

# Fat contents and fatty acid profiles of Indian Scad (*Decapterus russelli*)

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## Abstract

Indian Scad (*Decapterus russelli*, Sinhala: Linna) is one of the less expensive fish varieties in the Sri Lankan market. Total fat contents in white muscle, red muscle and skin; and fatty acid composition in white muscle of the Indian Scad were evaluated. The total fat content was relatively high in the skin (3.64%) and red muscle (3.17%) while the white muscle contained low amount (0.65%). Fatty acid profiles of white muscle showed 32.66% saturated fatty acids (SFA), 16.07% monounsaturated fatty acids (MUFA) and 39.38% polyunsaturated fatty acids (PUFA). Among SFA, those occurring in the highest proportions were palmitic acid (C16:0, 18.36%) and stearic acid (C18:0, 12.21%). Oleic acid (C18:1 *n*-9, 10.61%) and palmtoleic acid (C16:1 *n*-7, 3.91%) were the main MUFAs. Eicosapentaenoic acid (EPA, C20:5 *n*-3, 8.83%) and docosahexaenoic acid (DHA, C22:6 *n*-3, 19.76%) were the main PUFAs. The PUFA/SFA ratio was 1.21 and *n*-6 /*n*-3 ratio was 0.13. Sum of EPA + DHA was 28.59%. Therefore it can be concluded that although the fat content is low the nutritional value of the fat contained in the white muscle of Indian Scad is high.