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A Checklist Of Fish Species From Two Feeder Streams Of Tasik Kenyir: Sungai Tembat And Sungai Ketiar Of Hulu Terengganu, Terengganu

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ABSTRACT – Sampling trips were done on the 22nd until 27th April 2006 and on the 14th until 17th June 2006 for Sungai Tembat (ST) in Tembat Forest Reserve and Sungai Ketiar (SK), located at Hulu Terengganu, Terengganu, respectively. Cast net, gill net, and rod and line were deployed during both trips. A total of 219 specimens representing four orders, eight families and 22 species of fishes were caught. A total of 20 species were recorded for ST while only nine species were caught at SK during the study.

Keywords – Freshwater fishes, species checklist, feeder streams, Tasik Kenyir.

ABSTRAK – Dua persampelan telah dijalankan masing-masing pada 22hb hingga 27hb April 2006 dan 14hb hingga 17hb Jun 2006 di Sungai Tembat (ST), Hutan Simpan Tembat dan Sungai Ketiar (SK), Hulu Terengganu, Terengganu. Jala, jaring dan pancing telah digunakan sepanjang persampelan di kedua-dua lokasi. Sejumlah 219 spesimen dari empat order, 8 famili dan 22 spesies ikan telah direkodkan. Sejumlah 20 spesies telah direkodkan di ST, manakala di SK hanya 9 spesies ikan berjaya direkodkan.

Kata kunci – Ikan air tawar, senarai semak spesies, anak sungai, Tasik Kenyir.

This paper presents a checklist of the fish species collected from two rivers flowing into the Tasik Kenyir; (1) Sungai Tembat (ST) in Tembat Forest Reserve and (2) Sungai Ketiar (SK), both located at Hulu Terengganu, Terengganu. Tasik Kenyir, a manmade lake is 2,590 square kilometres wide stretching into the Kelantan borders in the west and into Pahang in the south (Department of Fisheries Malaysia and Ketengah, 1994). The sampling at ST was carried out around the

TABLE 1

Fish species caught from Sungai Tembat, Tembat Forest Reserve, Hulu Terengganu

No.	Order	Family	Species	Local Name	N
1	Osteoglossiformes	Notopteridae	Notopterus notopterus	Selat/Belida	1
2	Cypriniformes	Cyprinidae	Oxygaster anomalura	Aur	6
3	Cypriniformes	Cyprinidae	Rasbora sumatrana	Seluang	3
4	Cypriniformes	Cyprinidae	Neolissochilus hexagonalepis	Kejor	10
5	Cypriniformes	Cyprinidae	Poropuntius deuratus	Tengas	24
6	Cypriniformes	Cyprinidae	Tor tambroides	Kelah	1
7	Cypriniformes	Cyprinidae	Cyclocheilichthys apogon	Chemperas	5
8	Cypriniformes	Cyprinidae	Mystacoleucus marginatus	Sia	8
9	Cypriniformes	Cyprinidae	Barbonymus schwanefeldii	Lampam	13
10	Cypriniformes	Cyprinidae	Hampala macrolepidota	Sebarau	3
11	Cypriniformes	Cyprinidae	Labiobarbus lineatus	Kawan	6
12	Cypriniformes	Cyprinidae	Tylognathus caudimaculatus	Rong Batu	3
13	Cypriniformes	Cyprinidae	Osteochilus vittatus	Rong	14
14	Siluriformes	Bagridae	Hemibagrus nemurus	Baung	4
15	Siluriformes	Bagridae	Mystus vittatus	Baung	2
16	Siluriformes	Siluridae	Silurichthys hasseltii	Tapah bemban	1
17	Siluriformes	Clariidae	Clarias batrachus	Keli	1
18	Perciformes	Nandidae	Pristoplepis fasciata	Patong	1
19	Perciformes	Osphronemidae	Osphronemus goramy	Kaloi	4
20	Perciformes	Channidae	Channa micropeltus	Toman	1
				Total	111

N – Number of specimen collected

vicinity of the Tembat recreational area fringing Tasik Kenyir; N5°03.529', E102°33.337', at the altitude of 170 m – 194 m above sea level (asl). The Tembat Forest Reserve is also considered as a buffer zone to the National Park. The sampling site at SK was conducted at the coordinate N5°12.890', E102°38.426' with the elevation of 149 m asl. Sampling was done on the 22nd until 27th April 2006 and 14th until 17th June 2006 for ST and SK, respectively.

