

**Figure 2.1.** Locations of sampling zones. The study site was divided into three sampling zones (TC1, TC2, TC3) in Tung Chung Bay and one zone in San Tau (ST) (map generated from Google Map).

**TC1**



**TC2**



**TC3**



**ST**



**Figure 2.2.** Photographic record of the environment in every sampling zone.

**TC1** *Carcinoscorpius rotundicauda*



**TC1** *Tachypleus tridentatus*



**TC2** *Carcinoscorpius rotundicauda*



**Figure 3.1.** Examples of photographic records of horseshoe crab (Jun. 2016)

**TC3** *Carcinoscorpius rotundicauda*



**TC3** *Tachypleus tridentatus*



**Figure 3.1 (Cont'd).** Examples of photographic records of horseshoe crab (Jun. 2016)

**ST** *Carcinoscorpius rotundicauda*



**ST** *Tachypleus tridentatus*



**Figure 3.1 (Cont'd).** Examples of photographic records of horseshoe crab (Jun. 2016)

**Table 3.1.** Summary of horseshoe crab survey in every sampling zone

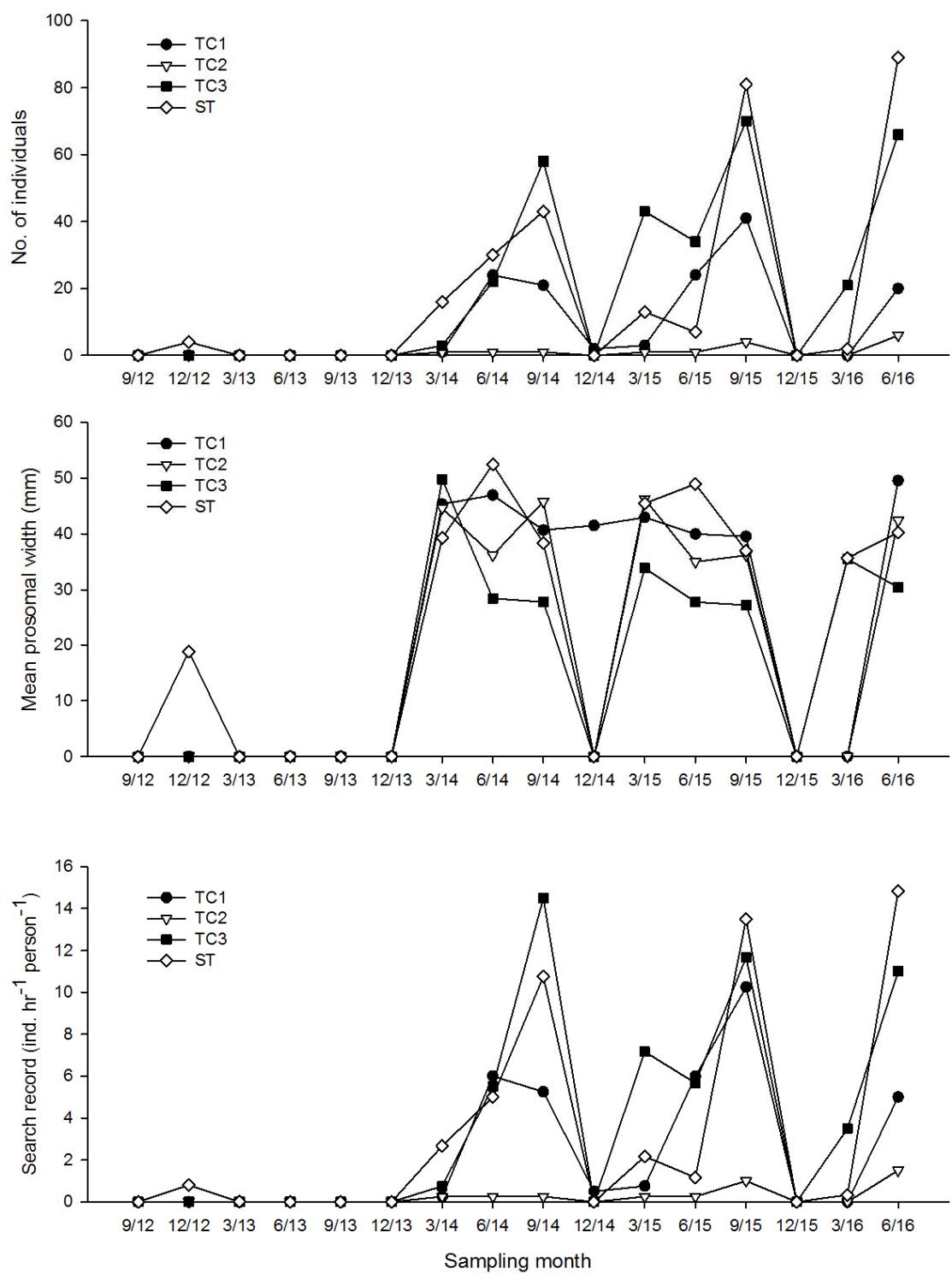
	TC1	TC2	TC3 *	ST
Search duration (hr)	2	2	3	3
<b><i>Carcinoscorpius rotundicauda</i></b>				
no. of individuals	20	6	66	89
mean prosomal width (mm)	49.57	42.43	30.42	40.30
max. prosomal width (mm)	142.72	74.17	86.54	75.41
min. prosomal width (mm)	15.24	30.38	11.76	12.00
Search record (ind. hr <sup>-1</sup> person <sup>-1</sup> )	5.0	1.5	11.0	14.8
<b><i>Tachypleus tridentatus</i></b>				
no. of individuals	2		18	27
mean prosomal width (mm)	44.74		45.16	60.28
max. prosomal width (mm)	53.71	N.A.	54.58	80.03
min. prosomal width (mm)	35.77		28.89	43.16
Search record (ind. hr <sup>-1</sup> person <sup>-1</sup> )	0.5		3.0	4.5

