



**Establishment and Operation of a Regional System of
Fisheries *Refugia* in the South China Sea and Gulf of Thailand**

REPORT

**COLLECTION OF FISH EGGS AND LARVAE IN MASINLOC BAY,
ZAMBALES, FROM JANUARY TO DECEMBER 2019**

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1. Objective

To process and analyze the fish eggs and larvae samples collected in Masinloc bay, Zambales, on a quarterly basis in the year 2019.

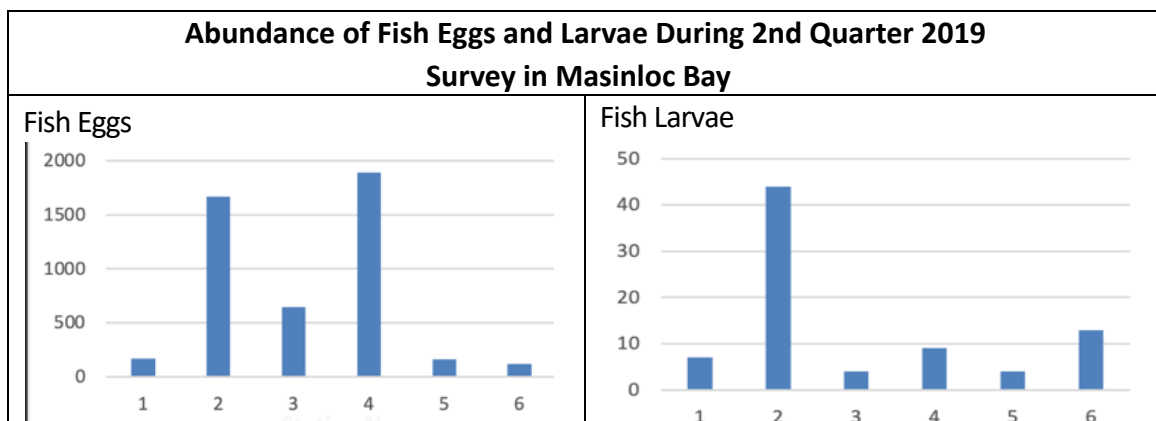
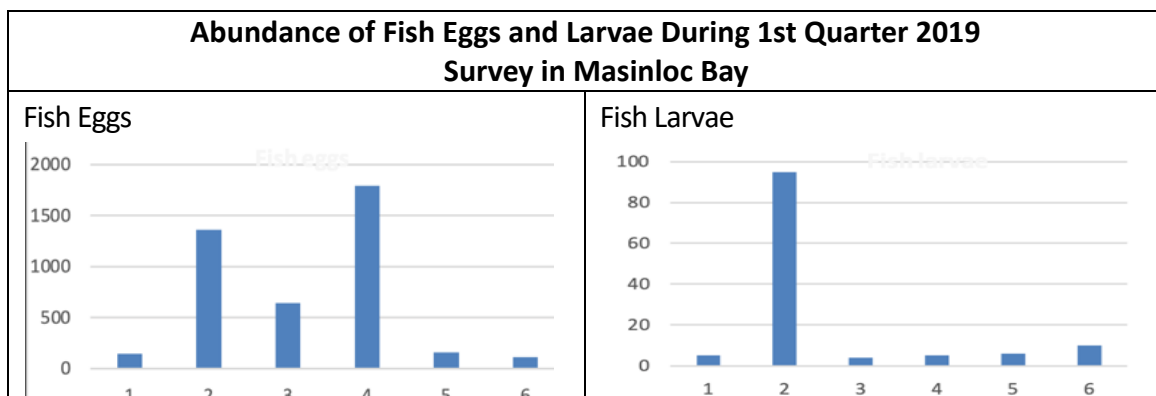
2. Methodology

