

Occurrence of some Commercial and Non-Commercial Fish Species in Inn-Yegyí Lake, Kyonpyaw Township, Ayeyarwady Region

Sa Soe Shwe¹, Yi Yi Win², Nilar Soe³, Aye Mon Sann⁴ and San San Htay⁵

Abstract

Inn-yegyí Lake in Kyonpyaw Township was chosen as the study area. Composition and productivity of fish species in the study area were investigated from December 2017 to July 2018. A total of 21 fish species belonging to 19 genera and 13 families under five orders was recorded during the study period. Fish species composition and catch weight were recorded from the study site of Inn-yegyí Lake, Kyonpyaw Township. Fish species of order Cypriniformes, Siluriformes and Perciformes predominated over Osteoglossiformes, Cyprinodontiformes, of them order Cypriniformes was to be the most catch weight (91.11%). The recorded catch weight (kg) and percentage (%) in different orders were Osteoglossiformes (41.53kg, 0.39%), Cypriniformes (9761.72kg, 91.11%), Siluriformes (150.79kg, 1.41%), Cyprinodontiformes (112.33kg, 1.05%) and Perciformes (647.7kg, 6.05%). Among these orders, the order Cypriniformes was to be the most catch weight and percentage (9761.72kg, 91.11%). The maximum recorded species were *Labeo rohita* (2769.24kg), *Catla catla* (2769.4kg) and *Cirrhinus mrigala* (2769.24kg). Some commercial fish species were recorded as 10 species in this study area. Among them, the fish species of *Notopterus notopterus*, *Ompok bimaculatus* and *Wallago attu* were the highest price in Myanmar. The species *Channa striatus* and *Wallago attu* would be necessary to conserve, because its lowest collected weight as 38.47kg and 16.93kg during the study period. Some 11 species, non-commercial fish species were recorded in this study area. Among them, the fish species of *Cirrhinus mrigala*, and *Oreochromis spp.* were the highest price in Myanmar. The main fishing gears utilized were large meshed gill net and small meshed gill net.

Keywords: commercial and non-commercial fish species, Gears

Introduction

Myanmar is an extensive inland water system and a long sea-coast possesses a wealth of fishery resources. Fishery sector is considered as the important one after the agriculture to fulfill the protein requirement of the people in Myanmar and to provide the food security as well as employment to a large of fishery communities and rural dwellers (DOF, 2011). In comparing with many of its neighboring counties, Myanmar is rich in aquatic resources and fish is a staple food for protein intake. Fishing products from inland fisheries and aquaculture exceed other animal protein sources such as meat and eggs in local markets (Jennifer Soe Maung, 2009). Fishes are the most diverse vertebrate group, estimated to a number over 23,000 species worldwide with about 200 taxa described each year. About 40% of all fishes are freshwater continental species (Bibb *et.al*, 2000). Around 40-45% is estimated to be freshwater species (FAO, 2002). The world's fish catch is 75 million tons per year, but only about 1% of man's food is fish, although 10% of this animal protein intake is fish protein (FAO, 1986). Fish is a rich source of lysine as well as all the other essential amino acid, vitamin A, essential fatty acids and calcium. All of which are difficult to secure in non-fish products including all kinds of meats. Fish is also an excellent source of minerals such as iodine, calcium, phosphorus and iron, vitamins A, D, B₁, B₂, B₁₂ and important trace elements (Reali, 1991).

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In 2010-2011 fiscal year, total production of fish is 4.4 million metric tons in Myanmar (DOF, 2011). Fish provides the world's largest wild food harvest and a vital source of protein and many families fetch sustainable income in the developing countries (Pereira, 2000). The importance of fish as a source of protein for human consumption is well known. A major source of animal protein in the diet of the people in Myanmar is obtained from fish either consumed as fresh, fried, pasted, fermented or salted forms. In fact, fish is a dietary staple food source highly favored by the people of Myanmar (Jenkins, 2003). Myanmar produces large amount of aquatic products compared to other South-east Asia countries. Many people prefer to consume the fish due to its soft flesh and taste. The fishery sector plays an important role in contributing social and economic development of Myanmar, especially plays for substantial increase in the fish supply for domestic consumption and for export. Fish resource is marketed fresh or frozen, processed into fish paste or dried fish (DOF, 2007). Approximately there are at least 300 fish species in Myanmar freshwater. Freshwater fishes are most common staple food among the population of Myanmar and neighboring countries. The popularity of this food source is due to its tasteful and nutrition cooking variety and its availability in most areas. Generally almost all species of fish are consumed except few intoxicated species (FAO, 2001). Inland fisheries in Myanmar play an important role in food security and socio-economic status of the people especially in rural areas and also in daily freshwater fishes together with rice. Inland fishery resources comprise rivers, estuaries, lagoons, brackish water ponds, floodplain lakes and major, minor and village tanks (Murray and Little, 2000).

