

Species Composition and Seasonal Abundance of Family Nemipteridae from Nyaungtan Jetty, Pazuntung Township, Yangon Region, Myanmar

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Abstract:- Species composition and seasonal abundance of Family Nemipteridae collected from Nyaungtan Pazuntaung Township was studied during the study period July 2013 to March 2015. Sample collection was conducted monthly and identified. Seasonal occurrence of the species was recorded monthly. Four fish species belonging to family Nemipteridae under three genera of order Perciformes were recorded. Nemipterids japonicas was commonly found in all seasons. *Parascolopsis aspinosa* was recorded for the first time from Myanmar. The highest number of catch weight was recorded in August, and the second highest number of catch weight in March both for > 100 g and > 50 to < 100 g fish. The highest amount of catch weight for > 30 to < 50 g fish was recorded in January followed after March and December.

Keywords:- *Nemipteridae*, *Shwe-Nga*, *Nyaungtan Jetty*, *Threadfin Bream*.

I. INTRODUCTION

Myanmar has a great potential for sustained fishing activities because of its long coastline of 2832 kilometers and an extensive river system. Vast sea, abundant inland water-bodies, appropriate and diverse climates and favorable water in Myanmar provide migration and breeding of most species of fishes. Fisheries support the livelihood of the people of Myanmar. Fishes are important to local people not only for family income but also for getting foreign currency earning. Species diversity of fish fauna is also an integral part of any freshwater or marine fauna in a given area. [1] Commercial marine fishes are important not only for the local people for their family income but also for getting foreign currency of the country. Tanintharyi Coastal area, Ayeyarwady coastal area and Mon Coastal area are major productive fishing places of Myanmar. The present work was carried out.

- To identify the species of Family Nemipteridae
- To observe the seasonal occurrence of Family Nemipteridae

II. MATERIALS AND METHODS

The specimens were collected at Fish Depot of Nyaung Tan Jetty, Pazundaung Township in Yangon Region, located at 96° 10' 35.13" E and 16° 46' 35.13" N where fishing vessels containing various species of Nemipteridae captured from Andaman Sea were unloaded their catches.

The study period lasted from July 2013 to March 2015.

Fish collection was carried out Monthly from landing site, Nyaungtan Jetty, Pazuntung Township. Occurrence of the fish species was recorded and photographic records were taken. Then, fishes were preserved in 10% anhydrous disodium phosphate and acid sodium phosphate monohydrate for further identification. Identification was followed after [2] and [3]

III. RESULTS

Four species of fish, *Nemipterus japonicus* (Bloch, 1791), *N. peronii* (Valenciennes, 1830), *N. nematophorus* (Bleeker, 1854) and *Parascolopsis aspinosa* (Rao & Rao, 1981) belonging to three genera under family Nemipteridae were recorded.

A. Seasonal abundance of Nemipteridae

Monthly abundance of Nemipteridae (> 100 g, > 50 to < 100 g, and < 100 g) were recorded. The highest number of catch weight was recorded in August, and the second highest number of catch weight in March both for > 100 g and > 50 to < 100 g fish. The abundance of Nemipteridae (> 30 to < 50 g) fish was also recorded. The highest amount of catch weight for > 30 to < 50 g fish was recorded in January followed after March and December.

The < 30 g fishes of Nemipteridae were recorded the highest amount in December followed after March and August.

Family	No	Species	Common Name	Local Name
Nemipteridae	1	<i>Nemipterus japonicus</i> (Bloch, 1791)	Japanese threadfin bream	Shwenga
	2	<i>N. peronii</i> (Valenciennes, 1830)	Notched threadfin bream	Shwenga
	3	<i>N.nematophorus</i> (Bleeker, 1854)	Doublewhip threadfin bream	Shwenga
	4	<i>Parasalopsis aspinosa</i> (Rao & Rao, 1981)	Smooth dwarf monocle bream	Shwenga

Table 1:- Occurrence of Nemipteridae at Fish Depot of Nyaung Tan Jetty

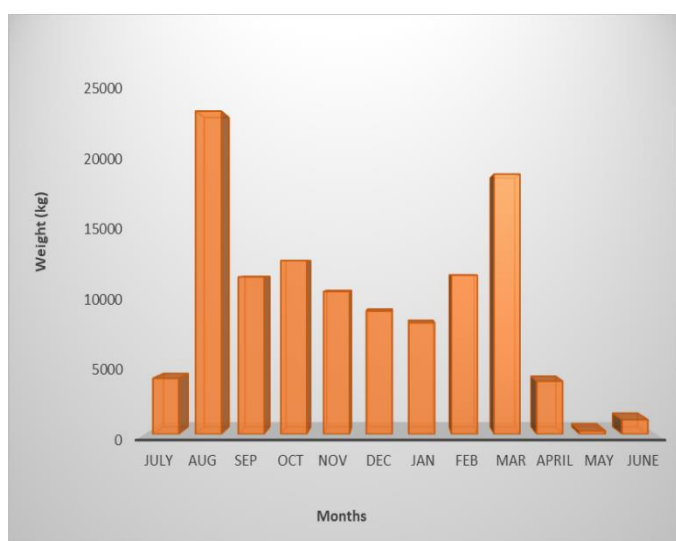


Fig 1:- Monthly abundance of Nemipteridae(>100 g)

