Identifying ten common freshwater fish of Indonesia: Translation and lexicographical information for English-Indonesian

by Phil Quick

2011

Sulang Language Data and Working Papers: Topics in Lexicography, no. 6



Sulawesi Language Alliance <u>http://sulang.org/</u>

LANGUAGES

Language of materials : English

ABSTRACT

This paper comprises a checklist, along with brief descriptions, of ten commonly encountered freshwater fish of Indonesia.

TABLE OF CONTENTS

Introduction; The task of identifying flora and fauna; Carp, koi and goldfish; Climbing perch; Giant gourami; Milkfish; Snakehead; Tilapia; Walking catfish.

VERSION HISTORY

Version 1 [05 December 2011] This paper originally circulated December 2005; reformatted for posthumous publication by David Mead, December 2011.

 $\ensuremath{\mathbb{C}}$ 2005, 2011 by Phil Quick and SIL International All Rights Reserved

Identifying ten common freshwater fish of Indonesia: Translation and lexicographical information for English-Indonesian

by Phil Quick

Introduction

In this article I give a brief summary of ten common freshwater fish found throughout most of Indonesia. In Table 1 these ten fishes are identified by English common name, Indonesian common name, and scientific name. Many of these fish species are used in aquaculture throughout Southeast Asia, or are widely available as ornamental fish. One of my motivations for compiling this list is to provide some standardization for translating these names. I have sometimes seen others translate the local name literally into English or Indonesian, and it may help us all if we know when these particular fish are mentioned. This is not to say that literally translating the local name is not helpful; it is helpful for many contexts when it is used in addition to the common name in English or Indonesian along with its scientific name.

English	Indonesian	Scientific
climbing perch	betok, puyu	Anabas testudineus
common carp	mas	Cyprinus carpio
giant gourami ¹	gurami, gurame	Osphronemus goramy
goldfish	maskoki	Carassius auratus
koi	mas, koi	Cyprinus carpio
milkfish	bandeng	Chanos chanos
Mozambique tilapia, Java tilapia	mujair	Oreochromis mosambicus ²
Nile tilapia	nila	Oreochromis niloticus ³
snakehead ⁴	gabus	Channa striata
walking catfish ⁵	lele, kalang	Clarius batruchus

Table 1. English, Indonesian and scientific names of ten common fish found in Indonesia

¹ This unfortunately is a common name for two different gourami species. The *Colisa fasciata* is also identified as a 'giant gourami' in Axelrod and Vorderwinkler (1978) and in Anon. (1976).

 $^{^2}$ Formerly *Tilapia mossambicus* and *Sarotherodon mossambicus*. The Tilapia fish species are part of the large family of Cichlidae fishes. This group of fishes has undergone extensive reclassification (Loiselle 1994). The various species of Tilapia has been part of this focus and thus in the literature different scientific names will be found, depending on the date of the book and how up to date the work is.

³ Formerly *Tilapia nilotica* and *Sarotherodon nilotica*. See previous footnote for more information.

⁴ The snakehead is now reportedly an introduced pest in the eastern United States. Other previous scientific names include *Channa asiatica* and *Ophicephalus striatus*.

⁵ The walking catfish has become established in Florida in the USA.

The task of identifying flora and fauna

The task of identifying flora and fauna is a challenging one. This brings me to the second motivation for providing this list of common fish names. Since these are among the most commonly found freshwater fish in Indonesia, we should be able to at least identify and get these names down correctly in our dictionaries. There are two sides to the 'coin' in identifying fish names (as well as any flora and fauna in a language), in which there are two lists that need to be cross-indexed. Identifying the names of fish so that they will be useful to others requires matching the taxonomic folk list with the taxonomic scientific list (see Bulmer 1992, Hooper 1994, Osmond 2004 and Quick 2006). Matching these two inventories is often challenging. Bulmer (1992) points out that it is difficult to identify with certainty a particular taxon without seeing it in its actual context with a native speaker. Even when this condition can be met, then the linguist has the unenviable task of matching this with the latest state-of-the-art experts' best claim for what the genus-species is. Here too Bulmer (1992) states that the linguist (or ethnographer) must not be surprised when the experts are themselves uncertain or confused (see also Osmond 2004:3). Several of these fish species have been reclassified (more than once!) during the past twenty to thirty years. Therefore, depending on the reference that you employ, the scientific name that you use might be 'outdated.' There is also a potential problem with the English and Indonesian common names. The common names I have given are the most 'common' that I am aware of, as used in the literature I have checked. However, there may still be differences for these names depending on regional variations.⁶