As population in Myanmar is increasing rapidly, alongside improving social conditions, it is important to aquaculture factor, including the leasable inland fishes to meet the future nutritional requirements. Fish species will respond to such pressure by the evolution of compromising adaptations to new environment (Agostinho *et.al.*, 1999). Naturally, freshwater bodies that include rivers, lakes, ponds and courses which are of permanent or temporary grounds for inland fisheries, are highly sensitive to the rainfalls and floods in monsoon. The deviation from normal climatic situation has driven distinct fluctuation of catch quantities from inland capture fisheries. Inland capture fisheries provide a valuable contribution to food security in many parts of developing countries including Myanmar. The type of fisheries in Myanmar is determined by nature of catch. It can be classified into freshwater fisheries and marine fisheries. Freshwater fisheries consist of fish culture, leasable and open fisheries. Freshwater fisheries are significant for Myanmar people in terms of providing food security and employment to a large number of fishery communities and rural dwellers. Freshwater fisheries resources are probably among the most resilient harvestable nature resources, habitat, and variability of river flow maintenance (DOF, 2006). Myanmar has a vast quantity of natural resources and Ayeyarwady Region is renowned for its rich fishery resources which provide great opportunities for livelihood, investment in a vast array of fisheries and other aqua products (FAO, 2002). Moreover, some gear can be used in various ways. A common way to classify fishing gears and methods is based on the principle of how the fish or other preys are captured and to a lesser extent, on the gear construction. Fishing gears used in inland fisheries are traditionally developed from small scale fishing activities. The most widely used gear includes stationary pots, stow net, lift net, gill net, line, scoop net, bamboo trap and cast net (Freshwater fisheries law, 1991). The fishing gears are quite selective and simple to use (Anonymous, 2007).

The present study was conducted with the following objectives:

- to record and identify of some fish species in Inn-yegyí Lake
- to record productivity and price of each species

- to record the types of fishing gear
- to investigate the commercial and non-commercial fish species in Inn-yeygi Lake Kyonpyaw Township, Ayeyarwady Region

Materials and Methods

Study area

Inn-yeygi Lake is one of the leasable fisheries at Kyun Inn village of Kyonpyaw Township in Ayeyarwady Region. It is located between 17° 15' 23.08" N and 95° 13' 24.23" E which is situated in the east of Kyonpyaw Township, Ayeyarwady Region. The area is approximately 35,140 square kilometer (Fig. 1, Plate 1).

Study period

The study period was conducted from December, 2017 to July, 2018.

Fish sample collection

Fish specimens were collected fortnightly in a month with the help of the local fishermen. Scaled photographs were taken soon after catch to obtain the natural size and colour. The total weight of the caught fish was recorded. The types of fishing gears were large meshed gill net (6.3cm) and small meshed gill net (2.8cm) (Plate 2).

Identification of fish species

Identification of fish species was followed after by Day (1978) and Talwar and Jhingran (1991).

Recording data

The data obtained from research work was presented by histogram and tabulation (Plate 3).

