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Inventory of Fish Types in Lubuk Larangan Area Batang Bungo River, Jambi Province

Inventarisasi Jenis Ikan di Area Lubuk Larangan Sungai Batang Bungo, Provinsi Jambi

Rini Hertati[1*], Mohd. Yusuf Amrullah[1], Sri Maryeni[1]
[1]Department of Aquatic Resources Utilization, Faculty of Fisheries,
Muara Bungo University, Jambi 37211 Indonesia
**email: rinihertati4@gmail.com*

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Abstract

The decreasing number of fish species caught by fishermen in the Batang Bungo River from year to year means that this study aims to inventory the types of fish caught in the Batang Bungo River. Hopefully, this inventory data can create a wealth of fishery resources in Indonesia. The research method uses the Purposive Sampling method. Data collection uses descriptive data. The research location is station I in the Lubuk larangan area people old Hamlet, Laman Panjang Hamlet, Station II in the Lubuk larangan area of Tepian Lamo Hamlet, Rantau Pandan Hamlet and Station III in the Lubuk larangan area of Belimbing, Tebat Hamlet, Batang Bungo River. The results of the research at Station I, the types of fish found were 2 Orders, two families, eight genera, and eight species; Station II fish caught 4 Orders, four families, ten genera, and ten species; and Station III types of fish caught as many as 4 Orders, four families, seven genera and seven species. The types of fish caught in the Batang Bungo River are five orders, five families, 15 genera, and 15 species.

Keywords: Types of fish, Batang Bungo, Inventory, Lubuk Larangan.

Abstrak

Menurunnya jumlah spesies ikan yang ditangkap nelayan di Sungai Batang Bungo dari tahun ke tahun berarti penelitian ini bertujuan untuk menginventarisasi jenis ikan yang ditangkap di Sungai Batang Bungo. Diharapkan data inventarisasi ini dapat dimanfaatkan sebagai kekayaan sumber daya perikanan di Indonesia. Metode penelitian menggunakan metode Purposive Sampling. Pengumpulan data menggunakan data deskriptif. Lokasi penelitian adalah stasiun I di kawasan larangan Lubuk Dusun Tua Rakyat, Dusun Laman Panjang, Stasiun II di kawasan larangan Lubuk Dusun Tepian Lamo, Dusun Rantau Pandan dan Stasiun III di kawasan larangan Lubuk Belimbing, Dusun Tebat, Sungai Batang Bungo. Hasil penelitian di stasiun I, jenis ikan yang ditemukan adalah 2 Ordo, 2 famili, 8 genus dan 8 spesies, ikan stasiun II menangkap 4 Ordo, 4 famili, 10 genus dan 10 spesies dan jenis ikan stasiun III ditangkap sebanyak 4 Ordo, 4 famili, 7 genus dan 7 spesies. Jenis ikan yang ditangkap di Sungai Batang Bungo adalah 5 ordo, 5 famili, 15 genus dan 15 spesies.

Kata kunci: Tipe Ikan, Batang Bungo, Inventarisasi, Lubuk Larangan

1. Introduction

The characteristics of Indonesia's waters are very diverse. They consist of freshwater, brackish water, and sea. Freshwater consists of rivers, lakes, swamps, and other types of water. Sea waters consist of shallow seas, deep seas, trenches, and others (Iskandar et al., 2020). Each water area has its characteristics, containing various fish resources (SDI). The diversity of fish resource species and endemism are two critical parameters in the context of biodiversity (Caldecott et al., 1994). The types of fish native to and endemic to Indonesia must be disseminated to the public, as information about these fish still exists in Indonesia. One of the author's objectives in conducting this research is to provide information on the types of fish found in the Batang Bungo River, Jambi Province. The Batang Bungo River is in Bungo Regency, Jambi Province. The length of the Batang Bungo River is ± 50 km; the use of the river by the local community as a place for washing, bathing, toilets (MCK), a place for catching fish by fishermen, agriculture, plantations, C, B mining and management of lubuk larangan (Hertati et al., 2023). The use of rivers such as C B excavations and lubuk larangan by the community, if not appropriately managed, will impact the existence of fish species that inhabit the Batang Bungo River. There are 131 species of freshwater fish found in Jambi Province, 14 orders, and 25 families (Sudjarat et al., 2009).

