

## INTISARI

Ikan gabus (*Channa striata*) bermanfaat dalam bidang kesehatan karena mengandung protein, albumin, asam-asam amino, asam lemak, serta mineral lainnya, sehingga berpotensi untuk dikembangkan menjadi *food supplement*. Penelitian ini bertujuan untuk mengetahui pengaruh variasi konsentrasi gom arab terhadap sifat fisik dan stabilitas emulsi serta mengetahui konsentrasi gom arab yang akan menghasilkan emulsi minyak ikan gabus yang memenuhi syarat fisik dan stabilitas emulsi.

Formula emulsi minyak ikan gabus di buat dengan variasi konsentrasi gom arab (10%, 12,5%, 15%, 17,5%). Emulsi minyak ikan gabus dibuat dengan metode gom kering. Evaluasi emulsi meliputi evaluasi sifat fisik, evaluasi satabilitas dan uji hedonik. Evaluasi sifat fisik meliputi organoleptik, pengukuran pH dan pengukuran viskositas. Evaluasi stabilitas meliputi uji sentrifugasi dan uji volume *creaming*. Data pengukuran pH dan viskositas yang diperoleh dianalisis secara statistik dengan uji anova dengan taraf kepercayaan 95%, kemudian dilanjutkan dengan uji *Least Significant Different* (LSD) sedangkan data organoleptik dan uji stabilitas dilakukan analisis deskriptif. Data uji hedonik dianalisis menggunakan analisis deskriptif persentase.

Hasil penelitian menunjukkan bahwa penambahan konsentrasi gom arab pada emulsi minyak ikan gabus dapat meningkatkan viskositas dan stabilitas emulsi secara signifikan. Tetapi tidak berpengaruh pada pH dan organoleptik selama proses penyimpanan. Formula IV dengan konsentrasi gom arab 17,5% merupakan Formula yang memenuhi syarat uji sifat fisik, stabilitas dan rasa yang paling disukai.

**Kata kunci:** *Channa striata*, *Supplement*, Emulsi, Stabilitas.

## ABSTRAK

Snakehead fish (*Channa striata*) is useful in the field of health because it contains protein, albumin, amino acids, fatty acids, as well as other materials. This study aims to determine the effect of variations in the concentration of gum arabic on the physical properties and stability of emulsion and determine of gum arabic which will produce snakehead fish oil emulsion with eligible physical properties and stability.

Formulations of snakehead fish oil emulsion with variations of gum arabic (10%, 12,5%, 15%, 17,5%). Snakehead fish oil emulsion is prepared by dry gum method. Evaluation of the emulsion includes physical properties, stability, and hedonic. Physical properties evaluations includes organoleptic, measurement of pH and viscosity. Stability evaluations includes centrifugation test and *creaming* volume test. pH and viscosity measurement data were analyzed statistically ANOVA test with significance level of 95%, followed by Least Significant Different test (LSD) while organoleptic, stability, and hedonic data was analyzed by descriptive analysis.

The results showed that the addition of gum arabic concentration in snakehead fish oil emulsion can increase the viscosity and stability significantly. But has no effect on pH and organoleptic during the storing process. Formula IV with a concentration of 17,5% gum arabic is the formula that is most eligible because it meets the qualification of physical properties, stability and most favorite regarding flavor.

**Keywords:** *Channa striata*, Supplement, Emulsion Stability.