

**UGC SPONSORED MINOR RESEARCH PROJECT ENTITLED 'ICHTHYODIVERSITY OF
' KURUNTHURAPUZHA, A TRIBUTARY OF RIVER MUVATTUPUZHA'**

Principal Investigator: Dr. S.L.Sreelatha, Dept. of Zoology.

EXECUTIVE SUMMARY

Among the tropical nations, India stands out as a fascinating destination with an incredible diversity among its fauna and flora. All round development will become possible only by exploring the vast potential of the still unknown resources of nature.

The existing checklists of fishes from river Muvattupuzha indicated that only species belonging to Muvattupuzha and some adjoining tributaries have been listed. Information on the fauna of the tributary Kurunthurapuzha seems to be lacking. No investigation seems to have been undertaken so far to document the list of fauna there. Hence the present study was undertaken to pioneer this task of investigating the ichthyo diversity of this river.

During the present investigation fish samples were collected from different sections of the river Kurunthurapuzha by operating gears such as cast net, gill net, harpoons, hook and line, as well as traps of different designs. The collected samples were identified, their weight, morphometric and meristic characteristics recorded, preserved and photographed.

Water samples were also collected from the river and analysed for temperature, salinity, ammonia, pH, dissolved oxygen. The transparency of the water was recorded with the help of a secchi disc. The data was subjected to statistical analysis for meaningful interpretation of the results.

The result summarises a total of 56 species of fishes belonging to 11 orders, 33 families and 42 genera. Among them order Perciformes was the most predominant one. The predominant families observed were Clupeidae, Engraulidae, Cichlidae, Ambassidae and Channidae. The most frequently occurring genera among the fish samples collected were Puntius, Channa, Leiognathus, Gerres, Thryssa and Etroplus. Among the total fish samples collected during the entire study, 54 % of fishes belonged to the purely fresh water category while 34 % represented the brackish water category.

It is concluded that this calm and undisturbed fresh water flowing system, winding its way through the area of Thalayolaparambu locality, has a rich ichthyodiversity comprising of 75 % high food value fishes and 25 % ornamental value fishes. The quality of the water assessed indicated that their values fell within the standard limits prescribed by IUCN. Hence this natural water resource is ideal for raising commercial fish species of food value by adopting culture techniques such as cage culture, taking into consideration the rising demand for such fishes in the markets while their numbers seem to be on the decline in the various water bodies of the country.