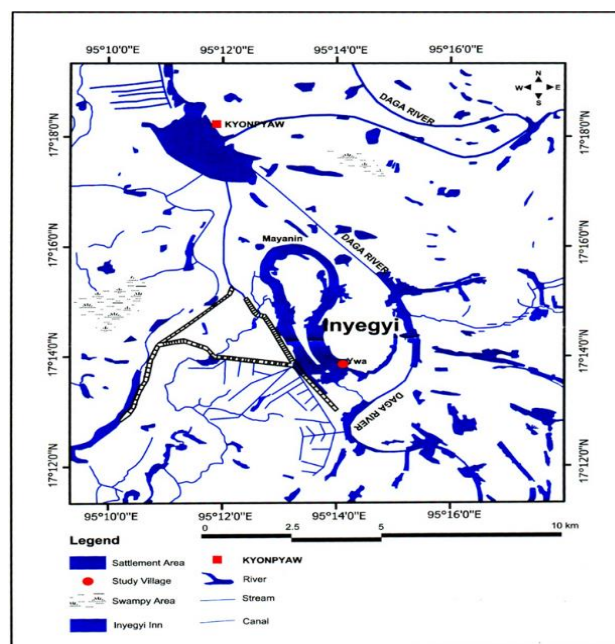


Figure (1). Map of the study area. (Source: Google search)



Plate (1). Study site of Inn-yegy Lake



Seine net



Gill net

Plate (2). Fishing gears



Collection of the specimens



Weighing of the collected fish species by digital balance



Weighing of each fish by weight balance

Plate (3). Data collection and utilization of equipments

Results

A total of 21 species belonging to 19 genera and 13 families under five orders of freshwater fish was recorded from the study area during the study period (Table 1).

Catch weight (kg) of recorded some commercial and non-commercial fish species

A total catch weight 10714.07kg of fish which included 41.53kg (*Notopterus notopterus*), 2769.4kg (*Catla catla*), 2769.24kg (*Cirrhinus mrigala*), 2769.24kg (*Labeo rohita*), 39.99kg (*Puntius chola*), 353.86kg (*Amblypharyngodon mola*), 738.45kg (*Osteobrama belangeri*), 292.31 kg (*Osteobrama cotio cunma*), 50.78kg (*Mystus pulcher*), 50.77kg (*Ompok bimaculatus*), 16.93kg (*Wallago attu*), 56.93kg (*Xenentodon cancila*), 55.4kg (*Hyporhamphus limbatus*), 338.48kg (*Pseudambassis ranga*), 38.47kg (*Channa striatus*) and 192.28kg (*Oreochromis spp.*) were found in December to May, respectively.

29.23kg (*Labeo dussumieri*), 32.31kg (*Pseudeutropius acutirostris*), 24.62kg (*Glossogobius giuris*), 20.01kg (*Macrognathus zebrinus*) and 33.84kg (*Trichogaster pectoralis*) were found in April and May. Among, fish production observed from December 2017 to August, 2018. April and May were higher than the other months. Total catch weight of *Labeo rohita* (2769.24kg), *Catla catla* (2769.4kg) and *Cirrhinus mrigala* (2769.24kg) were higher than the rest species. Total catch weight of *Wallago attu* (16.93kg) and *Macrognathus zebrinus* (20.01kg) were least found (Table 2).

Recorded catch weight (kg) and percentage (%) in different orders of fish species

The weight and percentage of fish species in order Cypriniformes (9761.72kg, 91.11%), Perciformes (647.4kg, 6.05%), Siluriformes (150.79kg, 1.41%), Cyprinodontiformes (112.33kg, 1.05%) were found to be high whereas those of order Osteoglossiformes (41.53kg, 0.39%) were recorded to be low (Table 5, Fig. 4).

Types of utilized fishing gears

Among the collected species, eighteen species were caught by large meshed gill net and three species such as *Pseudambassis ranga*, *Osteobrama belangeri* and *Osteobrama cotio cunma* were caught by small meshed gill net according to the interview with the fishermen.