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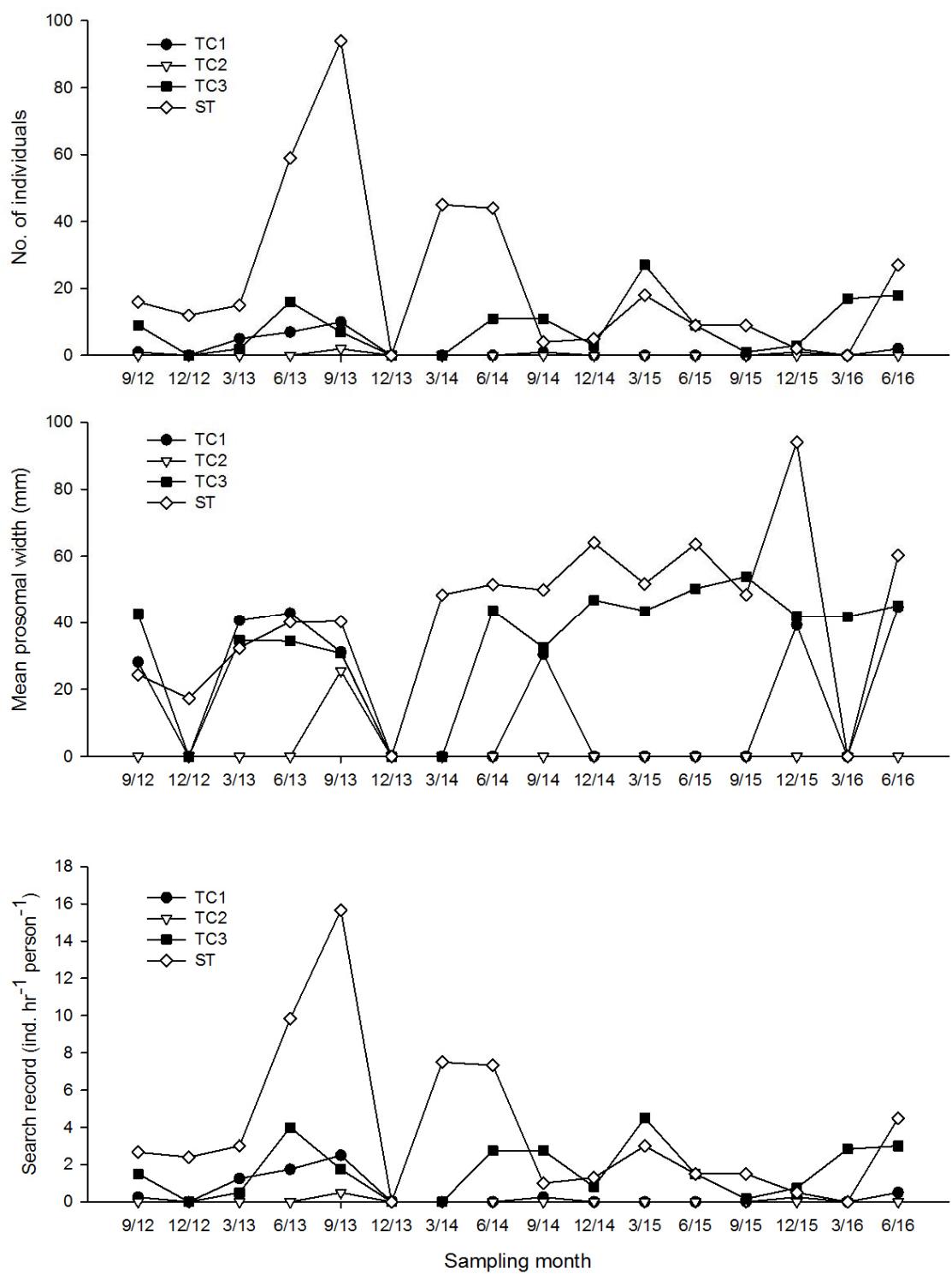
\* Three tiny juvenile horseshoe crabs were too small to be identified in TC3 while they were excluded from data analysis.



