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## **Dynamic Headspace Analysis of Volatile Aroma Compounds in Fresh and Deteriorated Mackerel (*Scomber scombrus*)**

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Volatile aroma compounds of mackerel samples (fresh, and frozen at  $15\pm 2^{\circ}\text{C}$  (FR)) were analyzed by a dynamic headspace concentration chromatography/mass spectrometry (DHA/GC/MS) method. Compounds identified by MS were confirmed by comparing their mass spectra to those of standard compounds. Out of 65 peaks, 26 different volatiles were identified. Among the identified compounds were 4 aldehydes, 3 ketones, 3 alkanes, 3 sulfur-containing compounds and an acid. The alcohols, esters and alkanes generally give fresh fish aroma, whereas aldehydes, ketones and acids give off-odors in mackerel. Although no sulfur

compounds were found in fresh mackerel, approximately 74% of t was occupied by dimethyl disulfide alone in FR mackerel.

**Keywords:** [DHA/GC/MS](#), [volatile aroma compounds](#), [aroma qual](#)

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