Table (1). Systematic position of recorded fish species in Inn-yeygi Lake

Sr. No.	Order	Family	Species	Common Name	Local Name
1.	Osteoglossiformes	Notopteridae	<i>Notopterus notopterus</i>	Feather-back	Nga-phe
2.	Cypriniformes	Cyprinidae	<i>Catla catla</i>	Catta carp	Nga-thaing-gaung-pwa
			<i>Cirrhinus mrigala</i>	Carp marigal	Nga-gin
			<i>Labeo rohita</i>	Rohu carp	Nga-myit-chin
			<i>Labeo dussumieri</i>	Labeo	Nga-dane-lone
			<i>Puntius chola</i>	Swamp barb, Chola barb	Nga-kone-ma
			<i>Amblypharyngodon mola</i>	Mola carplet	Nga-bei-phyu
			<i>Osteobrama belangeri</i>	Carplet	Nga-phe-oung
			<i>Osteobrama cotio cunma</i>	Cunma osteobrama	Nga-lay-daunt
3.	Siluriformes	Bagridae	<i>Mystus pulcher</i>	Pulcher mystus	Nga-zin-yine-kyetchay
		Siluridae	<i>Ompok bimaculatus</i>	Butter catfish	Nga-nu-than
			<i>Wallago attu</i>	Freshwater shark	Nga-but
		Schilbeidae	<i>Pseudeutropius acutirostris</i>	Dwarf catfish	Nga -Than -Gyeik- Par
4.	Cyprinodontiformes	Belontiidae	<i>Xenentodon cancila</i>	Freshwater gar-fish	Nga-phaung-voe
		Hemiramphidae	<i>Hyporhamphus limbatus</i>	Gaimard's half-beak	Na-phaung-voe-arto
5.	Perciformes	Ambassidae	<i>Pseudambassis ranga</i>	Indian Glass fish	Nga-zin-zat
		Gobiidae	<i>Glossogobius giuris</i>	Tank goby	Ka-tha-boe
		Channidae	<i>Channa striatus</i>	Murrel, Striped-snakehead	Nga-yant
		Cichlidae	<i>Oreochromis spp.</i>	Nile Tilapia	Tilapia
		Mastacembelidae	<i>Macrognathus zebrinus</i>	Burmese spinyeel	Nga-mway-doh-kyan-sit
		Belontiidae	<i>Trichogaster pectoralis</i>	Snakeskin Gourami	Japan-nga

Table (2). Catch weight (kg) of recorded some commercial and non-commercial fish species

Sr No	Species	December		January		February		March		April		May		Total
		1 st (kg)	2 nd (kg)	1 st (kg)	2 nd (kg)	1 st (kg)	2 nd (kg)	1 st (kg)	2 nd (kg)	1 st (kg)	2 nd (kg)	1 st (kg)	2 nd (kg)	
1	<i>Notopterus notopterus</i>	1.52	4.62	1.54	4.62	-	-	1.54	-	7.69	10.77	9.23	-	41.53
2	<i>Catla catla</i>	307.69	153.85	307.69	153.85	307.69	153.85	153.85	307.85	153.85	307.69	153.85	307.69	2769.4
3	<i>Cirrhinus mrigala</i>	153.85	307.69	153.85	307.69	307.69	153.85	153.85	307.69	307.69	153.85	307.69	153.85	2769.24
4	<i>Labeo rohita</i>	153.85	307.69	153.85	307.69	307.69	153.85	153.85	307.69	307.69	153.85	307.69	153.85	2769.24
5	<i>Labeo dussumieri</i>	-	-	-	-	-	-	-	-	10.77	7.69	10.77	-	29.23
6	<i>Puntius chola</i>	3.08	6.15	3.08	6.15	-	-	-	6.15	-	7.69	7.69	-	39.99
7	<i>Amblypharyngodon mola</i>	46.15	30.77	46.15	30.77	30.77	15.39	30.77	15.39	30.77	30.77	15.39	30.77	353.86
8	<i>Osteobrama belangeri</i>	92.31	107.69	92.31	107.69	76.92	46.15	30.77	15.38	61.54	30.77	30.77	46.15	738.45
9	<i>Osteobrama cotio cunma</i>	30.77	46.15	30.77	46.15	30.77	-	-	15.38	30.77	15.39	15.39	30.77	292.31
10	<i>Mystus pulcher</i>	4.62	3.08	4.62	3.08	-	-	-	4.62	7.69	9.23	6.15	7.69	50.78
11	<i>Ompok bimaculatus</i>	4.62	3.08	4.62	3.08	-	-	-	6.15	7.69	7.69	6.15	7.69	50.77
12	<i>Wallago attu</i>	1.54	1.54	1.54	-	7.69	-	-	4.62	-	-	-	-	16.93
13	<i>Pseudeutropius acutirostris</i>	-	-	-	-	-	-	-	-	4.62	7.69	12.31	7.69	32.31
14	<i>Xenentodon cancila</i>	4.62	6.15	4.62	6.15	3.08	7.69	6.15	4.62	3.08	6.15	3.08	1.54	56.93
15	<i>Hyporhamphus limbatus</i>	6.15	4.62	6.15	4.62	7.69	3.08	4.62	3.08	4.62	1.54	3.08	6.15	55.4
16	<i>Pseudambassis ranga</i>	46.15	30.77	46.15	30.77	15.39	30.77	15.39	30.77	15.39	30.77	15.39	30.77	338.48
17	<i>Glossogobius giuris</i>	-	-	-	-	-	-	-	-	7.69	4.62	4.62	7.69	24.62
18	<i>Channa striatus</i>	4.62	4.62	4.62	-	-	7.69	-	-	-	9.23	7.69	-	38.47
19	<i>Oreochromis spp.</i>	30.77	15.38	30.77	15.38	7.69	7.69	9.23	10.77	15.38	18.46	15.38	15.38	192.28
20	<i>Macrogathus zebrinus</i>	-	-	-	-	-	-	-	-	4.62	6.15	4.62	4.62	20.01
21	<i>Trichogaster pectoralis</i>	-	-	-	-	-	-	-	-	10.77	7.69	7.69	7.69	33.84
Total		1926.16		1920.02		1683.08		1600.18		1820.01		1764.62		10714.07