Note that sometimes fish are misidentified by local people (this is often the case when non-specialists try to identify flora and fauna). For example, sometimes goldfish are mistakenly called *ikan mas* (although technically goldfish are a kind of carp, they are a different species which doesn't get as large as the common carp). More recently I have noticed that the red strains of Nile tilapia are sometimes mistakenly identified as *ikan mas*. Finally, fish names may often have regional or other vernacular names that have no locally recognized Indonesian equivalent.

Here follows some basic descriptive information for each of these fishes. Photographs (or links to photos) and further details on each of these species can be found at www.fishbase.org.

Carp, koi and goldfish

The common carp is one of the freshwater fish delicacies in Indonesia and in other parts of Southeast Asia. These carp can grow very large. Koi are an ornamental variety developed from the common carp, technically called *ikan koi* in Indonesia, but they may be called *ikan mas* as well. A distinctive identifying feature of carp and koi are the two barbels found next to its mouth. Goldfish and tilapia do not have barbels (for cases where

⁶ I also want to thank Sulawesi colleagues Donna Evans, Tom Laskowske, and Michael Martins for their help in identifying and/or verifying the Indonesian and scientific names of some of the fish I list and discuss here.

individuals may call goldfish and the red strain of Nile tilapia *ikan mas*, this can be helpful). Carp are usually raised in ponds or rice paddies, although they are probably found in ponds, lakes and rivers.

Climbing perch

This fish is not perhaps as 'common' as the other fish I've listed here, but it is likely to occur in many parts of Indonesia. It does not seem to be a major food fish in Indonesia, although it is used in parts of southeast Asia in aquaculture, and it is an edible freshwater fish (and can also be raised in brackish water) (Froese and Pauly 2005). This fish is not very large and grows to about the size of your hand. It also has somewhat of a reputation of having extraordinarily prickly scales and fins. This species also has an auxiliary breathing organ, which allows it to move over land.

Giant gourami

All gouramis have an auxiliary air breathing mechanism which requires them to breathe air (they will die if they can't reach the surface). Giant gouramis grow large enough to be productively used as a food fish and as such are found generally in fish ponds. There are also a number of smaller gouramis that may be found throughout many parts of Indonesia, such as the three-spot gourami (*Trichogaster trichopterus*), but these are not big fish nor considered to be food fish (although a couple of other larger gouramis such as the 'kissing gourami' are used as food fish in some parts of Indonesia). One distinguishing characteristic of gouramis is that their ventral fins are long and narrow, often reaching as far back as its tail fin.

Milkfish

This is actually a brackish water fish that is fish farmed along the coast. Ling (1977:4) states: "The most important brackish-water pond monoculture in Southeast Asia is that of the milkfish, *Chanos chanos* ... Indonesia, the Philippines and Taiwan are the world's leaders in milkfish farming. It is generally believed that this industry was started in Indonesia some 500 years ago and was introduced to the Philippines and Taiwan during the 16th centruy." This fish can reach several feet in length and is not found in interior locations.

Snakehead

This is another fish with an auxiliary air breathing organ. As these fish grow larger they resemble a heavy-bodied snake or eel. Snakeheads are raised in fish ponds or rice paddies and may also be found in shallow water such as ditches and swamps.

