Evaluation of Sensory Qualities of Catla Fish (*Catla Catla*) in Three Selected Reservoirs of Badulla District, Uva Province, Sri Lanka

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Catla (*Catla catla*) is one of the common exotic Indian carp species in inland fishery sector of Uva province in Sri Lanka. There is a high potential to develop Catla fish production and introduce value added products from the excess fish harvest. Environmental factors can significantly affect the physico-chemical and organoleptic quality of fish meat. Current study was focused on investigating Organoleptic properties of Catla fish flesh from 03 reservoirs selected (Ulhitiya, Rathkinda, Sorabora reservoir) with higher fish production in Badulla district. The fish samples with weight of 6.0 -12.5 kg and length of 65cm-95 cm were collected from the landing sites of three selected reservoirs. Prepared fish fillets were subjected to steam cooking for 10 minutes without adding spices at temperature of 100^0C. The sensory evaluation was conducted using 05-point hedonic scale to assess the sensory characters; color, texture, aroma, mouth feel, taste, overall acceptance of the steamed fish fillets by 30 untrained panelists. Sensory scores were statistically assessed through Friedman non parametric test. As results revealed, all the sensory parameters of flesh samples are significantly different according to the type of reservoir ($p<0.05$). Highest estimated median for all the organoleptic parameters (color/texture/aroma/mouth feel/taste=4, overall acceptance=5)were recorded for Catla flesh samples of Ulhitiya reservoir showing that, Catla fish from Ulhitiya reservoir has highest consumer preference. Sensory qualities of fish flesh depend on different kind of factors such as characteristics of living environment, fertility of water, availability of food and climatic condition. In conclusion, consumer acceptability also depends on organoleptic properties of fish samples. Detailed study on biochemical and physical quality changes of Catla fish samples in different reservoirs is recommended improve knowledge on fish quality.

Keywords: Carp fish varieties, Sensory parameters, Consumer acceptability, Environmental factors, Inland fishery