

Composition of fish and their food habits in the downstream of Kelani river

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The composition of fish fauna in the downstream of Kelani river was examined. Sampling was conducted in Mattakkuliya, Thotalnga and Ambathale. Twenty-eight species belonging to eighteen families (Mugilidae, Tetradontidae, Ambassidae, Gerridae, Trachysuridae, Bagridae, Cichlidae, Scatophagidae, Sparidae, Anguillidae, Anabantidae, Cyprinidae, Carangidae, Mullidae, Electridae, Lutianidae, Soleidae and Leiognathidae) were recorded and the species were identified using Munro (1955) key. Correlation of their morphological features to their diet was examined using stomach content analysis of the collected specimens (1- 10 of each species). The species were classified in to eight broad categories (zooplanktivores-3, aquatic invertivores-11, algivores-4, diatom feeders-1, blue green algivores-1, piscivores-2, omnivores-1 and planktivores-1) based on the average occurrence of eight food items using the cluster analysis.

There were significant relationships between the food types and relative gut lengths of the species. This relationship was the main morphological variable used to classify the species from carnivore to planktivore gradient.

Standard length, maximum width, no of gill rakers and gape size of the species were closely associated with the prey size. These results supported the hypotheses that morphology of the species is related to the food habits & diets of fish species. The morphological similarity is conserved even in comparison with taxonomically unrelated species.

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