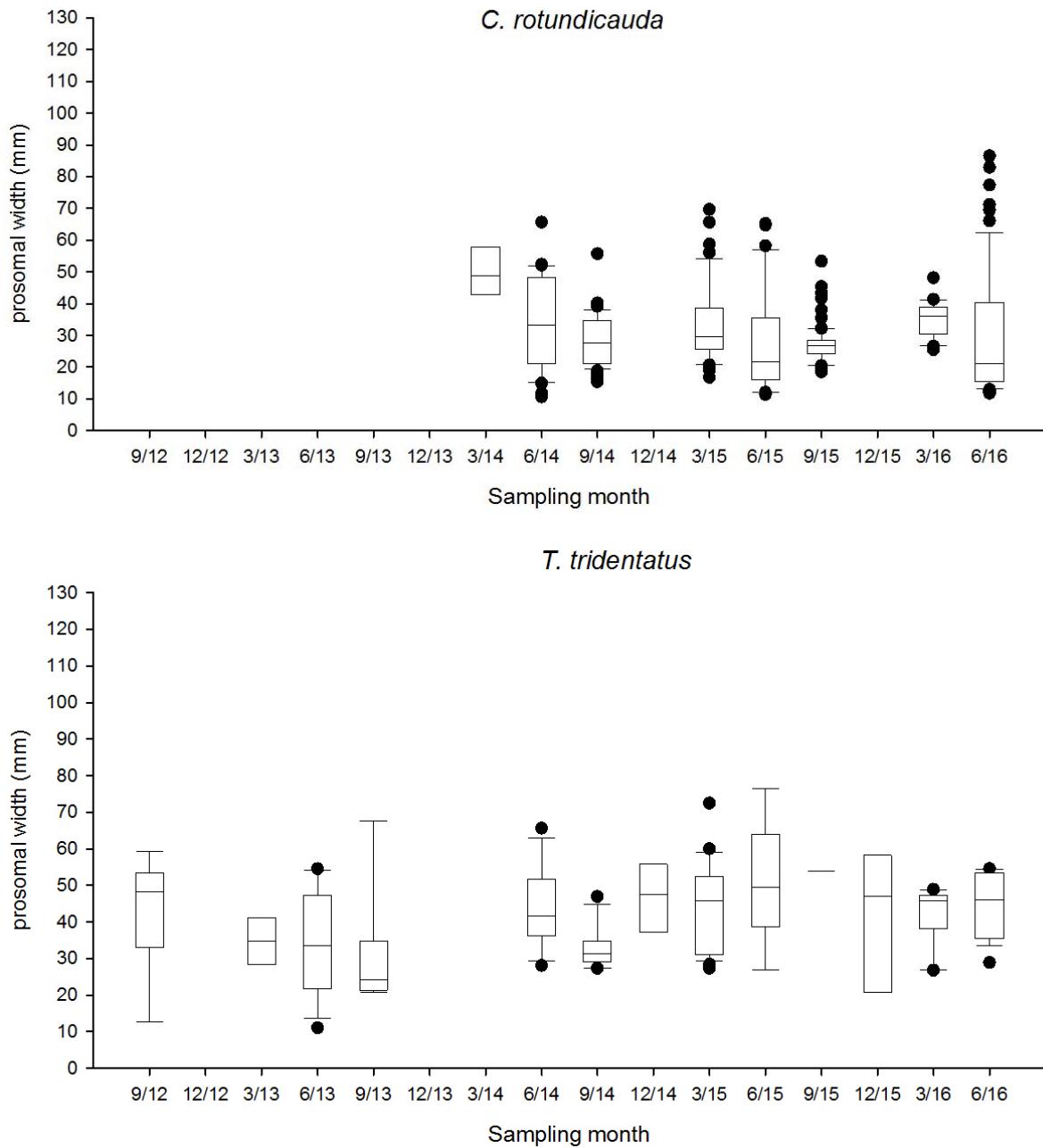
**Figure 3.2.** Photographic records of mating pair (above) and moult (below) of *Carcinoscorpius rotundicauda* (Mar.2015)



