

Report on Larval Fish Identification

Species Composition from Push Net & Density of Fish Larvae and Egg from Bongo Net

Prepared by: Nurul & Santi
Group B: 1

Background

To build capacity with respect to the identification of fish larvae especially important species within The South China Sea member country network and to guide the longer-term sustainability for reversing environmental degradation trends within the regions

Main Objective

- To have a better understanding on how to identify fish egg, fish larvae and juvenile fishes
- To have a further knowledge on the importance of the early life history for a better fishery management

Methods

1. Push Net: To study the species composition of juvenile fishes
2. Bongo Net : To study the density of fish larvae and fish egg



The background of the image is a dense, repeating pattern of small, realistic water droplets. Each droplet is rendered with a gradient of light blue and white, giving them a three-dimensional, glistening appearance. They are scattered across the entire frame, creating a textured, fresh, and clean aesthetic.

Result

Species composition from push net

No	Family/species	No of fish in 1 kg sample	Density/ hour/haul
1	Atherinidae	22	859
2	Clupeidae (<i>Hilsa kelee</i>)	3	2788.5
3	Clepeidae 1	1	84.5
4	Clupeidae 2	33	253.5
5	Leiognathidae (<i>L. equulus</i>)	46	3887
6	Leiognathidae (<i>Secutor</i> sp)	148	12506
7	Carangidae (<i>Alepes djedaba</i>)	2	169

Total number of fish per hour/haul 21,548 individual

Density of fish larvae

No	Family	No.of individual	Density (ind/1000m ³)
1	Cynoglassidae	2	10.10
2	Nemipteridae	2	10.10
3	Carangidae	17	85.85
4	Gobidae	1	5.05
5	leiognathidae	1	5.05
6	Callionymidae	4	20.20
7	Terapontidae	1	5.05
8	Engraulidae	156	787.87
9	Sillaginidae	1	5.05
10	Scorpioniformes	1	5.05
11	Unidentified specimens	6	30.30

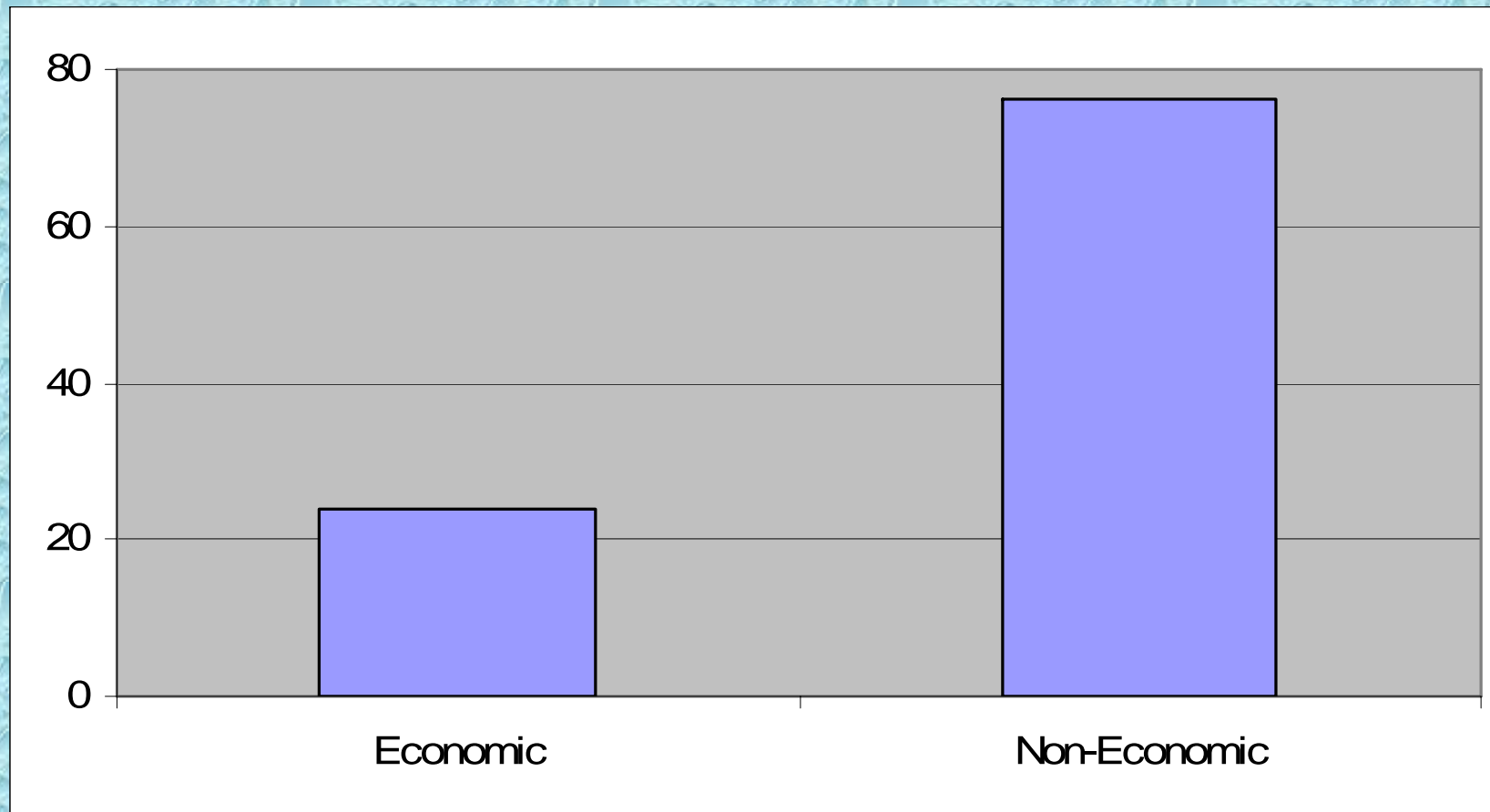
Density of fish egg

No	Egg	No.of egg	Density (egg/1000m ³)
1	Elliptical	432	2181.81
2	Spherical	93	469.69

