Endemic Fish Diversity of Western Ghats

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Fish Fauna of the Chaliyar River, North Kerala

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The Chaliyar river is one of the west flowing rivers of Western Ghats located north latitude 11° 29′ N, longitude 75° 52′ E. It has many tributaries such as Karimpuzha, Punnappuzha, Kuruvanpuzha, Tiruvanchipuzha, Cherupuzha, etc. with a catchment area of 2535 sq. km. The total discharge of the river is 7775 Mm³. The river which was in a pristine condition before 4 to 5 decades has become highly degraded in the lower stretches by the effluents of Gwalior Rayons and in the upper stretches by various anthropogenic factors like deforestation, high siltation, dynamite fishing and use of copper sulphate for fishing. During the summer months, the water in the river is very low due to high run off during the wet months. Further, a few dams proposed in the upstream will surely deal a death blow to the ecology of the river basin. It is essential that a holistic study is undertaken before we plan any project to utilize the water resources of the river.

During the period 1994 to 1997, five collection trips were made to the river Karimpuzha during the rainy season (July-August) and the dry season (March-April). Velon screen of length 3 m, 5 m and 10 m were used to collect the fishes. In addition, traps made of earthern pots, the mouth covered with cloth having a hole in the centre were also used. Such pots with prawn heads and 'atta' were kept over night in the deeper areas to collect fishes. The fishes were preserved in formalin for further studies.

A few ornamental and aquarium fishes like *Puntius melanampyx*, *Puntius punctatus*, *Garra mullya*, *Mastacembelus armatus*, etc. were transported to the Calicut Aquarium for behaviour studies. It was observed that many specimens of *Puntius* species were infected by epizootic ulcerative syndrome (E.U.S.) and mortality of these fishes were also observed during the dry months. The identified

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fishes were deposited in the Reference Collection Museum of the Zoological Survey of India.

The following species were collected during the study:

Chela fasciata Silas - F.5305

Barilius gatensis (Val)- F.5308

Danio malabaricus (Jerdon)- F.4729, F.4730, F.5307

Puntius filamentosus (Val) - F.5310

Rasbora daniconius (Ham) - F.4527, F.4730, F.5307

Puntius melanampyx Day - F.4529, F.4731, F.5311

Puntius punctatus Day - F.4531d, F.5309

Garra gotyla stenorhynchus (Jerdon) - F.4732

Garra mullya (Sykes) -F.4533, F.5312.