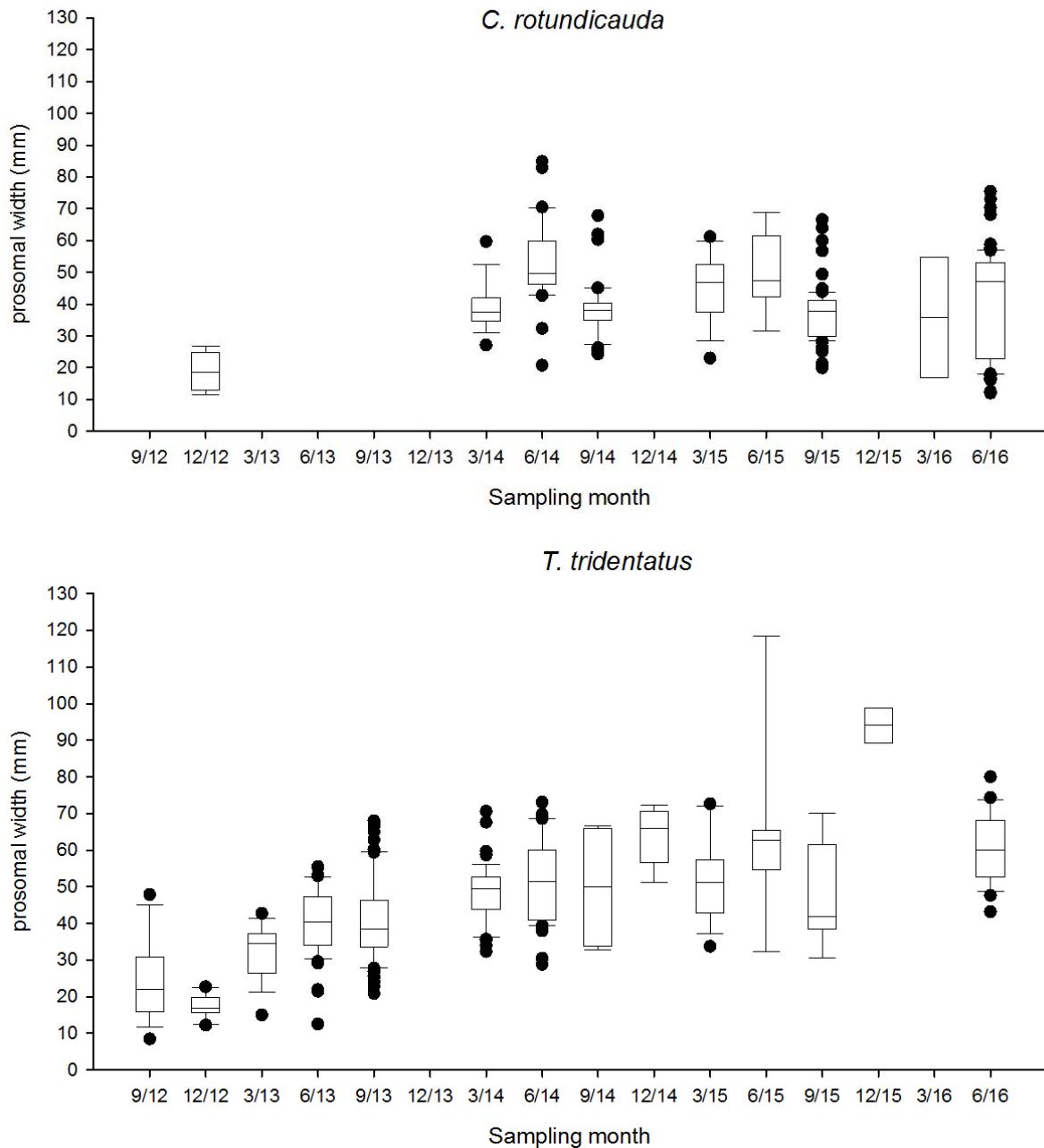
**Figure 3.3.** Changes of number of individuals, mean prosomal width and search record of horseshoe crab *Carcinoscorpius rotundicauda* in every sampling zone along the sampling months



**Figure 3.4.** Changes of number of individuals, mean prosomal width and search record of horseshoe crab *Tachypleus tridentatus* in every sampling zone along the sampling months



**Figure 3.5. Box plot of prosomal width of horseshoe crab in the sampling zone TC3 along the sampling months. (The box represents 50% of the sample (upper to lower quartile) with a middle line showing the median value. The upper whisker and lower whisker showed the 25% of sample above upper quartile and below the lower quartile respectively. The black circle dots showed the data of outlier.)**



**Figure 3.6.** Box plot of prosomal width of horseshoe crab in the sampling zone ST along the sampling months. (The box represents 50% of the sample (upper to lower quartile) with a middle line showing the median value. The upper whisker and lower whisker showed the 25% of sample above upper quartile and below the lower quartile respectively. The black circle dots showed the data of outlier.)