- some commercial fish species
- some non-commercial fish species

Table (3). Monthly value changes (kyats/kg) of some commercial fish species in Inn-ye gyi Lake

Sr. No	Species	December	January	February	March	April	May	Total
1	<i>Notopterus notopterus</i>	3250.0	3250	-	3250	3900	3900	17550
2	<i>Catla catla</i>	1300.0	1300	1300	1625	1625	1625	8775
3	<i>Labeo rohita</i>	1625.0	1625	1625	1625	1950	1950	10400
4	<i>Osteobrama belangeri</i>	1625.0	1625	1625	1625	1625	1625	9750
5	<i>Mystus pulcher</i>	1625.0	1625	-	1625	1625	1625	8125
6	<i>Ompok bimaculatus</i>	3250.0	3250	-	3250	3250	3250	16250
7	<i>Wallago attu</i>	3900.0	3900	3900	3900	-	-	15600
8	<i>Xenentodon cancila</i>	1300.0	1300	1300	1300	1625	1625	8450
9	<i>Hyporhamphus limbatus</i>	1300.0	1300	1300	1300	1300	1300	7800
10	<i>Channa striatus</i>	2600.0	2600	2600	-	3250	3250	14300
Total		21775	21775	13650	19500	20150	20150	117000

Table (4). Monthly value changes (kyats/kg) of some non-commercial fishspecies in Inn-yeygi Lake

Sr. No	Speices	December	January	February	March	April	May	Total
1	<i>Cirrhinus mrigala</i>	1950.0	1950	1950	1950	2275	2275	12350
2	<i>Labeo dussumieri</i>	-	-	-	-	1300	1300	2600
3	<i>Puntius chola</i>	975.0	975	-	975	975	975	4875
4	<i>Amblypharyngodon mola</i>	780.0	780	780	780	975	975	5070
5	<i>Osteobrama cotio cumma</i>	1625.0	1625	1625	1625	1625	1625	9750
6	<i>Pseudeutropius acutriostris</i>	-	-	-	-	3250	3250	6500
7	<i>Pseudambassis ranga</i>	975.0	975	975	975	780	780	5460
8	<i>Glossogobius giuris</i>	-	-	-	-	2600	2600	5200
9	<i>Oreochromis spp.</i>	1625.0	1625	1625	1625	1950	1950	10400
10	<i>Macrognathus zebrinus</i>	-	-	-	-	3900	3900	7800
11	<i>Trichogaster pectoralis</i>	-	-	-	-	1625	1625	3250
Total		7930	7930	6955	7930	21255	21255	73255

Table (5). Recorded catch weight (kg) in different orders

Sr. No	Order	Catch weight (kg)	Percentage(%)
1	Osteoglossiformes	41.53	0.39
2	Cypriniformes	9761.72	91.11
3	Siluriformes	150.79	1.41
4	Cyprinodontiformes	112.33	1.05
5	Perciformes	647.7	6.05
Total		10714.07	100

