



**STUDY ON THE MORPHOLOGICAL  
APPROACHES TO THE IDENTIFICATION,  
DISTRIBUTION AND DIVERSITY OF FISH  
UNDER CYNOGLOSSIDAE AND DASYPATIDAE  
FAMILY IN CHATTOGRAM COAST**

**Fahmida Tanjim Bhuiyan**

**Roll No: 0119/11**

**Registration No: 710**

**Session: 2019-2020**

**A thesis submitted in the partial fulfillment of the requirements for the degree of  
Master of Science in Marine Bioresource Science**

**Department of Marine Bioresource Science  
Faculty of Fisheries  
Chattogram Veterinary and Animal Sciences University  
Khulshi, Chattogram-4225, Bangladesh**

**OCTOBER 2022**

## **AUTHORIZATION**

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**This is to certify that we have examined the above Master 's thesis and have found that it is complete and satisfactory in all respects and that all revisions required by the thesis examination committee have been made**

---

**Supervisor**

**Ms. Shahnaz Sultana**

**Professor**

**Department of Agricultural Economics  
and Social Science**

**CVASU**

---

**Co-supervisor**

**Avijit Talukder**

**Assistant Professor**

**Department of Marine Bioresource Science**

**CVASU**

---

**Chairman of the Examination Committee**

**Dr. Mohammad Sadequr Rahman Khan**

**Department of Marine Bioresource Science**

**Faculty of Fisheries**

**Chattogram Veterinary and Animal Sciences University**

**Khulshi, Chattogram-4225, Bangladesh**

**OCTOBER 2022**

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**The Author**

**Fahmida Tanjim Bhuiyan**

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## ABSTRACT

One of the most famous fish's families for consumption in Chattogram coast is Cynoglossidae and Dasyatidae family but no such work was done on this specific family in this coast before. So, variations among different species under the Cynoglossidae and Dasyatidae family was investigated using morphometric characters. A detailed one year (February 2019 to January 2020) long survey considering 2 months of ban periods (June-July 2019) was done for checking out the available Cynoglossidae and Dasyatidae in the Chattogram coast, including three stations. Two stations in Chattogram metropolitan area (Patenga and Kattoli) and one in Cox's Bazar. Morphometric data collected from the survey went through the statistical analysis of correlation. In total, seven species under the Cynoglossidae and Dasyatidae family could be able to find out. After every sampling, initially samples were sorted into different group on the basis of visual examination, then the morphological process confirmed species of different sorted group. From every sample, six morphological data (length) was collected for statistical analysis. A detailed morphological study to differentiate among closely related species was the study's basis. The frequency of availability of *Cynoglossus lida* and *Himantura walga* were the most among the species both in stations and months. Some species such as *Cynoglossus macrolepidotus*, *pseudorhombus elevatus*, *Paralich algoeosis*, *Dasyatis bennettis*, *Gymnura poecilure* were found less frequently. Within species, all species were correlated. Cynoglossidae and Dasyatidae family might influence the environment, the economy because of being the diverse fish family, and this study was an initial step towards this process. Further scientific experiment on Cynoglossidae and Dasyatidae family can use this study as baseline experiment.

**KEYWORDS:** Morphometric, Cynoglossidae and Dasyatidae, Availability, Chattogram.