

INTISARI

PENGARUH METODE PENGASAPAN, BUMBU CAIR, DAN STERILISASI TERHADAP KANDUNGAN GIZI SERTA NILAI CERNA PROTEIN IKAN MANYUNG DALAM *RETORT POUCH*

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Penelitian ini bertujuan untuk mengetahui pengaruh metode pengasapan, penambahan bumbu cair, dan proses sterilisasi terhadap kandungan gizi serta nilai cerna protein secara *in vitro* pada ikan manyung asap yang dikemas dalam *retort pouch*. Ikan manyung yang digunakan diasap dengan metode asap konvensional dan asap cair. Pada perlakuan asap cair, ikan manyung direndam pada konsentrasi asap cair 6% selama 30 menit, ditiriskan 15 menit, lalu dioven pada suhu 100°C selama 2 jam sedangkan pada asap konvensional diasap selama 10 menit menggunakan bonggol jagung. Setiap kemasan *retort pouch* berisi 50 gram ikan manyung asap tanpa tulang dan kulit, serta terdapat perlakuan penambahan bumbu cair berupa kuah mangut sebanyak 10ml. Pengujian yang dilakukan meliputi uji kadar protein, lemak, abu, dan air serta nilai cerna protein *in vitro*. Hasil penelitian menunjukkan bahwa metode pengasapan yang berbeda memberikan pengaruh nyata pada kandungan protein, lemak, dan abu; proses sterilisasi pada ikan manyung asap cair memberikan pengaruh nyata pada kandungan lemak dan nilai cerna protein sedangkan pada ikan manyung asap konvensional memberikan pengaruh nyata pada kandungan air, protein, lemak, dan nilai cerna protein; penambahan bumbu cair pada sampel ikan manyung asap cair maupun konvensional memberikan pengaruh nyata pada kandungan air, lemak, dan nilai cerna protein. Kadar air berkisar 51-57%, kadar protein (db) berkisar 51-67%, kadar lemak (db) berkisar 2-5%, kadar abu (db) berkisar 3-4%, dan nilai cerna protein *in vitro* (wb) berkisar 46-57%. Hasil yang didapat menunjukkan bahwa proses sterilisasi merupakan metode pengolahan lanjutan yang tepat dilakukan karena dapat mempertahankan kandungan gizi dan nilai cerna protein.

Kata kunci : ikan manyung asap, kandungan gizi, nilai cerna protein *in vitro*, *retort pouch*, sterilisasi

ABSTRACT

EFFECT OF SMOKING METHOD, LIQUID SEASONING, AND STERILIZATION ON NUTRITIONAL CONTENT AND PROTEIN DIGESTIBILITY OF MANYUNG FISH IN RETORT POUCHES

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This research aimed to determine the effect of smoking method, addition of liquid seasoning, and sterilization process on the nutritional content and in vitro protein digestibility value of smoked manyung fish packed in retort pouches. The manyung fish used were smoked using conventional and liquid smoke methods. In the liquid smoke treatment, manyung fish were soaked at 6% liquid smoke concentration for 30 minutes, drained for 15 minutes, then oven at 100⁰C for 2 hours while in the conventional smoke method, they were smoked for 10 minutes using corn cobs. Each retort pouch contains 50 grams of smoked manyung fish without bones and skin, and there is a treatment of adding liquid seasoning in the form of mangut sauce as much as 10ml. Tests conducted included protein, fat, ash, and water content tests as well as in vitro protein digestibility value. The results showed that different smoking methods had a significant effect on protein, fat, and ash content; the sterilization process on liquid smoked manyung fish had a significant effect on fat content and protein digestibility value while on conventional smoked manyung fish had a significant effect on water content, protein, fat, and protein digestibility value; the addition of liquid seasoning to both liquid and conventional smoked manyung fish samples had a significant effect on water content, fat, and protein digestibility value. Water content ranged from 51-57%, protein content (db) ranged from 51-67%, fat content (db) ranged from 2-5%, ash content (db) ranged from 3-4%, and in vitro protein digestibility value (wb) ranged from 46-57%. The results obtained indicate that the sterilization process is an appropriate advanced processing method because it can maintain the nutritional content and protein digestibility value.

Key words: smoked manyung fish, nutrient content, in vitro protein digestibility, retort pouch, sterilization