



Catalogue of the type specimens in the fish collection of the National Zoological Museum, Institute of Zoology, Chinese Academy of Sciences, Beijing, China

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Abstract

A checklist of type specimens housed in the National Zoological Museum, Institute of Zoology, Chinese Academy of Sciences, Beijing, is presented for research and scientific communication. Included are 80 holotypes, 1 lectotype, 1 neotype, 402 paratypes and 17 syntypes of 99 species belonging to 28 families and 12 orders. With 60 species, Cypriniformes has the largest representation. All of the specimens were collected in China and neighboring countries in the past 90 years.

Key words: Catalogue, Type specimens, Fishes, China

Introduction

China is one of the richest countries in terms of freshwater fish diversity with more than 1600 species (Froese & Pauly, 2014). Accurate identification of fishes is important for ecological and evolutionary studies and for the conservation of the Chinese fish fauna. Almost all of the types of species described by foreign ichthyologists before 1949 are preserved in institutions outside China. For example, there are hundreds of type specimens of 84 nominal species of Chinese cypriniforms in the British Museum of Natural History in London. In contrast, most types of the Chinese species described after 1949 are preserved in collections inside China. Knowing the localities of type specimens is fundamentally important to taxonomic studies, and it is helpful to document the information on the location and status of type specimens.

The National Zoological Museum of the Institute of Zoology, Chinese Academy of Sciences (NZMC), is the largest collection of animals in China with over 6.1 million specimens (<http://english.ioz.cas.cn/au/>). The collection originated from the Fan Memorial Institute of Biology, which was established in 1928. It was the first institutional collection of biological specimens in China (Editorial Committee, A History of the Institute of Zoology, Chinese Academy of Sciences, 2008). The museum holds specimens collected from the 19th Century until the present day. The NZMC Fish Collection contains a significant resource for studies on taxonomy, phylogeny, ecology, biodiversity and conservation of freshwater and marine fishes. Over 400,000 specimens of over 3,000 species are deposited in the NZMC covering Ascidiacea, Cephalochordata, Cyclostomata, Chondrichthyes and Actinopterygii. Most of the specimens were collected in China and neighboring countries.

Due to massive field investigations carried out on both inland and marine water bodies since the 1950s, many type specimens of fish species are preserved in the Museum. Based on our statistics, there is a total of 99 nominal species with 80 holotypes, 1 lectotype, 1 neotype, 402 paratypes and 17 syntypes, belonging to 28 families and 12 orders. Seventy-one percent (60 species) of the types belong to Cypriniformes. Here we catalog the data on these type specimens for taxonomic research and international academic exchange.

Each type specimen typically has been given two numbers, a specimen number and a field number. The specimen number was a sequential number for specimens in the collection and was provided by museum curators.