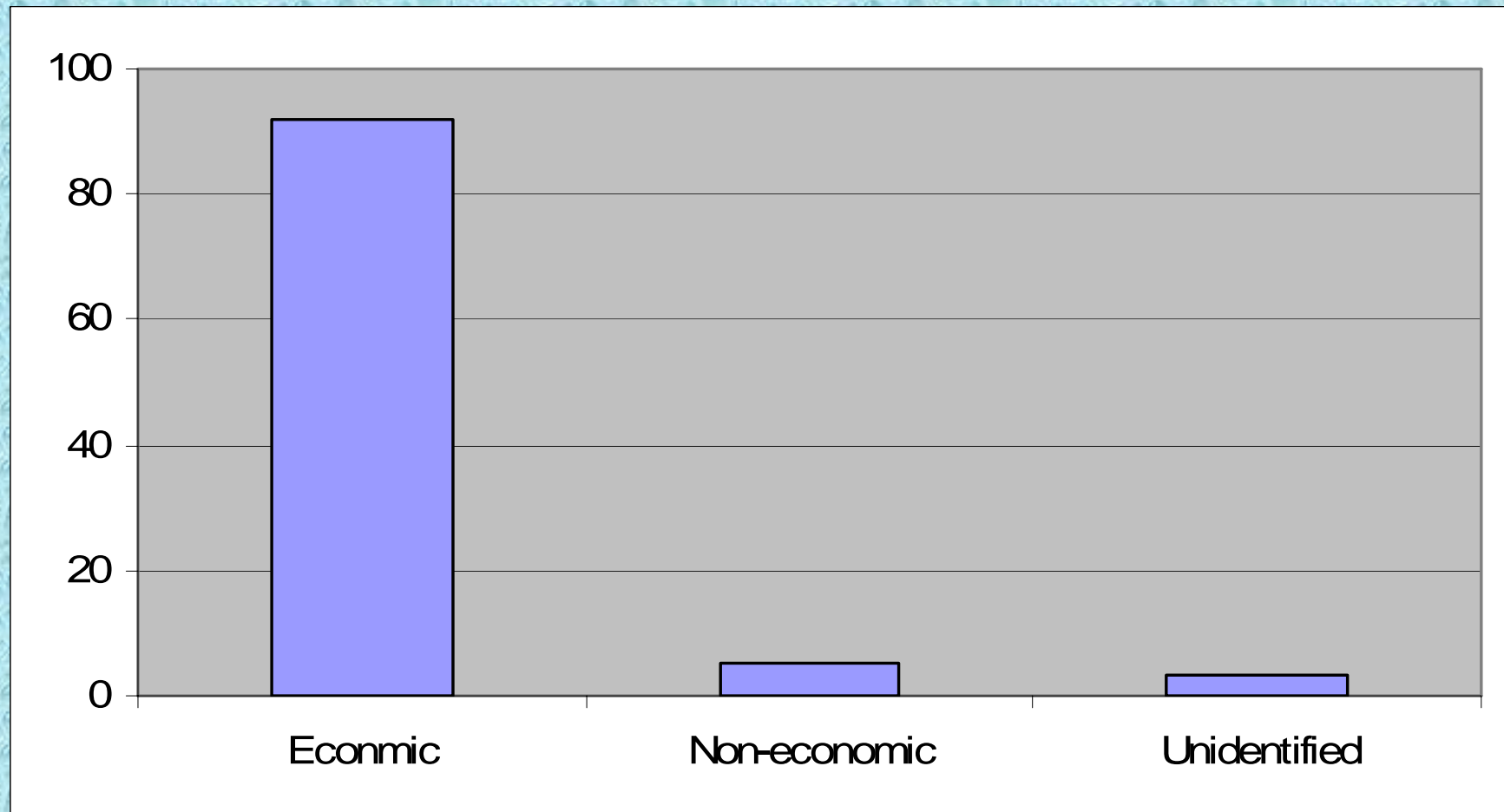
Stage development of fish larvae

No	Family	Development Stage		
		PF	F	Po
1	Cynoglassidae	1	1	
2	Nemipteridae	1	1	
3	Carangidae	10	5	2
4	Gobidae	1		
5	Leiognathidae	1		
6	Callionymidae	2	2	
7	Terapontidae	1		
8	Engraulidae	11	4	
9	Sillaginidae	1		
10	Scorpioniformes	1		
11	Unidentified specimens	6		

Push net



Larva



Discussion

Juvenile fishes

From the result shown that the most abundance juvenile fishes collected in Ko Lan waters was occupied by Leiognathidae (76%), followed by Clupeidae (14.5%) and Atherinidae (8.67%). In contrast, Carangidae is the least abundance family. In fact this family is commercially important fishes. From this feature shows that this area tends to degrade fish resources if not manage wisely

Larval & Egg

Engraulidae is the most dominant family in fish larvae and fish egg collected during the survey using Bongo Net in Pattaya. From the developmental stages it shows that Pre-flexion is the most dominant stage during the survey. It indicates that this area is predicted to be a nursery area of fishes, especially for commercially important like Engraulidae and Carangidae which is the most abundance family during this survey.

The fish egg collected indicates that the area is said to be a spawning ground for especially Engraulidae



Sawasdee