Development of canned tausi decapterus maruadsi fish mixed with black jelly mushroom

ABSTRACT

This research was carried out to develop canned tausi (salted black beans) fish mixed with black jelly mushroom (also known as wood ear mushroom or black fungus) (Auricularia polytricha). Analysis of physical properties, sensorial properties, and proximate content of the canned tausi fish mixed with black jelly mushrooms was carried out. There are three formulations with the composition of black jelly mushrooms at 8%, 9.40%, and 11%. From the hedonic sensory test, formulation 2 which contained 9.40% of black jelly mushroom was chosen as the best formulation of canned tausi fish mixed with black jelly mushroom. The best formulation had 66% sardine, 9.40% salted black bean, 9.40% black jelly mushroom, 9% water, 3.30% vegetable oil, 1% sweet soy sauce, and 0.44% garlic. This product was found to contain 51.7% moisture, 33.54% crude protein, 10.60% crude fat, 0.26% ash, 0.17% crude fibre, and 3.96% carbohydrate. Throughout six weeks of storage, this product was found to have a significant difference (p < 0.05) in pH value and colour. The microbiological test had shown that the best formulation was safe to be consumed as the total plate count for bacteria was 3.3×106 cfu/g while yeast and mold were 4.4×106 cfu/g on the sixth week of storage. In conclusion, adding Auricularia polytricha into tausi fish was not affected the product's sensory quality and shelf life.