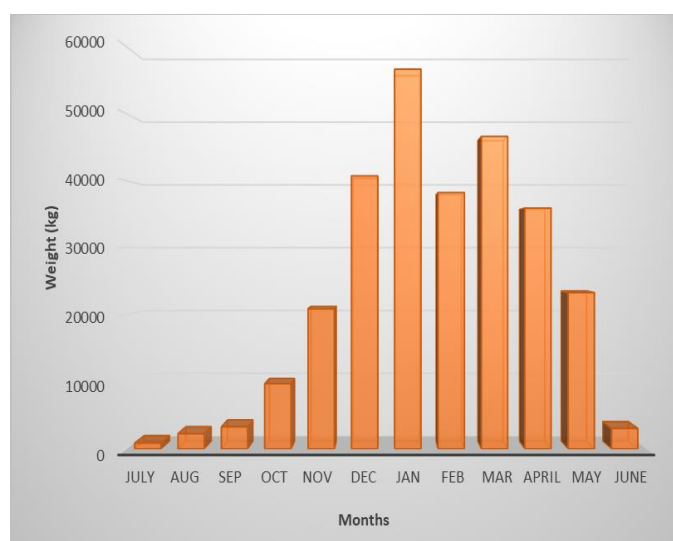


Fig 3:- Monthly abundance of Nemipteridae(>30-<50 g)

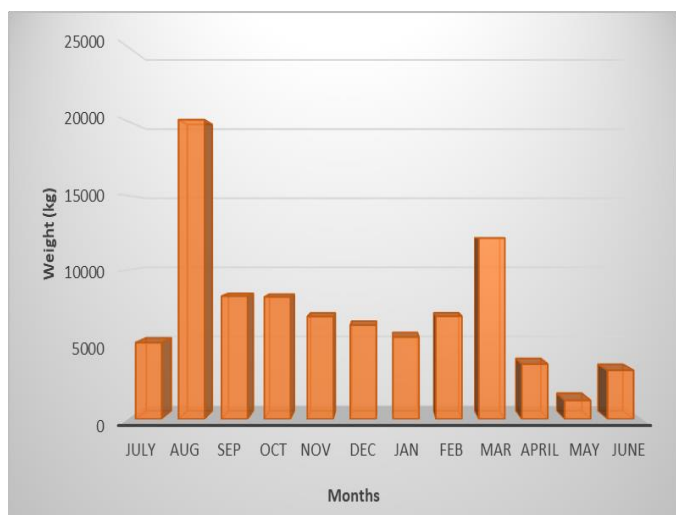


Fig 2:- Monthly abundance of Nemipteridae(>50-<100 g)

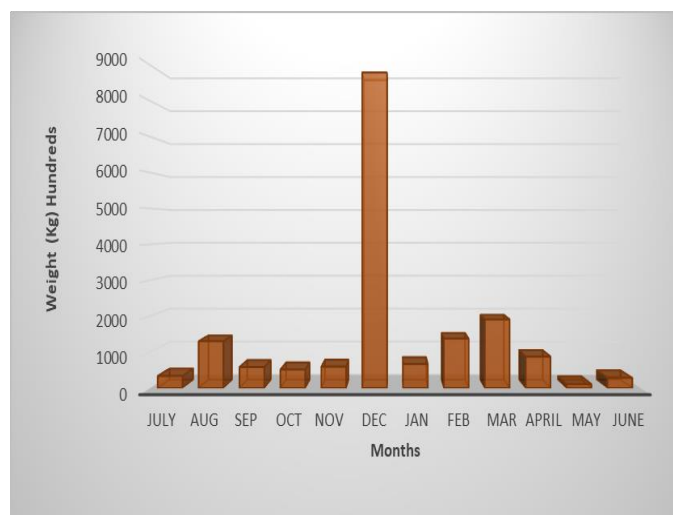


Fig 4:- Monthly abundance of Nemipteridae(<30 g)

IV. DISCUSSION

Four species of fish belonging to three genera under Family Nemipteridae were recorded. *Nemipterus japonicus*, *N. peronii*, *N. nematophorus* and *Parascalopsis aspinosa* were recorded. They are marine, bottom-living fishes. Species of the genus *Nemipterus* occur on mud and sand bottoms in coastal inshore as well as offshore shelf waters and range in depths to about 300 m, although most species occur in much shallower water. [5]

It agrees with the present study. *Nemipterus* species were caught in coastal inshore and offshore waters. *N. japonicus*, *N. peronei*, *N. nematophorus* were recorded by previous researchers [4], [6] [7], [8] in Myanmar. *Parascalopsis aspinosa* was recorded for the first time in Myanmar. Nemipterids can be solitary or schooling and do not appear to be territorial, carnivorous and feed mainly on other small fishes, cephalopods, crustaceans, and polychaetes. [5].

Spawning seasonality varies widely among different species and appears to vary also between localities. Mature ova are present in species of *Nemipterus* over a prolonged period [5]. Threadfin breams, are important commercial fishes in Indo-West Pacific region. [5]. It agrees with the present study. Nemipteridae fishes are commercial fishes in the study area. *Nemipterids* are popular eating fishes and are marketed fresh, dry-salted, dry-smoked, fermented, and steamed. [8] recorded that the export value of *Nemipterus japonicus* was (1268150 US\$) in 2004. In the present study, *Nemipterus japonicus* was most commonly found commercial fishes. It was also recorded whole year round. It also agrees with [7]

Trash fish are made into fish balls, fish cakes, fish meal and surimi, or used as animal feed. In many areas, species of *Nemipterus* are the second or third-most important catch species by weight. The Fishery Statistics reports a total catch of around 134200 t of nemipterids from the Western Central Pacific. [5] In many areas, species of *Nemipterus* are the second or third-most important catch species by weight. It agrees with the present study. Nemipterids are popular eating fishes in the study area. Trash fish are also used as animal feed.

V. CONCLUSION

It could be concluded that the information about the seasonal abundance of Nemipteridae and its commercial importance for the local people may be of great help for conservation of this valuable marine fish.

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