

## ABSTRACT

### **Amornchai Lothongkham, Ekapong Chaichofa and Jeamjit Changsarn, 2007: Survey on Diversity of Fish Species and Utilization on community from Fishes in Hang River, a Tributary of Upper Nan River basin, northern Thailand**

The objective of this research, Survey on Diversity of Fish Species and Utilization on community from Fishes in Hang River, a Tributary of Upper Nan River basin, northern Thailand, were (1) study on species of fishes and study some ecology for planning on the conservation, the administration and applying from the fish and the resource that related by the community, and (2) to make the database of biodiversity of fish and menu of fishes follow the folk wisdom.

A survey of fish fauna in the Hang river, a tributary of the Upper Nan River basin (Nan Province), northern Thailand, found that Nine orders, 19 families, 40 genera, 46 species of fishes were collected. The most dominant order is Cypriniformes (27 species[58%]), followed by Perciformes (9 species [20%]) and Siluriformes (3 species [7%]) The most dominant family is Cyprinidae (19 species[42%]), followed by Balitoridae (7 species [15%]) and Cobitiidae (2 species [4%]). Only one species, *Hemimyzon nanensis*, is an endemic species to the basin. Three alien species, *Gambusia affinis*, *Poecilia reticulata* and *Oreochromis niloticus* were collected.

The water quality in terms of physical, chemical and biological characteristics along the Hang River, total 6 parameters. Water quality are presented as the average concentration as follows; temperature between 20-24°C, dissolved oxygen between 4-6 mg/l, Ammonia-nitrogen average 0 mg/l, pH between average 7-8.5, total alkalinity between 68-170 mg/l, total hardness between 60-130 mg/l. Comparison of water quality in Yao river to standard of surface water quality by the National Environment Board (1994), the Yao River quality was classified as type 3.

The utilization on community from Fishes in Hang River found that, there was 2 type, fishing for Business and foods of people.