Furthermore, Budiyono (2011) states that the types of fish found in the Batang Bungo River are 25 freshwater fish species from 16 genera and nine families. Hertati et al. (2023) stated that the fish caught in the Batang Bungo River were 17 species, 17 genera, five families, and five orders. From the results of the above research, it is stated that there is a reduction in the types of freshwater fish in the Batang Bungo River, Jambi Province. The study aims to conduct an inventory of freshwater fish species in Jambi Province and the Batang Bungo River. Data on these types of fish is expected to provide information on Indonesia's wealth of fishery resources.

2. Material and Method

2.1. Time and Place

The research was conducted from January 2024 – March 2024. The research location was in the Batang Bungo River. Lubuk larangan area, location 1 in the Lubuk larangan area of the old people, station 2 in Lubuk larangan Tepian Lamo and station 3 in the Lubuk larangan area of Belimbing.

2.2. Methods

The research area is determined based on the purposive sampling method, which is research that the researcher determines because it has unique criteria and characteristics. Identifying types of fish using the technique developed (Kottelat et al., 1993; Saanin, 1984), fish identification guidelines. In addition, each fish species is grouped based on order, family, genus, and species.

2.3. Data Analysis

All data obtained are displayed in tables, and descriptive data is analysed.

3. Result and Discussion

The results of the study at three stations (station I, Lubuk Larangan people old area), station II of the Tepian Lamo Lubuk Larangan area, and Station III of the Belimbing Lubuk Larangan area on the Batang Bungo River), can be seen in Tables 1, 2, and 3.

Tabel 1. Types of fish caught at station I in the people old Lubuk larangan area Batang Bungo River

No	Order	Family	Genus	Species	Regional Name
1	Cypriniformes	Cyprinidae	Cydochaicichthys	*Hampala macrolepidota*	Sebarau
2			Rasbora	*Rasbora argyrotaenia*	Seluang
3			Labiobarbus	*Labiobarbus fasciatus*	Masik
4			Tor	*Tor soro*	Semah
5			Puntius	*Puntius schwanefeldi*	Kapiek
6			Schismatorhynchus	*Schismatorhynchus heterorhynchus*	Simancung
7			Barbonymus	*Barbonymus schwanenfeldii*	Lampam
8	Siluriformes	Bagridae	Hemibagrus	*Hemibagrus numurus*	Baung

Based on Table 1, the types of fish caught were found in 2 orders: two families, eight genera, and eight species. Table 2 Types of fish caught in the Tepian Lamo lubuk larangan area in the Batang Bungo River. Fish caught four orders, four families, ten genera, and ten species. Table 3 shows the types of fish caught in the Belimbing forbidden pool area, which found four orders, four families, seven genera, and seven Lampam fish species at station III. This is following Hertati et al. (2023), the fish that is often found in the Batang Bungo River is the Lampam. For the number of fish species caught in the Batang Bungo River, see Table 4.

Table 2. Types of fish caught at Station II in the Lamo Tepian lubuk larangan Area, Batang Bungo River

No	Ordo	Family	Genus	Species	Regional Name
1	Cypriniformes	Cyprinidae	Barbonymus	*Barbonymus schwanenfeldii*	Lampam
2			Hampala	*Hampala macrolepidota*	Sebarau
3			Barbichthys	*Barbichthys laevis*	Bentulu
4			Crossocheilus	*Crossocheilus cobitis*	Nalis
5			Tor	*Tor soro*	Semah
6			Puntius	*Puntius schwanefeldi*	Kapiek
7			Osteochilus	*Osteochilus vittatus*	Palau
8	Siluriformes	Bagridae	Hemibagrus	*Hemibagrus nemurus*	Baung
9	Anabantiformes	Osphronemidae	Osphronemus	*Osphronemus goramy*	Gurami
10	Perciformes	Channidae	Channa	*Channa cyanospilos*	Bujuk

Table 3. Types of fish caught at station three in the Belimbing Lubuk Larangan area, Batang Bungo River.

