

Wannabordee Eakpiyakul 2006: Product Development of Blood Clam (*Anadara granosa*) Sauce. Master of Science (Fishery Products), Major Field: Fishery Products, Department of Fishery Products. Thesis Advisor: Associate Professor Nongnuch Raksakulthai, Ph.D. 108 pages.  
ISBN 974-16-2129-9

Sensory evaluation of 5 brands of commercial oyster sauces was conducted and the sample with the highest acceptability score was analyzed for total nitrogen and amino nitrogen contents to be used as a guideline for developing of blood clam sauce. Blood clam extract was prepared by 2 methods, i.e. heat treatment at 80°C for 1, 2, 3, 4 and 5 h or hydrolysing with 0, 0.25, 0.50 and 0.75 % bromelain w/w of clam at 55°C for 0, 2, 4, 6 and 8 h. It was found that the appropriate method was extraction with enzyme at 0.50 % for 8 h. The basic formula was selected from 3 reference formulae. The selected formula with the highest sensory evaluation scores was adjusted for saltiness. The formula with 5 % salt received the highest scores. The proximate compositions of prepared blood clam sauce were 7.73 % protein, 69.34 % moisture, 1.21 % fat, 8.91 % ash and 12.80 % carbohydrate. Pathogenic microorganism and yeast and mold were not found. Total bacterial count was  $< 1 \times 10^4$  CFU/g. Consumer test indicated that 96 % accepted the product. Shelflife study of the product with and without 0.1 % sodium benzoate at 4-6°C or at ambient temperature showed that all samples could be kept for longer than 12 weeks. Sensory evaluation using 9-point hedonic scale was higher than 5 at the 12<sup>th</sup> week.

Wannabodee Eakpiyakul  
Student's signature

Nongnuch Raksakulthai 22/ May 1 2006  
Thesis Advisor's signature