comparison of fish sausage from bighead carp and silver carp: texture, color and sensorial properties

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ABSTRACT
Silver carp and Bighead carp are the main freshwater fish species, due to their fast growth rate, easy cultivation, high feed efficiency ratio as well as high nutritional value. Fish sausage may be the one of favorable product because of safety properties. The aim of this work was to evaluate Silver carp and Bighead carp sausage from point of physical and sensorial properties. To prepare fish sausage, Silver carp and Bighead carp bought from Lake Aras from West Azerbaijan and transported to laboratory. Fish sausage processed with 70 and 80% fish mince. Texture, color and sensorial properties of trial fish sausages evaluated after one day setting. Result showed the highest hardness in Bighead sausage with 80% fish mince (P<0.05). Sausage prepared from 70 % Silver carp mince showed the lowest hardness (P<0.05). No significant difference between Bighead sausage (70%) and Silver carp sausage (80%) were observed (P>0.05). Because of pinkish color of Bighead carp, fish sausage prepared from this fish had pinkish color in comparison with Silver carp sausage. Lightness of 80% and 70% Bighead carp and 80% and 70% Silver carp were 75.86, 72.74, 70.32 and 67.11 respectively. Bighead sausage had higher a* than Silver carp sausage (P<0.05). Trial treatments had no significant differences among b* (P>0.05). Bighead sausage with 80% fish mince had the highest point in odor, flavor and overall acceptability in comparison with other treatments (P<0.05). Based on the results it is concluded that, 80% Bighead sausage have better quality than other sausage formulations.

Keywords: fish sausage, Silver carp, Bighead carp, hardness