

Fatty acids profile of tropical bagridae catfish (*Mystus numerus*) during storage.

Abstract

Changes in the fatty acid composition of the fresh water catfish (*Mystus nemurus*) stored in 10°C and ice (0± 2°C) for 1, 10 and 20 days were monitored. A total of 22 fatty acids were found to be present in the studied samples. The main saturated fatty acids (SFA) were palmitic (17.99%), tridecanoic (16.59%), stearic (4.40%) and myristic (2.61%). The monounsaturated fatty acids (MUFA) were dominated largely by the oleic acid (24.84%) and palmitoleic acid (4.66%). The long-chain polyunsaturated fatty acids (PUFA) were also present in significant amounts, composed of eicosapentaenoic (2.65%) and docosahexaenoic (4.44%). Results also revealed that saturated and monounsaturated fatty acid significantly increased ($p < 0.05$) during storage while polyunsaturated decreased. This should attract attention to the importance of the proper and short period storage to retain the best quality of fish meat and its lipid contents.

Keyword: Fish; Food quality; Food safety; Storage conditions; Lipid decomposition.