

## RINGKASAN

DARWIN. Keamanan Pangan Kerupuk Ikan yang diproduksi dari Beberapa Unit Usaha di Kabupaten Bintan, Kepulauan Riau. Dibimbing oleh JUMSURIZAL dan YULIA OKTAVIA.

Keamanan pangan merupakan salah satu hal yang harus dilakukan untuk menghindari cemaran mikroba pada makanan dan bahan kimia yang dapat menyebabkan gangguan pada kesehatan manusia. Kerupuk merupakan produk kering dibuat dari bahan yang mengandung pati cukup tinggi. Tujuan dari penelitian ini adalah untuk mengetahui tingkat keamanan pangan dari kerupuk ikan di Kabupaten Bintan serta melakukan analisis terhadap kandungan gizi yang terdapat pada kerupuk ikan tersebut. Penelitian ini dilakukan pada bulan Oktober-Desember 2021 di Laboratorium *Marine Biotechnology* sarta Laboratorium *Marine Chemistry*, Universitas Maritim Raja Ali Haji, sedangkan pengujian proksimat dilaksanakan di Laboratorium Saraswanti Indo Genetech, Bogor, Indonesia. Penelitian ini menggunakan rancangan acak lengkap dengan 5 perlakuan, data dianalisis dengan *one way* ANOVA, jika hasil berpengaruh nyata, kemudian dilakukan uji lanjut DMRT pada tingkat keakuratan 95%. Penelitian ini memiliki 4 parameter uji yaitu pengujian kapang, boraks, formalin, dan proksimat. Hasil penelitian yang diperoleh yaitu angka kapang/khamir pada sampel K1  $3 \times 10^1$ , K2  $<10$ , K3  $4,8 \times 10^2$ , K4  $1,2 \times 10^4$  dan K5  $2,9 \times 10^2$  koloni/g. Hasil kandungan boraks untuk sampel K1 (2,4%), K2 2,05%, K3 1,65%, K4 0,6% dan K5 1,7% b/b. Pengujian kandungan formalin pada sampel K2 positif mengandung formalin. Hasil dari sampel K2 menunjukkan konsentrasi kadar formalin sebesar 4,44 mg. Hasil kandungan gizi kerupuk ikan di Kabupaten Bintan pada K1 kadar air 12,61%, abu 3,77%, protein 12,84%, lemak 0,54%, serat kasar 0,58%, K2 kadar air 10,47%, abu 5,18%, protein 18,19%, lemak 0,64%, serat kasar 0,54%, K3 kadar air 8,57%, abu 3,50%, protein 14,88%, lemak 0,54%, serat kasar 0,36%, K4 kadar air 12,20%, abu 3,45%, protein 11,06%, lemak 0,91%, serat kasar 0,62%, dan K5 kadar air 11,36%, abu 3,38%, protein 10,29%, lemak 0,25, serat kasar 0,95%. Kesimpulan dari keamanan pangan untuk boraks dan formalin belum sesuai dengan PERMENKES RI No.722/Menkes/Per/IX/1988. Hasil pengujian boraks yang menunjukkan konsentrasi kadar boraks disetiap sampel dan untuk formalin pada sampel K2 menunjukkan positif mengandung formalin.

Kata kunci: Keamanan Pangan, Kerupuk Ikan, Proksimat

## SUMMARY

Darwin. Safety Food Fish crackers produced from some business units in Bintan Regency, Riau Islands. Supervised by JUMSURIZAL and YULIA OKTAVIA.

Food safety is way to prevent microbial and chemical contamination of food that cause damage or disturbance to human health. Crackers are dry products made from ingredients that contain high levels of starch. The objection of this study was to determine the level of food safety of fish crackers in Bintan Regency and to measure the nutritional content of these fish crackers. This research was conducted in October-December 2021 at Marine Biotechnology Laboratory and Marine Chemistry Laboratory, at Raja Ali Haji Maritime University. Measurement of nutritional content was carried out at Saraswanti Indo Genetech Laboratory, Bogor, Indonesia. This research was done in a completely randomized design with 5 treatments, the data were analysed using one-way ANOVA, if the results had a significant effect, then the DMRT follow-up identification was carried out at an accuracy level of 95%. The identification parameters observed were the identification of total yeast and mold count, borax, formalin, and nutritional content. The results showed total yeast and mold count in samples K1  $3 \times 10^1$ , K2  $<10$ , K3  $4.8 \times 10^2$ , K4  $1.2 \times 10^4$ , and K5  $2.9 \times 10^2$  colony/g. Results of borax content for samples K1 2.4%, K2 2.05%, K3 1.65, K4 0,6%, and K5 1.7% w/w. K2 sample contain positive for formalin. The results of the K2 sample showed a concentration of 4.44 mg of formalin. Nutritional content of fish crackers on K1 moisture content 12.61%, ash 3.77%, protein 12.84%, fat 0,54%, crude fiber 0,58%, K2 moisture content 10.47%, ash 5.18%, protein 18.19%, fat 0.64%, crude fiber 0.54%, K3 moisture content 8.57%, ash 3.50%, protein 14.88%, fat 0.54%, crude fiber 0.36%, K4 moisture content 12.20%, ash 3.45%, protein 11.06%, fat 0.91%, crude fiber 0.62%, and K5 moisture content 11.36%, ash 3.38%, protein 10.29%, fat 0.25%, crude fiber 0.95%. The conclusion of food safety identification for borax and formalin, they are not in accordance with PERMENKES RI No.722/ Menkes / Per / IX / 1988. The results of the borax identification showed the concentration of borax in each sample and for formalin in sample K2 it showed positive for formalin.

Keywords: Food Security, Fish Crackers, Proximate Analysis