REFINEMENT OF FISH OIL PRODUCED FROM THE FAT OF TRA AND BASA CATFISH

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ABSTRACT

The objective of this study was to refine fish oil produced from the fat of Tra and Basa catfish. The results showed that the quality parameters of crude fish oil were: density of 0.914, water content of 0.238%, acid index of 9.913 and peroxide index of 0.043. The initial fish oil had ivory colour and rancid flavour. The fish oil was deacidified by using sodium hydroxide. The fish oil was then washed two times in sodium chloride solution at a concentration of 10% and finally washed in distilled water at temperature in the range of 90°C to 95°C at a ratio of water to fish oil of 2:3. The volatile nitrogen base compounds in the fish oil were removed by water vapour for 45 min. After that fish oil was dried at temperature of 100 °C. The quality parameters of refined fish oil were: density of 0.878, water content of 0.074%, acid index of 0.22 and peroxide index of 0.016. The refined fish oil had yellow colour, no fishy smell and transparency and meet to standards of food oil.

Keywords: Fish oil, Tra and Basa catfish, refinement, esterification

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