ST *Halophila ovalis*



ST *Zostera japonica*



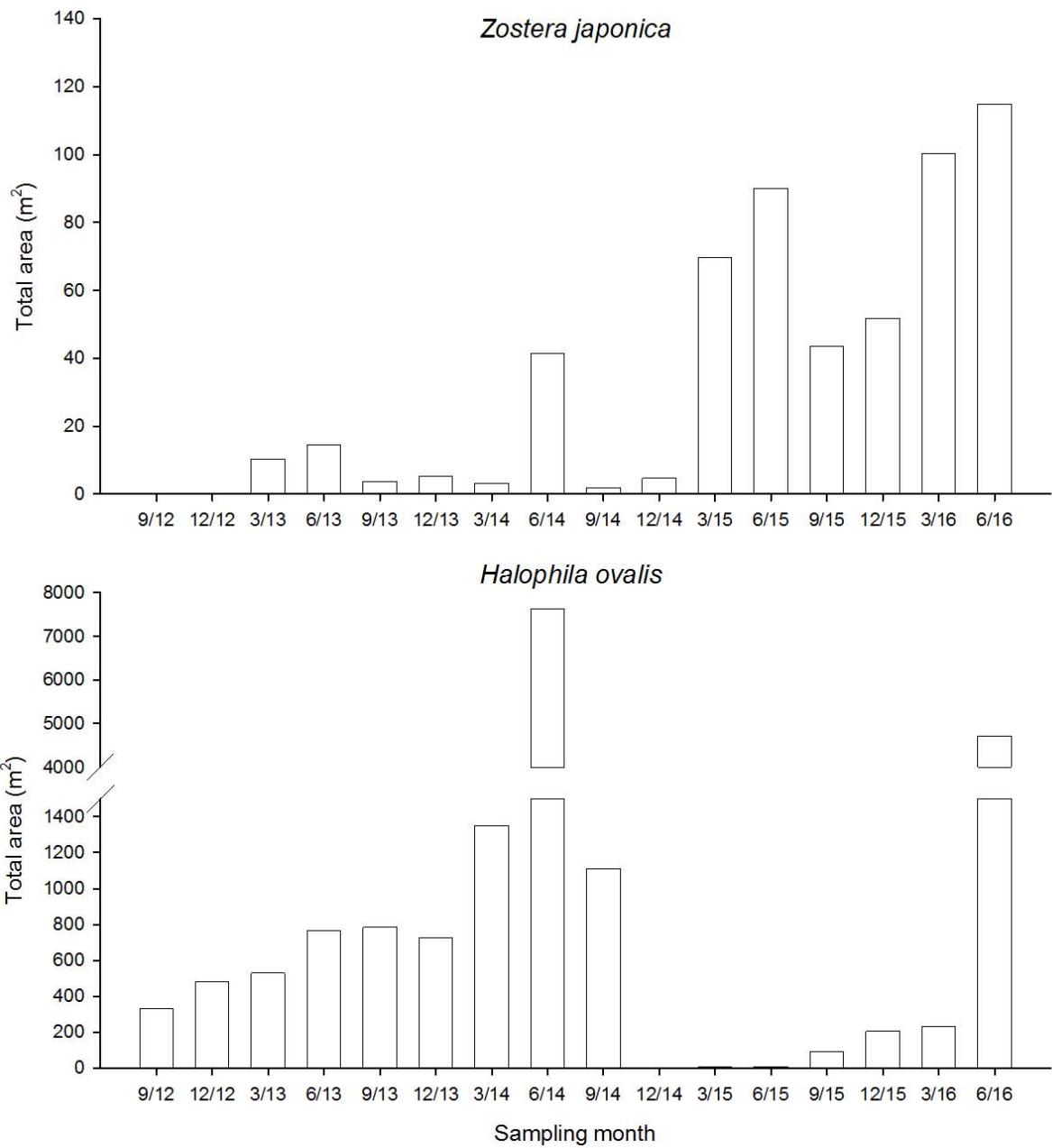
Two seagrass species coexisted in one long strand of seagrass bed



