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Research article

Characterization of oil and lecithin from pioly (*Aspidoparia morar*) fish

Md. Khursed Alam, Md. Salim Uddin*

Department of Biochemistry and Molecular Biology, University of Rajshahi, Rajshahi-6205, Bangladesh.

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***Corresponding Author: Md. Salim Uddin**, Department of Biochemistry and Molecular Biology, University of Rajshahi, Rajshahi-6205, Bangladesh.

Abstract

Pioly fish oil was extracted from fish powder using n-hexane as a solvent. Lecithin containing mainly phospholipids was also isolated from pioly fish powder. The amount of extracted oil was approximately 0.11 g/g fish powder. The percentage of lecithin from pioly fish powder was 2.13, whereas it was 3.67% for the residues after the extraction of oil. Oil and lecithin from pioly fish powder were characterized by the determination of iodine value, acid value, percentage of FFA content, peroxide value and saponification value to know the quality for comparison to commercially available oil and lecithin from other sources. The iodine values of oil and lecithin for fish flesh powder were 81.28 and 55.95, respectively. Saponification value of pioly fish oil and lecithin were 191.37 and 119.11 mg KOH/g. Acid value and peroxide value of pioly fish oil and lecithin were in acceptable ranges. Lecithin from pioly fish showed high oxidative stability indicating potential for commercial purposes.