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LIST OF ABBREVIATIONS

Acronym	Definition
M	Meter
μm	Micro meter
Mm	Millimeter
m^3	Cubic meter
Jan	January
Feb	February
Mar	March
Apr	April
May	May
Jun	June
Jul	July
Aug	August
Sep	September
Oct	October
Nov	November
Dec	December
S	Summer
W	Winter
M	Monsoon

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Abstract

The temporal abundance and composition of fish larval families, as well as their spawning season were researched in the Shamlapur area of Cox's Bazar coast, Bangladesh from March 2020 to February 2021. A bongo net was used in sampling in each month. Under a stereo microscope, fish larvae were classified up to the family level. A total of 827 larvae representing 8 families, with a mean abundance of 68.92 per 1000m³, were identified. Clupeidae were the most frequent, accounting for 69.65% of the total capture, followed by Engraulidae (20.19%), Ambassidae (5.44%), Mugilidae (2.54%), Blenniidae (1.09%) and others (1.09%). Clupeidae, Engraulidae, and Ambassidae are the three prominent larval families that use the Shamlapur region as their nursing area. The month of April was identified as the most diversified month, which had 329 individuals/1000m³. In contrast, August had the highest number of larvae families (03). Spawning season were divided into three groups—winter, summer, and the monsoon. Clupeidae and Ambassidae larvae were prolonged spawners as their larvae were found in all three seasons. Engraulidae spawned in late summer, early and mid-rainy monsoons. As per research, Blenniidae reproduce in the middle of the winter, while Mugilidae do that in the early monsoon. Gerriidae, Labridae, and Carangidae were identified as midwinter, late summer, and late winter spawners, respectively. The highest value of the Shannon-Wiener index was observed in August (0.788). In January (0.918), Margalef's family richness reached its highest value, whereas Pielou's index peaked in January (0.845). This present study's findings will help in the decision-making regarding marine fisheries management in Cox's Bazar –Shamlapur region.

Key Words: fish larvae, diversity, abundance, spawning seasons, Shamlapur region.