ABSTRACT

Yoel Andita Noichi (0000001743)

SENSORY, PHYSICAL, AND CHEMICAL CHARACTERISTICS OF NUGGET FROM ANCHOVY
(xiii + 47 page: 12 figures, 8 tables, and 18 appendices)

Jengki anchovies (Stolephorus sp.) are one of many fish consumed in Indonesia. Jengki anchovies are bigger in size, but are less popular compared to other kind of anchovies even though it is very nutritious especially its protein. By processing the anchovy to produce nuggets, jengki anchovies are expected to be more widely used and better product diversification. This research was aimed to find out the best filler ratio and binder concentration by investigating its sensory characteristics and to analyze its chemical characteristics. The filler used was tapioka flour and corn starch with ratio of 1:1 and 1:2, as for the binder used is sodium tripolyphosphate with the concentrations of 2.5%, 5.0%, and 7.5%. Best filler ratio and binder concentration was determined by the results of scoring and hedonic test. The best nugget then analyzed by performing proximate analysis, texture profile analysis, paired comparison test, frying loss determination, and color analysis. The best filler ratio for nugget sensory characteristics was 1:2 while the best binder concentration was 2.5%. The color of anchovy nugget had less score than commercial fish nugget with the value of -1.84 while the smell of anchovy nugget also had less score than commercial fish nugget with the value of -0.53. The hardness and springiness value of anchovy nugget was significantly higher than the commercial fish nugget while the cohesiveness and chewiness was lower. Anchovy nugget contains 44.98 ± 2.60% of moisture and 3.66 ± 0.17% of ash which was significantly higher than commercial fish nugget, while the carbohydrate content of anchovy nugget was 11.19 ± 3.73% which was significantly lower than commercial fish nugget. Anchovy nugget contains 27.36 ± 1.53% of fat and 12.79 ± 1.94% of protein.

Keywords: Anchovy, fish nugget, filler, binder, sodium tripolyphosphate

References: 45 (1996-2015)