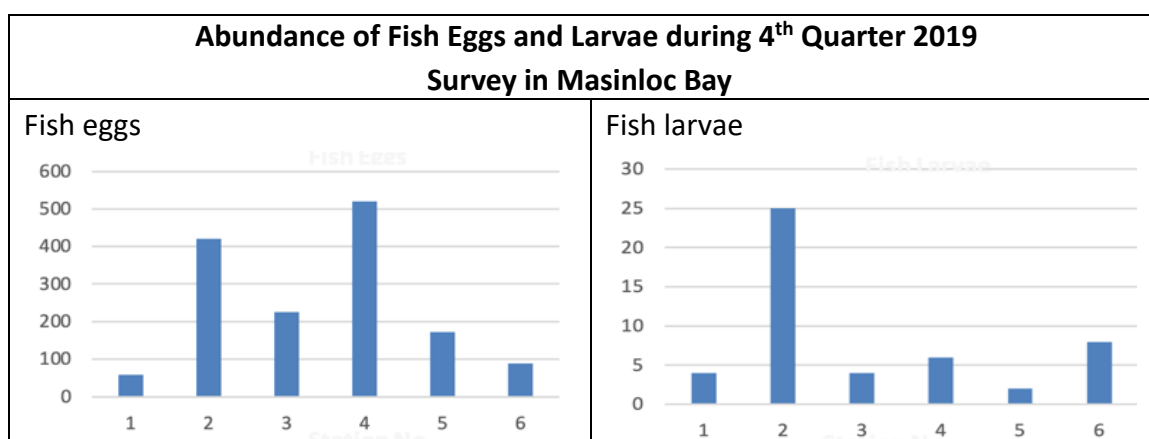
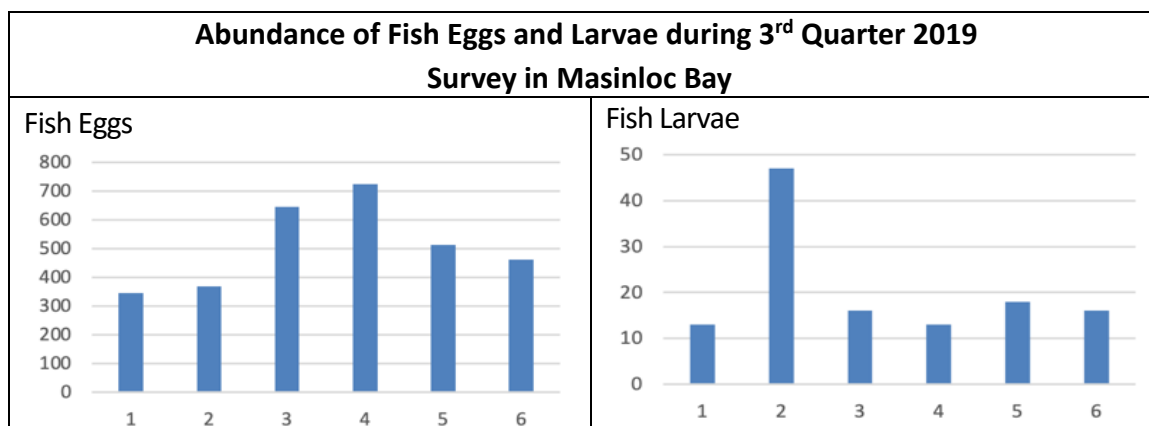
A quarterly monitoring/survey of fish eggs and larvae in Masinloc bay was conducted in 2019. The samples were collected by horizontal towing of a bongo net for 10 minutes with a 0.5m diameter, 1.5 meters length, 350- μ m mesh size, and a flowmeter centrally attached to the center of the net.

3. Results

The concentration of planktonic fish eggs collected in the coastal water of Masinloc bay during four surveys in 2019 was observed in station 4. A high abundance of planktonic fish eggs was observed in station 4, followed by station 2. A low quantity of fish eggs was recorded in stations 1, 5, and 6, respectively. Fish eggs abundance ranged from 89 ind. to 1,891 ind. during the 2019 survey.

During the survey in 2019, a total of 378 fish larvae belonging to 26 families were identified in 6 sampling points in Masinloc bay. The main fish larval families were Siganidae, Carangidae, Scombridae, Caesionidae, and Clupeidae. High concentrations of fish larvae were observed in station 2 throughout the survey period, and a low abundance of fish larvae was detected in stations 1, 3, 4, 5, and 6, respectively. Fish larval ranged from 2 ind. to 95 ind. in 6 sampling stations during the 2019 survey in Masinloc Bay.





Distributions of Fish Larvae by quarterly and families in Masinloc Bay 2019.

Masinloc Bay	Q1-2019	Q2-2019	Q3-2019	Q4-2019	Total
Family Larvae					
<i>Acanthuridae</i>	7	5	9	2	23
<i>Balistidae</i>	1	1	1	1	4
<i>Caesionidae</i>	7	2	9	4	22
<i>Carangidae</i>	16	6	10	7	39
<i>Chaetontidae</i>	2	1	1	1	5
<i>Clupeidae</i>	13		7	3	23
<i>Coryphaenidae</i>	1	1	7		9
<i>Exocoetidae</i>	8	4	10	1	23
<i>Labridae</i>		1	3		4
<i>Latidae</i>	1			1	2
<i>Leiognathidae</i>	5		5		10
<i>Lethrinidae</i>		2	6	1	9
<i>Lutjanidae</i>	2	1	7	1	11
<i>Mugilidae</i>	4				4
<i>Mullidae</i>	4		5		9
<i>Nemipteridae</i>	5	2	4	2	13

<i>Scaridae</i>		1	1	1	3
<i>Sciaenidae</i>			8		8
<i>Scombridae</i>	12	10	11	5	38
<i>Siganidae</i>	22	18	7	8	55
<i>Sillaginidae</i>	2	2	4		8
<i>Sphyraenidae</i>			6	1	7
<i>Syngnathidae</i>	3	3	2		8
<i>Terapontidae</i>	2		2		4
<i>Tetraodontidae</i>	2				2
<i>Trichiuridae</i>	6	4	1	2	13
<i>Unidentified</i>		17	9	8	34
Total	125	81	135	49	390

Annex 1

Processing fish larvae samples collected in Masinloc Bay, Zambales, during four sampling periods in the year 2018.