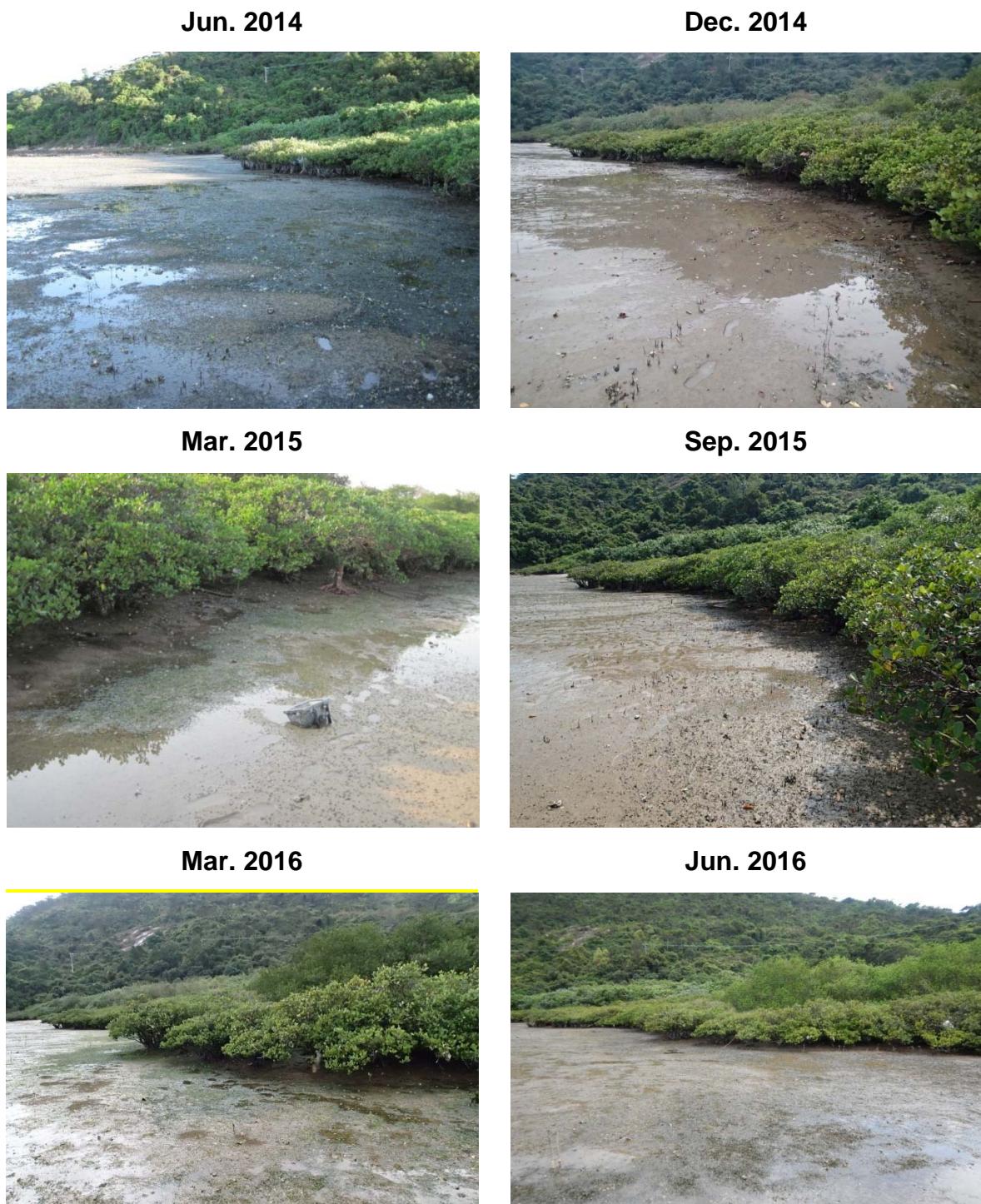
**Figure 3.7.** Examples of photographic records of seagrass beds survey (Jun. 2016)

**Table 3.2.** Summary of seagrass beds survey

<b>Sampling zone</b>	ST	
	<i>Halophila ovalis</i>	<i>Zostera japonica</i>
<b>Number of patches</b>	4	1
<b>Total area (m<sup>2</sup>)</b>	4707.3	114.9
<b>Average area (m<sup>2</sup>)</b>	1176.8	\



