

## ABSTRACT

### **FORMULATION OF CHITOSAN EFFERVESCENT GRANULE SUSPENSION OF MANGROVE CRAB (*Scylla serrata*) SHELLS WITH VARIOUS SUSPENDING AGENT XANTHAN GUM DAN CMC Na**

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*Mud crab shell (*Scylla serrata*) contains chitosan which is used for anti-hypercholesterolemia. Chitosan synthesis includes demineralization, deproteination and deacetylation. Evaluation of chitosan included tests for the degree of deacetylation, yield, organoleptic, moisture content, ash content. Chitosan test results deacetylation degree (77.89±0.81%), ninhydrin (purple), yield (69.92%), organoleptic (powder, white to pale yellow, and odorless), moisture content (4.6±3.05%), ash content (0.2±0.09%). Evaluation of effervescent granules before reconstitution, namely flow rate, angle of repose, moisture content and particle size distribution (% fines). Evaluation after reconstitution, namely dispersion time, foam height, organoleptic, pH, viscosity, hedonic. Evaluation results before reconstitution flow rate F1 (21.12±2.62 g/s) and F2 (23.27 ± 0.89 g/s). Angle of repose F1 (22.31±1.53°) and F2 (24.51±1.85°). Moisture content of F1 (4.3±2.10%) and F2 (9.2±1.03%). % fines F1 (6.95 ± 9.03%) and F2 (6.86±2.11%). Evaluation results after reconstitution of the dispersion time F1 (2.03 ± 0.15 minutes) and F2 (3.2 ± 0.25 minutes). Foam height F1 (5±1 cm) and F2 (4.6±1.15 cm, pH F1 (5.82) and F2 (8.31) Viscosity F1 (1.97±0.19 mPa.S) and F2 (1.94 ± 0.14 mPa.S).The formulation in this study had the effect of different suspending agents on the evaluation of moisture content, dispersion time and pH.The best suspending agent formulation was formula 1 with the suspending agent xanthan gum.*

**Keyword** : crab, chitosan, effervescent granule suspension, suspending agent