No	Ordo	Family	Genus	Species	Regional Name
1	Cypriniformes	Cyprinidae	Puntius	*Puntius schwanefeldi*	Kapiek
2			Barbonymus	*Barbonymus schwanenfeldii*	Lampam
3			Barbichthys	*Barbichthys laevis*	Bentulu
4			Crossocheilus	*Crossocheilus oblongus*	Selimang
5	Tetraodontiformes	Tetraodontidae	Tetraodon	*Tetraodon leiurus*	Buntal
6	Anabantiformes	Osphronemidae	Osphronemus	*Osphronemus goramy*	Gurami
7	Siluriformes	Bagridae	Hemibagrus	*Hemibagrus numurus*	Baung

Table 4. Types of fish caught in the Batang Bungo River at three stations

No	Ordo	Family	Genus	Species	Regional Name
1	Cypriniformes	Cyprinidae	Barbonymus	*Barbonymus schwanenfeldii*	Lampam
2			Hampala	*Hampala macrolepidota*	Sebarau
3			Barbichthys	*Barbichthys laevis*	Bentulu
4			Labiobarbus	*Labiobarbus fasciatus*	Masik
5			Crossocheilus	*Crossocheilus cobitis*	Nalis
6			Tor	*Tor soro*	Semah
7			Puntius	*Puntius schwanefeldi*	Kapiek
8			Osteochilus	*Osteochilus vittatus*	Palau
9			Rasbora	*Rasbora argyrotaenia*	Seluang
10			Crossocheilus	*Crossocheilus oblongus*	Selimang
11			Schismatorhynchus	*Schismatorhynchos heterorhynchos*	Simancung
12	Siluriformes	Bagridae	Hemibagrus	*Hemibagrus nemurus*	Baung
13	Anabantiformes	Osphronemidae	Osphronemus	*Osphronemus goramy*	Kalui
14	Perciformes	Channidae	Channa	*Channa cyanospilo*	Bujuk
15	Tetraodontiformes	Tetraodontidae	Tetraodon	*Tetraodon leiurus*	Buntal

Table 4 shows the types of fish caught in the three areas. lubuk larangan in the Batang Bungo River, 5 orders, 5 families, 15 genera and 15 species. The types of fish in the Batang Bungo River have decreased yearly, and the number of fish caught by fishermen is decreasing. When compared to research Fajri et al. (2022), six species of fish are no longer found in the Batang Bungo River, namely Tilan (*Mastacembelus erythrotaenia*), Tapah Kero (*Silurichthys phaiosoma*), parang (*Parachela oxygastroides*), senggiring (*Mystus nigriceps*), semuruk (*Osteochilus waandersi*), juaro (*Pangasius polyuranodon*) various community activities along the river can cause this. The lack of lubuk larangan has reduced fishermen's catch along the Batang Bungo River (Hertati et al., 2023). Furthermore, Hertati et al. (2023) stated that heavy metal (Hg) levels were found in the waters of Tebat Hamlet above the PP 82/2021 Quality Standard threshold (heavily polluted). Heavy metals in water are dangerous directly to the life of organisms and indirectly to the effects on) human health (Narasiang et al., 2015).

Waste that enters the waters will pollute the waters, thus affecting the condition of the waters and impacting the survival of fish, so that fish will look for a suitable and appropriate place for survival and reproduction (Fajri et al., 2022). Andani et al. (2017) The number of fish populations and their presence in a habitat is influenced by the lifestyle of the type of fish; fish that have a highly adaptable lifestyle will have large numbers, while fish that have a low level of adaptability will have a reduced number, and may even become extinct. One of the efforts that must be made in the Batang Bungo River is the regulation of C and B mining by the government and awareness by the community around the river, the impact of these activities on the aquatic ecosystem and humans who use the river water so that fishery resources are well maintained.

4. Conclusions

From the research results, it was found that at station 1, there were eight genera and eight species; at station 2, there were ten genera and ten species; and at station 3, there were seven genera and seven species, with a total of

15 species of fish caught. Compared to previous studies, several types of fish have disappeared in the Batang Bungo River. Six species of fish are no longer found in the waters of the Batang Bungo River, including tilan, tapah kero, parang, senggiring, semuruk, and juaro.

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