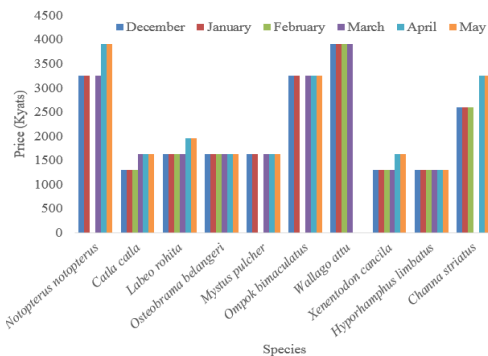


Figure (2). Monthly value changes (kyats/kg) of some commercial fish species in Inn-yeygi Lake

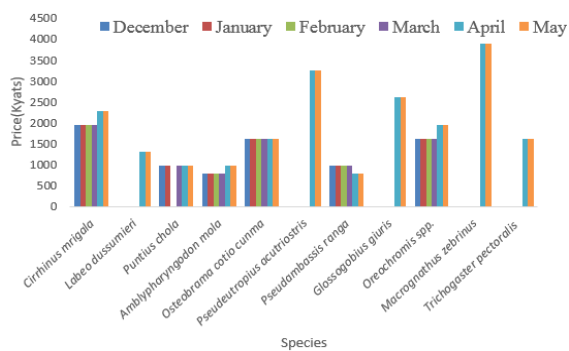


Figure (3). Monthly value changes (kyats/kg) of some non-commercial fish species in Inn-yeygi Lake

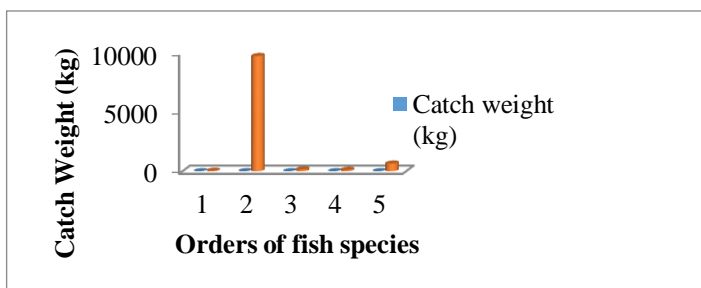
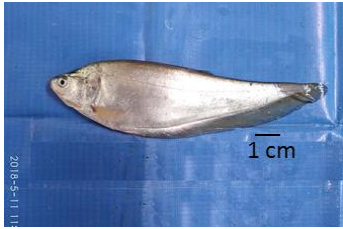


Figure (4). Recorded catch weight (kg) and percentage (%) in different orders of fishspecies



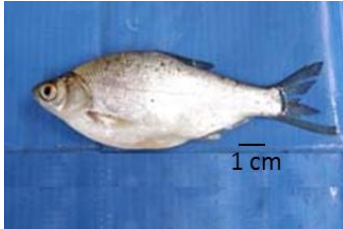
A. *Notopterus notopterus* (Nga-phe)



B. *Catla catla* (Nga-thaing-gaung-pwa)



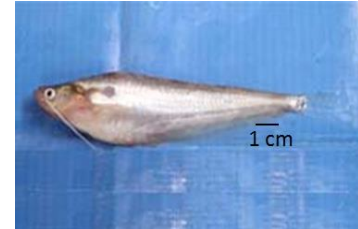
C. *Labeo rohita* (Nga-myit-chin)



D. *Osteobrama belangeri* (Nga-bei-oung)



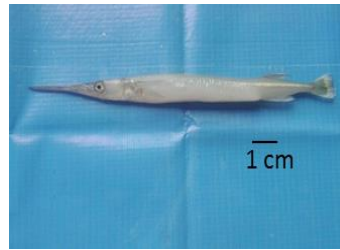
E. *Mystus pulcher* (Nga-zin-yine-kyetchay)