**Figure 3.8.** Temporal changes of estimated total area of seagrass beds in ST

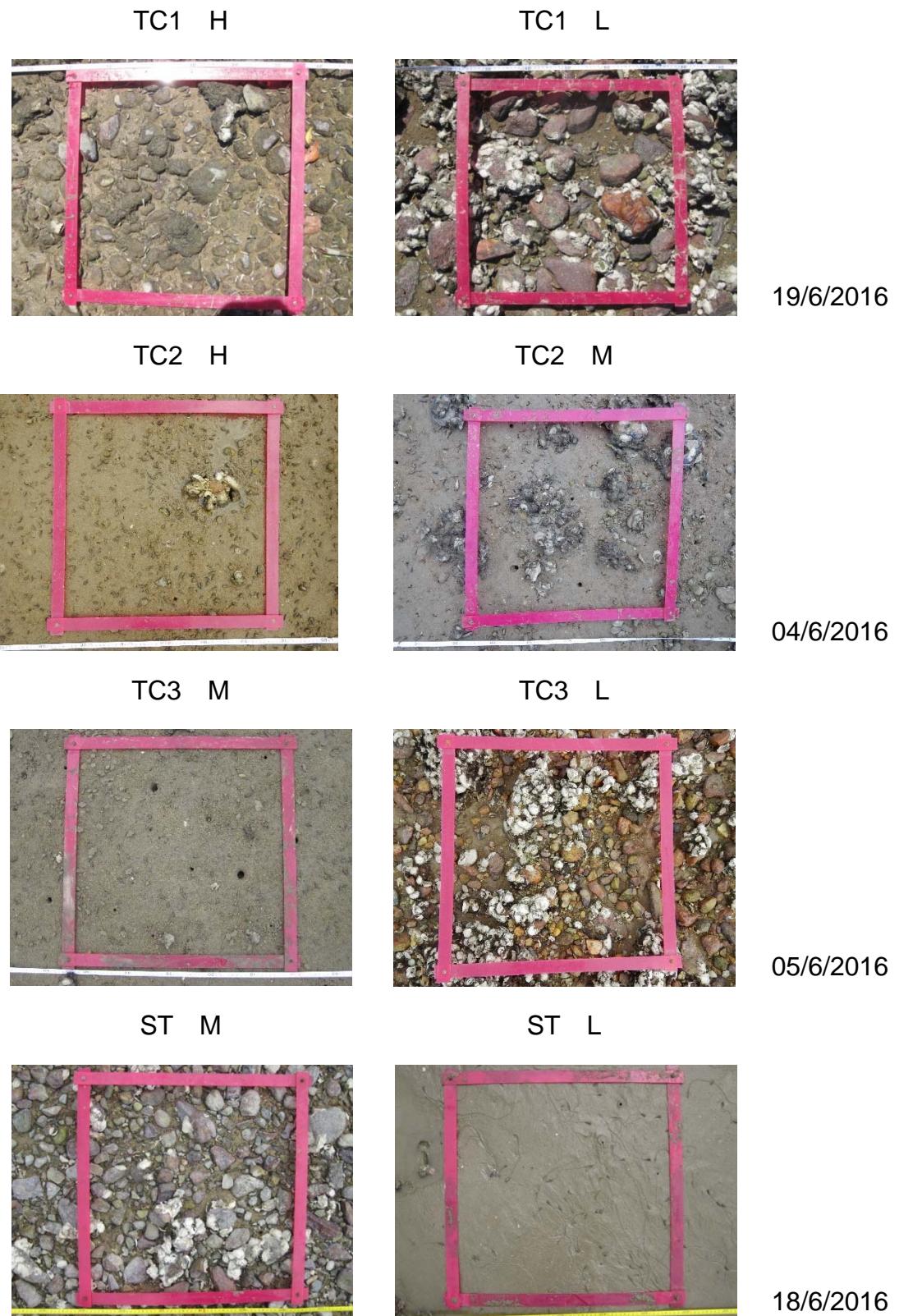


**Figure 3.9.** Comparison of pictures taken in different sampling months shows the disappearance and recolonization of seagrass beds.

**Table 3.3.** *Relative distribution (%) of types of substratum along the horizontal transect at every tidal level and in every sampling zone.*

Sampling zone	Tidal level	Percentage		
		Gravels and Boulders	Sands	Soft mud
TC1	H	80	20	
	M	80	20	
	L	90	10	
TC2	H	10	40	50
	M	20	60	20
	L	10	60	30
TC3	H		70	30
	M		100	
	L	70	10	20
ST	H	100		
	M	80	20	
	L	40	20	40

H: 2.0 m above C.D.; M: 1.5 m above C.D.; L: 1.0 m above C.D.



**Figure 3.10.** Examples of photographic records of quadrat for intertidal soft shore community survey (H: 2.0 m above C.D.; M: 1.5 m above C.D.; L: 1.0 m above C.D.)

