Thesis title A Study on Qualities of Surimi form Tilapia nilotica

Student Miss Pimchai Tongcom

Thesis Advisor Assist. Prof. Dr. Ratiporn Haruenkit

Thesis co-advisor Dr. Yuporn Puechkamut

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ABSTRACT

A study on qualities of surimi from *Tilapia nilotica* was aimed for a commercial production. Experiments were carried on protein analysis by gel electrophoresis and determination of myosin contents. The results showed that myosin content was 24.29-29.22 percent of flesh meat. The qualities of myosin and actin showed no changes during ice storage. Gel strength of surimi from Tilapia stored in ice was reduced when storage was prolonged for 4 days.

The investigation of factors affecting qualities of surimi showed that the gel strength was maximum when sodium chloride at 0.4 percent was used in leaching water. The ratio of fish meat to rinsing water at 1:4 gave the highest gel strength. Sex of fish had no effect on surimi qualities. Gel strength of big fish was higher than that of a smaller one. The yield of surimi was affected by many factors. The higher ratio of rinsing water to fish meat reduced the surimi yield. Fish of medium size (350-550 gm) gave the higher yield than other sizes. Storage of fish in ice longer than 4 days gave the lower yield. The salt concentration in leaching water had no effect on surimi yield. The cost of surimi was 159 bath / Kg.