

Nutritional studies of *Lethrinus lentjan* (Pink eared emperor, Meevetiya)I K P Kahandawalaarachchi¹, J Jinadasa¹ and A Bamunuarachchi^{2*}¹ Department of Zoology, University of Sri Jayewardanepura, Nugegoda² Department of Food Science and Technology, University of Sri Jayewardanepura, Nugegoda

Lethrinus lentjan is one of the coastal fish species and is well known as a bream. In Negombo fish landing site, 10-55 cm sized specimens are available for human consumption. Because of its scaly nature, small size and bone rich body, demand for this fish is much less than tuna or seer. But costs about Rs. 50-150 /kg. Therefore relatively cheap food source compared to deep-sea fishes like tuna or seer.

All the specimens (nearly 100 specimens) were collected from Negombo fish landing site for period of one year (2003 January to 2004 January) and were analyzed using standard methods, for crude protein, total fat, ash and moisture. Gas liquid chromatography was used to determine the fatty acid composition of fish flesh and Energy Dispersive X-ray fluorescence technique was used to determine the mineral composition.

Nutritional value of this fish is similar to highly demanded fish like tuna or seer. On wet basis, the fish flesh contains $21.64 \pm 0.31\%$ protein, $0.45 \pm 0.15\%$ of total fat, $2.3 \pm 0.35\%$ ash and $74.92 \pm 0.61\%$ moisture. As this fish has a low fat content (lean fish) it could be expected to show low lipid oxidation during storage and to have a comparatively high shelf-life than fish with more fat ($>1\%$, fatty fish).

Further analysis has shown that *L.lentjan* contains 58.5% unsaturated fatty acids and out of that 32.4% is Omega 3 polyunsaturated fatty acids, including Docosahexenoic acid and Eicosapentaenoic acids. This fish provides most nutritionally valuable fatty acids including two essential fatty acids. Therefore consumption of this fish is especially good for growing children and also helps to reduce incidence of thrombosis in adults. The fish contains valuable mineral elements like potassium (K), calcium (Ca), iron (Fe) and zinc (Zn). Potassium is the most abundant mineral and contains about 6.90×10^{-2} g/g in fish flesh.

As *L.lentjan* is a nutritionally valuable fish, exploiting this fish resource for human consumption is worthwhile.

*bam@sjp.ac.lk