

## ABSTRACT

The area under study is the main stretch of the River Jhelum from Mangla Dam to Jalalpur five Kilometers downstream of Rasool Barrage. The main purpose of the study was to study and have an understanding of the fish fauna of this area and its comparison with fish fauna of other rivers in the area. Fish collections were made during the years 2003 to 2005 from seven collection spots namely Sheikhpura Dhand, Jhelum Bridge, Saila Baga, Chingus Warena, Darapur Dhand, Rasool Headworks and Marala Dhand. In total 1191 fish specimens were collected during field visits by using the standard fish collection techniques.

The whole collection comprised of fifty one fish species belonging to nine orders, seventeen families and thirty eight genera were collected during these field collections. Out of these 4 species are strictly pelagic, 17 are demersal and rest of the 30 are benthopelagic. The nine orders found are Osteoglossiformes, Clupeiformes, Cypriniformes, Siluriformes, Mugiliformes, Belontiiformes, Characiformes, Perciformes and Synbranchiiformes. Out of these four orders were represented by only one species each. These orders are Osteoglossiformes, Clupeiformes, Belontiiformes and Synbranchiiformes which are represented by *Notopterus notopterus* Pallas, *Gudusia chapra* (Hamilton), *Xenentodon cancila* (Hamilton) and *Mastacembelus armatus* (Lecepede) respectively. Order Cypriniformes is represented by two families namely Cypriniformes and Nemachelidae. Similarly order Siluriformes is represented by fishes belonging to five families namely Bagridae, Sisoridae, Siluridae, Heteropneustidae and Schilbeidae. The most abundant family is Cypriniformes which is represented by seventeen genera. The thirty species reported first time from the River Jhelum are *Notopterus notopterus* Pallas, *Gudusia chapra* (Hamilton), *Chela cachius* (Hamilton), *Salmophasia punjabensis* (Day), *Aspidoparia morar* (Hamilton), *Amblypharyngodon mola* (Hamilton), *Barilius modestus* (Day), *Barilius naseeri* Mirza, Rafiq & Awan, *Barilius vagra* (Hamilton), *Esomus danricus* (Hamilton), *Labeo rohita* (Hamilton), *Osteobrama cotio* (Hamilton), *Puntius conchoni* (Hamilton), *Puntius sophore* (Hamilton), *Puntius ticto* (Hamilton), *Crossocheilus diplocheilus* (Heckel), *Gara gotyla* (Gray), *Cyprinus carpio* Linnaeus, *Acanthocobitis botia* (Hamilton), *Mystus cavasius* (Hamilton), *Mystus bleekeri* (Day), *Bagarius bagarius* (Hamilton), *Gagata cenia* (Hamilton), *Sisor rabdhophorus* Hamilton, *Sicamugil cassasia* (Hamilton), *Xenentodon cancila* (Hamilton), *Chanda nama* Hamilton, *Glossogobius giurus* (Hamilton), *Colisa faciata* Bloch & Schneider, *Oreochromis aureus* (Steindachner).

Fish fauna in this part of the river is very similar to that found in River Chenab. Forty eight species found in River Jhelum also found in River Chenab. Only three species namely *Barilius modestus* Day, *Barilius naseeri* Mirza, Rafiq & Awan and *Labeo dero* (Hamilton) are not found in River Chenab. Similarly thirty nine species found in this collection are also found in River Ravi. Twelve fish species present in this collection and not reported from River Ravi are *Tor macrolepis* (Heckel), *Barilius naseeri* Mirza, Rafiq & Awan, *Cyprinus carpio* Linnaeus, *Schizothorax plagiostomus* Heckel, *Acanthocobitis botia* (Hamilton), *Gagata cenia* (Hamilton), *Bagarius bagarius* (Hamilton), *Sisor rabdhophorus* Hamilton, *Glyptothorax cavia* (Hamilton), *Wallago attu* (Bloch & Schneider), *Clupisoma naziri* Mirza & Awan and *Channa marulius* (Hamilton).

The decreased water discharges in River Jhelum over the last fifteen years combined with the sewage added in the river from the Jhelum city have adversely affected the fish populations in the river. The populations of the *Tor macrolepis* (Heckel) have decreased while the *Oreochromis aureus* (Steindachner) have become established in the upper stretches of the river from Dhand Sheikhpura to Jhelum Bridge. Furthermore the spawning grounds of the *Sperata sarwari* (Mirza, Nawaz & Javed) are also under constant threat of poaching. These threats to the fish biodiversity need immediate attention and remedial measures.