



## Effect of packaging material on inhibitory migration of trimethylamine of dried squid

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Fishy odor is a typical chemical compound of seafood products, either fresh or dried sample. The fishy chemical compound is mainly from degradation of protein including trimethylamineoxide (TMAO), formaldehyde (FA) and trimethylamine (TMA) causing bad smell. This research was to compare the inhibitory migration of packaging material on trimethylamine of dried squid. Two different packaging materials used for packing dried squid were polypropylene film (PP) and laminate film (NYLON/LLDPE). All test samples were kept at room temperature (25°C) for one month. The volatile fishy samples that released from the package were analyzed by using Gas Chromatography-Mass Spectrometry (GC-MS). Twelve compounds released from PP package were TMA, pentanoic acid, butanoic acid, pentadecane, eugenol, propanoic acid, 1-penten-3-ol, trimethylpyrazine, 2-nonanone, tetramethylpyrazine, 2,3,5-trimethyl-6-ethylpyrazine and acetic acid. No TMA was found if the dried squid was packed in NYLON/LLDPE bag. The results demonstrated the NYLON/LLDPE packaging material could inhibit the release of TMA of dried squid out of the package better than PP packaging material.

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