Histamine and histamine-forming bacteria in keropok lekor(Malaysian fish sausage)during processing.

ABSTRACT

Keropok lekor at different processing stages were obtained and examined for total volatile bases (TVB), trimethylamine (TMA), putrescine, cadaverine and histamine and their forming bacteria. TVB and TMA levels decreased significantly (p < 0.05) after boiling from 7.29 to 4.68 mg/ 100g and 3.38 to 1.81 mg/ 100g, respectively. After cooling stage, the levels of TMA, putrescine, cadaverine and histamine in keropok lekor were increased significantly (p < 0.05). Putrescine, cadaverine and histamine level for all samples was found less than allowable level, which is 50 ppm. Bacteria forming putrescine, cadaverine and histamine reduced significantly (p < 0.05) after boiling stage and it was increased significantly (p < 0.05) after cooling stage. Before the boiling stage, microorganisms isolated producing putrescine, cadaverine and histamine were members of the family Enterobacteriaceae and also members of Staphylococcus, Pseudomonas and Micrococcus genera. Members of the genera Pseudomonas that produce biogenic amines were not found from keropok lekor after the boiling stage.

Keyword: Histamine; Histamine-forming bacteria; Keropok lekor.