANULE SUSPENSION CHITOSAN MANGROVE CRAB SHELL (*Scylla serrata*) AS A CHOLESTEROL LOWERING SUPPLEMENT (Made Using the Dry Granulation Method)

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Scylla serrata is one of the crustacean species which produce chitosan as a cholesterol-lowering supplement. The results of the evaluation of chitosan were 69.92% for Randemen, $77.89 \pm 0.82\%$ for Degree of Deacetylation, $0.22 \pm 0.09\%$ for Ash Content, $4.6 \pm 3.1\%$ for Moisture Content and produced a purple color on the evaluation of the Ninhydrine test. The purpose of making a chitosan effervescent granule suspension formulation for mangrove crab shells was to determine the effect of variations in citric acid and tartaric acid levels on the evaluation of the effervescent granule suspension formulation results. Suspension of chitosan effervescent granules of mangrove crab shells was prepared in two formulas with varying concentrations of citric acid and tartaric acid, F1(10%:20%) and F2(13%:26%). Formula 1 the results of testing for water content were 2%, flow time was 2.4 seconds, angle of repose was 26° , dispersion time was 2.6 minutes, and pH was 5.56. Formula 2, the results of testing for water content were 1.3%, flow time was 4.7 seconds, angle of repose was 20° , dispersion time was 2.7 minutes, and pH was 4.38. It was concluded that the variations in levels of citric acid and tartaric acid in the evaluation of effervescent granule suspension Formula 1 and Formula 2 have met the requirements except for the pH in Formula 2 which does not meet the requirements. Formula 1(10%:20%) is the best formula because it produces a smaller angle of repose, faster flow time, the resulting pH is close to neutral, faster dispersion time and hedonic on the preferred color, taste, aroma.

Keywords: Chitosan, Effervescent Granule Suspension, Citric Acid, Tartic Acid