



## INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh sterilisasi terhadap karakteristik flavor dan sifat organoleptik lele asap kemasan kaleng dengan berbagai bumbu tradisional khas Indonesia. Penelitian ini menggunakan 3 perlakuan, diantaranya sambal balado, sambal goreng dan rendang. Karakteristik flavor dan sifat organoleptik dilakukan pada sampel sebelum dan sesudah proses sterilisasi. Analisis senyawa flavor dilakukan dengan menggunakan *solid phase microextraction gas chromatography-mass spectrometry* (SPME-GCMS), sedangkan sifat organoleptik dilakukan dengan metode *quantitative descriptive analysis* (QDA). Alat analisis SPME-GCMS mendeteksi berbagai senyawa flavor dalam sampel. Secara umum, variasi senyawa yang terdeteksi pada sampel sesudah sterilisasi lebih banyak daripada sampel sebelum sterilisasi. Sebanyak 52 jenis senyawa flavor terdeteksi dalam perlakuan sambal balado sebelum dan sesudah sterilisasi. Sedangkan variasi senyawa flavor dalam sambal goreng dan rendang mengalami peningkatan, berturut-turut 50 senyawa menjadi 63 senyawa, dan 77 senyawa menjadi 92 senyawa. Senyawa tersebut terbagi menjadi beberapa golongan, diantaranya fenol, furan, aldehyd, alkohol, keton, ester, alkana, alkena, benzen, terpen dan senyawa lainnya dengan variasi senyawa yang terdeteksi secara berurutan. 13, 8, 8, 18, 19, 8, 35, 45, 6, 54, dan 11 jenis. Proses sterilisasi dalam pengalengan tidak merubah sifat organoleptik secara signifikan pada produk lele asap kemasan kaleng berbumbu tradisional khas Indonesia, hal tersebut berdasarkan hasil QDA yang menunjukkan bahwa tidak ada perubahan nilai secara nyata dari intensitas flavor yang terdeteksi oleh panelis terlatih pada semua sampel.

Kata kunci: bumbu tradisional khas Indonesia, lele asap kemasan kaleng, QDA, senyawa flavor, SPME-GCMS, sterilisasi.



## ***ABSTRACT***

This research aimed to determine the sterilization effect on the flavor characterization and organoleptic properties of canned smoked-catfish in various authentic Indonesian seasoning. This research consisted of 3 treatments, which were sambal balado, sambal goreng and rendang. Flavor characterization and organoleptic properties were performed on samples before and after the sterilization process. Analysis of flavor compounds was performed using solid phase microextraction gas chromatography-mass spectrometry (SPME-GCMS), whereas organoleptic properties was done by quantitative descriptive analysis (QDA) method. The SPME-GCMS analysis tool detected various flavor compounds in the sample. In general, the variation of compounds that detected in the samples after sterilization were more than the samples before sterilization. The total 52 types of flavor compounds were detected in sambal balado treatment before and after sterilization. In contrast, the variation of flavor compounds in sambal goreng and rendang were increased, 50 compounds to 63 compounds, and 77 compounds to 92 compounds, respectively. The volatile compounds were subdivided into groups of phenols, furans, aldehydes, alcohols, ketones, esters, alkanes, alkenes, benzene, terpenes and other compounds with variation of the detected compounds were 13, 8, 8, 18, 19, 8, 35, 45, 6, 54, and 11 types, respectively. The sterilization process in canning did not significantly change the organoleptic properties of canned smoked-catfish in various authentic Indonesian seasoning products, it was based on the QDA results that indicating there was no change in the value of flavor intensity detected by trained panelists in all samples.

**Keywords:** authentic Indonesian seasoning, canned smoked-catfish, flavor compounds, SPME-GCMS, QDA, sterilization.