Tilapia

Tilapia are an introduced fish used mostly in aquaculture and are now found worldwide including Indonesia. "Tilapias are now the most widely cultivated fish in the world and are dubbed 'aquatic chickens' by people in the trade" (Barlow 2000:257). The

two most common species encountered in Indonesia are the Mozambique and Nile tilapia. As you can discern from their common names they are originally from Africa. There are many hybrid crosses and there are probably other tilapia species in Indonesia or others that have been crossed with these. Tilapia are a mouth-breeding cichlid, and one parent broods the eggs and fry for up to a month in its mouth. They are very prolific, and unless they are controlled to some extent they will breed rapidly and their larger numbers will stunt their growth. Generally they are eaten when they are about twice the size of your hand (similar to various pan fishes in the USA). One hybrid developed a number of years ago in the Philippines can grow from a fingerling size up to 8 inches (about 20 cm) in about three months. Generally tilapia are black colored, although there are strains of Nile tilapia that are red or orange colored. Another means of recognizing tilapia is the enlarged mouth necessary for their mouth-brooding requirements. Tilapia are usually raised in ponds or rice paddies, although there are wild populations in some areas now.

Walking catfish

Catfish can be distinguished from all of the other fish discussed here by their 'whiskers,' and resemble the channel catfish and bullhead catfish found in North America. Another distinguishing feature is a large flat head. As its English common name states, this fish can 'walk' out of water with the help of its stiff fins and an air-breathing organ that allows it to breathe out of water. Walking catfish are raised in ponds or rice paddies and can also be found in a wide variety of shallow water situations such as ditches and swamps.

References

- Anon. 1976. Simon and Schuster's complete guide to freshwater and marine aquarium fishes. New York: Simon & Schuster.
- Anon. 1999. Investasi agribisnis komoditas unggulan perikanan. Yogyakarta: Penerbit Kanisius
- Axelrod, Herbert R. and William Vorderwinkler. 1978. *Encyclopedia of tropical fishes*. 24th edition. Neptune City, NJ: T.F.H. Publications.
- Barlow, George W. 2000. The cichlid fishes. Cambridge, MA: Perseus Publishing.
- Bulmer, R. N. H. 1992. Ethnozoology: Field methods in ethno-zoology with special reference to the New Guinea Highlands. Questionnaire 12 in Luc Bouquiaux and M. C. Jacqueline, *Studying and describing unwritten languages*, translated by James S. Roberts, pp. 526–556. Dallas, TX: Summer Institute of Linguistics.
- Evans, Donna. 2003. *Kamus Kaili-Ledo Indonesia Inggris*. Palu: Pemerintah Daerah Propinsi Sulawesi Tengah, Dinas Kebudayaan dan Pariwisata.
- Froese, R., and D. Pauly, eds. 2005. Fishbase, version 10/2005. Online. URL: <u>www.fishbase.org</u>.

- Hooper, Robin. 1994. Reconstructing Proto Polynesian fish names. In Andrew Pawley and Malcolm Ross, eds., Austronesian terminologies: Continuity and change. Series C-127, pp. 185–229. Canberra: Pacific Linguistics.
- Kottelat, Maurice, and Anthony Whitten. 1993. Freshwater fishes of Western Indonesia and Sulawesi / Ikan air tawar Indonesia bagian barat dan Sulawesi. With Sri Nurani Kartikasari and Soetikono Wirjoatmodjo. Jakarta: Periplus.
- Ling, Shao-Wen. 1977. *Aquaculture in Southeast Asia*. Seattle: University of Washington Press.
- Loiselle, Paul V. 1994. The cichlid aquarium. Melle, Germany: Tetra-Press.
- Osmond, Meredith. 2004. Proto Oceanic fish names. Paper presnted at the Sixth International Conference on Oceanic Linguistics (COOL-6), Port Vila, Vanuatu, July 4–9.
- Quick, Philip A. 1991. Annotated reference guide to flora and fauna for Sulawesi field linguists. Manuscript. (Attached as appendix to *An inventory of the flora and fauna in Pendau*, compiled by Phil Quick and Becky Quick.)
- Quick, Philip A. 2006. A lexicographical introduction and inventory of Pendau fish names. Paper presented at the Tenth International Conference on Austronesian Linguistics (10-ICAL), Puerto Princesa City, Palawan, Philippines, January 17–20. Online. URL: <u>http://www.sil.org/asia/philippines/ical/papers.html</u>.
- Sendjaja, Yulius Tirta and Mohammad Hairuru Riski. 2002. Usaha pembenihan gurami. Jakarta: Penebar Swadaya.