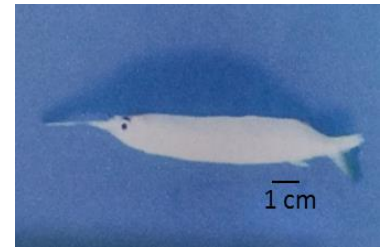
F. *Ompok bimaculatus* (Nga-nu-than)



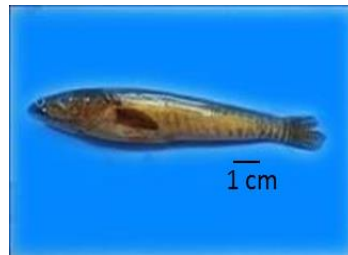
G. *Wallago attu* (Nga-but)



H. *Xenentodon cancila* (Nga-phaung-yoe)



I. *Hyporhamphus limbatus* (Nga-paung-yoe-arto)

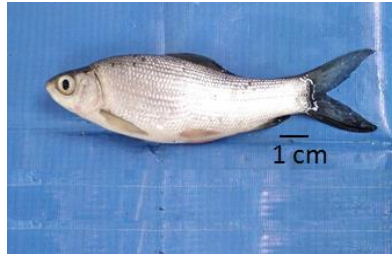


J. *Channa striatus* (Nga-yant)

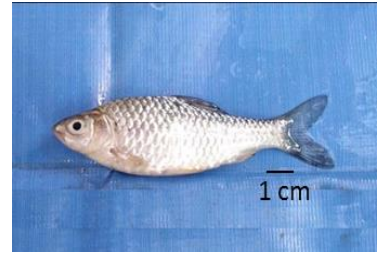
Plate (4). Recorded some commercial fish species in Inn-yegyi Lake, Kyonpyaw Township



A. *Cirrhinus mrigala* (Nga-gin)



B. *Labeo dussumieri* (Nga-dane-lone)



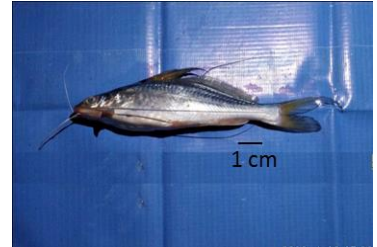
C. *Puntius chola* (Nga-kone-ma)



D. *Amblypharyngodon mola* (Nga-bei-phyu)



E. *Osteobrama cotio cunma* (Nga-lay-daunt)



F. *Pseudeutropius acutirostris* (Nga Than Gyeik Par)



G. *Pseudambassis ranga* (Nga-zin-zat)



H. *Glossogobius giuris* (Katha-boe)



I. *Oreochromis* spp. (Tilapia)



J. *Macrornathus zebrinus* (Nga-mway-doh-kyan-sit)



K. *Trichogaster pectoralis* (Japan-nga)

Plate (5). Recorded some non-commercial fish species in Inn-yeyi Lake, Kyonpyaw Township

Discussion

The present study recorded occurrence of 21 fish species belonging to 19 genera and 13 families under five orders from Inn-yegyí Lake. In the present study, the collected species were recorded from order Osteoglossiformes, Cypriniformes, Siluriformes, Cyprinodontiformes and Perciformes. The fish catch weight (kg) and percentage (%) of orders Osteoglossiformes (41.53kg, 0.39%), Cypriniformes (9761.72kg, 91.11%), Siluriformes (150.79kg, 1.41%), Cyprinodontiformes (112.33kg, 1.05%) and Perciformes (647.7kg, 6.05%).

Kathy Myint (2012) stated that Order Cypriniformes was dominant followed by order Perciformes and Siluriformes in Inma Inn, Pyay District. Ei Ei Khaing (2015) stated that Order Cypriniformes was the highest in Shar Khe Inn, Kyonpyaw Township. Thus, the present finding was the same.