The methods of fish sampling depend greatly on the type and the characteristic of the river. During this sampling, three sampling methods were employed; cast net, gill net, and rod and line. The specimens obtained were identified to species level. The key parameters of identification of the species were referred to Inger and Chin (1962), Mohsin and Ambak (1983), Roberts (1989), Kottelat et al. (1994) and Rainboth (1996).

Throughout the sampling, castings were done along the torrents and shallow streams. Nets with different mesh sizes: 3 cm, 4.5 cm, 5 cm and 8 cm, were also deployed at selected sites. In addition to the nets, rods and lines were also used. Commonly, the baits used were palm oil seeds and small fishes. All the specimens were measured for their weight (gram), total length (cm), standard length (cm), and body depth (cm). Samples collected were taken as museum specimens and kept at the Zoological Museum of Institute for Biodiversity, DWNP, Pahang.

A total of 219 specimens representing four orders, eight families and 22 species of fishes were caught. Both locations recorded seven similar species; *Poropuntius deuratus, Mystacoleucus* marginatus, *Barbonymus schwanefeldii, Hampala macrolepidota, Osteochilus vittatus, Hemibagrus nemurus and Pristoplepis fasciata.* A total of 20 species were recorded for ST while only nine species were caught at SK during the study period. Species collected at ST represents only 5.2% while SK represents 2.4% of the total of 353

TABLE 2

Fish species caught from Sungai Ketiau, Hulu Terengganu

No.	Order	Family	Species	Local Name	N
1	Cypriniformes	Cyprinidae	*Parachela oxygastroides*	Daun	2
2	Cypriniformes	Cyprinidae	*Poropuntius deuratus*	Tengas	1
3	Cypriniformes	Cyprinidae	*Mystacoleucus marginatus*	Sia	20
4	Cypriniformes	Cyprinidae	*Barbonymus schwanenfeldi*	Lampam sungai	65
5	Cypriniformes	Cyprinidae	*Hampala macrolepidota*	Sebarau	5
6	Cypriniformes	Cyprinidae	*Osteochilus hasseltii*	Kawan	5
7	Cypriniformes	Cyprinidae	*Osteochilus vittatus*	Rong	7
8	Siluriformes	Bagridae	*Hemibagrus nemurus*	Baung	1
9	Perciformes	Nandidae	*Pristolepis faciata*	Patong	2
N – Number of specimen collected				**Total**	**108**

freshwater fish species that exists in Peninsular Malaysia (Mohsin and Ambak, 1983). Fishes from the family Cyprinidae dominate both rivers with 86.5% (ST) and 97.2% (SK) of the total capture, which is in concordance with other studies (Lowe-McConnell, 1975; Khan et al., 1996).

Fish species recorded more at ST compared to SK due to the different habitat conditions. The shore vegetation at both rivers consisted of primary forest. Sampling site at ST constitutes of two habitats; fast flowing current with sandy, gravel and rocky bottom and relatively stagnant water at its confluence to the Kenyir Lake, in which the water flow is relatively stagnant. Sampling site at SK on the other hand, consists of current/rapid with sandy, gravel and rocky bottom which allows only species that can tolerate fast current.

The distribution and composition of species in a habitat is closely related to the various factors such as food availability, breeding sites, water current, depth, geography and water chemistry (Ali et al., 1988). Most of the species observed in KR are species that have specialized to live in fast flowing currents. In ST, *Neolissochilus hexagonalepis, Poropuntius deuratus, Tor tambroides, Cyclocheilichthys apogon, Mystacoleucus marginatus, Barbonymus schwanefeldii, Hampala macrolepidota, Labiobarbus lineatus, Lobocheilos sp.* and *Osteochilus vittatus* were caught at fast flowing currents. Similar species were caught in SK.

During the period of study at SK, it was observed that *B. schwanefeldi* was on a breeding season. Most adults caught bears eggs and sperms. According to Mohsin and Ambak (1983), from May to September, south-west monsoon brings heavy rains to most states in the Peninsular Malaysia; and like most fish species, breeding season is initiated during the raining season.

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