Due to the result of catch weight of fish species in study period, the species *Labeo rohita*, *Catla catla* and *Cirrhinus mrigala* were found to be largest in December to May (2018). The Department of fisheries (Kyonpyaw Township) released fish seeds (induced breed) in the Inn-yegyí Lake. Aung Kyaing (2010) stated that the Department of Fisheries (Hinthada and Zalun Townships) released fish seeds (induced breed) in the Ayeyarwady River from 2001 to 2010. Thus, the released fishes (*Labeo rohita* and *Catla catla*) are found in Hinthada and Zalun Townships (segments of Ayeyarwady River). The species *Amblypharyngodon mola*, *Pseudambassis ranga*, *Osteobrama belangeri*, *Osteobrama cotio cunma* and *Oreochromis spp.* were moderately caught in December to May (2018). *Wallago attu*, *Xenentodon cancila*, *Hyporhamphus limbatus*, *Mystus pulcher*, *Ompok bimaculatus*, *Puntius chola*, *Channa striatus*, *Notopterus notopterus*, *Macrogathus zebrinus*, *Glossogobius giuris* and *Trichogaster pectoralis* were least found in December to March (2018). Among the studied species, the species of *Wallago attu*, *Ompok bimaculatus* and *Macrogathus zebrinus* were the highest prices than the rest of the other fish species and also the species of *Puntius chola* was lowest price than the other fish species.

Some commercial fish species in Inn-yegyí Lake were *Notopterus notopterus*, *Catla catla*, *Labeo rohita*, *Osteobrama belangeri*, *Mystus pulcher*, *Ompok bimaculatus*, *Wallago attu*, *Xenentodon cancila*, *Hyporhamphus limbatus* and *Channa striatus*. Among 10 species of some commercial fish species in Inn-yegyí Lake, the fish species of *Notopterus notopterus*, *Ompok bimaculatus* and *Wallago attu* were the highest price because of the lowest productivity year after year. Therefore, this fish species should be replenished in Inn-yegyí Lake.

Some non-commercial fish species of Inn-yegyí Lake were *Cirrhinus mrigala*, *Labeo dussumieri*, *Puntius chola*, *Amblypharyngodon mola*, *Osteobrama cotio cunma*, *Pseudambassis ranga*, *Glossogobius giuris*, *Oreochromis spp.*, *Macrogathus zebrinus*, and *Trichogaster pectoralis*. Among 11 species of some non-commercial fish species in Inn-yegyí Lake, the fish species of *Pseudeutropius acutriostris* and *Macrogathus zebrinus* were the highest price than the remaining of the fish species.

Wing Kyaing (2005) stated that three species of carps, carplets, striped catfish *Pangasius* species and Tilapia species are the most economically important aquaculture species in Maubin. Yin Yin Win (2007) stated that the dominant wild fish species (*Mystus pulcher*) had been recorded the income for the fishing communities and farmers in two villages of Maubin Township. Jennifer Soe Maung (2009) stated that the commercial fish species, *Ctenopharyngodon idellus*, *Cirrhinus mrigala*, *Pangasius hypophthalmus*, *Catla catla*, *Piractus brachipomus*, *Oreochromis niloticus*, *Labeo rohita* and *Barbodes gonionotus*

are also economically cultured in Maubin District and majority of fish farmers get more benefit.

Conclusion

Among the studied species, *Notopterus notopterus*, *Ompok bimaculatus*, *Wallago attu* and *Channa striatus* were recorded as high commercial fish species (17550 Kyats/Kg, 16250 Kyats/Kg, 15600 Kyats/Kg and 14300 Kyats/Kg) respectively. The lowest price of *Hyporhamphus limbatus* was 7800 Kyats/Kg. The higher prices of non-commercial fishes were *Cirrhinus mrigala* (12350 kyats/kg) and *Oreochromis spp* (10400 kyats/kg) respectively. The lowest price of *Labeo dussumieri* was 2600 Kyats/Kg. Therefore, the fish species *Hyporhamphus limbatus* and *Labeo dussumieri* would be conserved in the near future. In this study, fish resources are divided into commercial and non-commercial fishes. The low production of the studied fishes is a major problem in this studied area.

Finally, the result and finding of present work will give some important information to fishery sector about species composition, production and price, in addition, this lake will give more income and food for local people.

Acknowledgements

We would like to express our sincere gratitude to Dr. Tin Htwe, Rector of Hinthada University, and Dr. Mar Lar, Pro-Rector Hinthada University for their kind permission and encouragement to carry out this work. We are indebted to Dr. Yi Yi Win, Professor and Head, Department of Zoology, Hinthada University for accepting the topic of research work and also for her encouragement and editing the manuscript.

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