**Table 3.4.** Total abundance, density and number of taxon of every phylum

Phylum	Total Abundance	%	Density (ind. m <sup>-2</sup> )	Number of taxon
<i>Jun. 2016</i>				
Mollusca	14722	96.2	491	40
Arthropoda	328	2.1	11	18
Annelida	123	0.8	4	14
Sipuncula	43	0.3	1	2
Cnidaria	38	0.2	1	1
Nemertea	28	0.2	1	1
Echiura	21	0.1	1	1
Chordata	1	0.0	0	1
<b>Total</b>	<b>15304</b>			

0.0 %: Total abundance of the phylum is less than 0.1% of relative abundance.

0 ind. m<sup>-2</sup>: Density of the phylum is less than 1 ind. m<sup>-2</sup>.

**Table 3.5.** The number of individuals, relative abundance (percentage) and density of each phylum in every sampling zone

Phylum	TC1	%	Density (ind. m <sup>-2</sup> )	TC2	%	Density (ind. m <sup>-2</sup> )	TC3	%	Density (ind. m <sup>-2</sup> )	ST	%	Density (ind. m <sup>-2</sup> )
Annelida	15	0.3	2	67	2.5	9	25	0.5	3	16	0.5	2
Arthropoda	51	1.1	7	100	3.7	13	110	2.4	15	67	2.1	9
Chordata										1	0.0	0
Cnidaria	2	0.0	0							36	1.1	5
Echiura	11	0.2	1				10	0.2	1			
Mollusca	4662	97.6	622	2513	93.6	335	4435	96.6	591	3112	95.8	415
Nemertea	14	0.3	2	3	0.1	0	2	0.0	0	9	0.3	1
Sipuncula	22	0.5	3	3	0.1	0	10	0.2	1	8	0.2	1
<b>Sub-total</b>	<b>4777</b>			<b>2686</b>			<b>4592</b>			<b>3249</b>		

0.0 %: Total abundance of the phylum is less than 0.1% of relative abundance of the sampling zone.

0 ind. m<sup>-2</sup>: Density of the phylum is less than 1 ind. m<sup>-2</sup> of the sampling zone.

**Table 3.6.** The abundant species (relative abundance >10%) in every sampling zone

Sampling zone TC1	Group	Species	Mean density (ind. m <sup>-2</sup> )	Relative abundance (%)	Cumulative relative abundance (%)
High	G	<i>Batillaria multiformis</i>	413	54	54
	G	<i>Cerithidea cingulata</i>	165	22	75
	G	<i>Cerithidea djadjariensis</i>	110	14	90
Mid	G	<i>Monodonta labio</i>	119	22	22
	G	<i>Cerithidea cingulata</i>	109	20	43
	G	<i>Batillaria multiformis</i>	88	16	59
	Bi	<i>Saccostrea cucullata</i>	75	14	73
Low	G	<i>Monodonta labio</i>	144	24	24
	Bi	<i>Saccostrea cucullata</i>	139	23	46

Bi = Bivalve, G = Gastropod

**Table 3.6 (Cont'd).** The abundant species (relative abundance >10%) in every sampling zone

Sampling zone TC2	Group	Species	Mean density (ind. m <sup>-2</sup> )	Relative abundance (%)	Cumulative relative abundance (%)
High	G	<i>Cerithidea djadjariensis</i>	322	51	51
	G	<i>Cerithidea cingulata</i>	167	27	78
Mid	G	<i>Cerithidea djadjariensis</i>	85	28	28
	Bi	<i>Saccostrea cucullata</i>	75	25	53
	G	<i>Batillaria zonalis</i>	56	18	71
	G	<i>Cerithidea cingulata</i>	34	11	82
Low	G	<i>Batillaria zonalis</i>	36	25	25
	Bi	<i>Saccostrea cucullata</i>	35	24	49
	G	<i>Cerithidea djadjariensis</i>	20	14	63

Bi = Bivalve, G = Gastropod

**Table 3.6 (Cont'd).** The abundant species (relative abundance >10%) in every sampling zone

Sampling zone TC3	Group	Species	Mean density (ind. m <sup>-2</sup> )	Relative abundance (%)	Cumulative relative abundance (%)
High	G	<i>Batillaria multiformis</i>	203	33	33
	G	<i>Cerithidea djadjariensis</i>	195	32	65
	G	<i>Cerithidea cingulata</i>	192	31	96
Mid	G	<i>Cerithidea djadjariensis</i>	282	45	45
	G	<i>Cerithidea cingulata</i>	220	35	81
Low	Bi	<i>Saccostrea cucullata</i>	202	34	34
	G	<i>Monodonta labio</i>	147	25	58
	G	<i>Cerithidea djadjariensis</i>	106	18	76

Bi = Bivalve, G = Gastropod

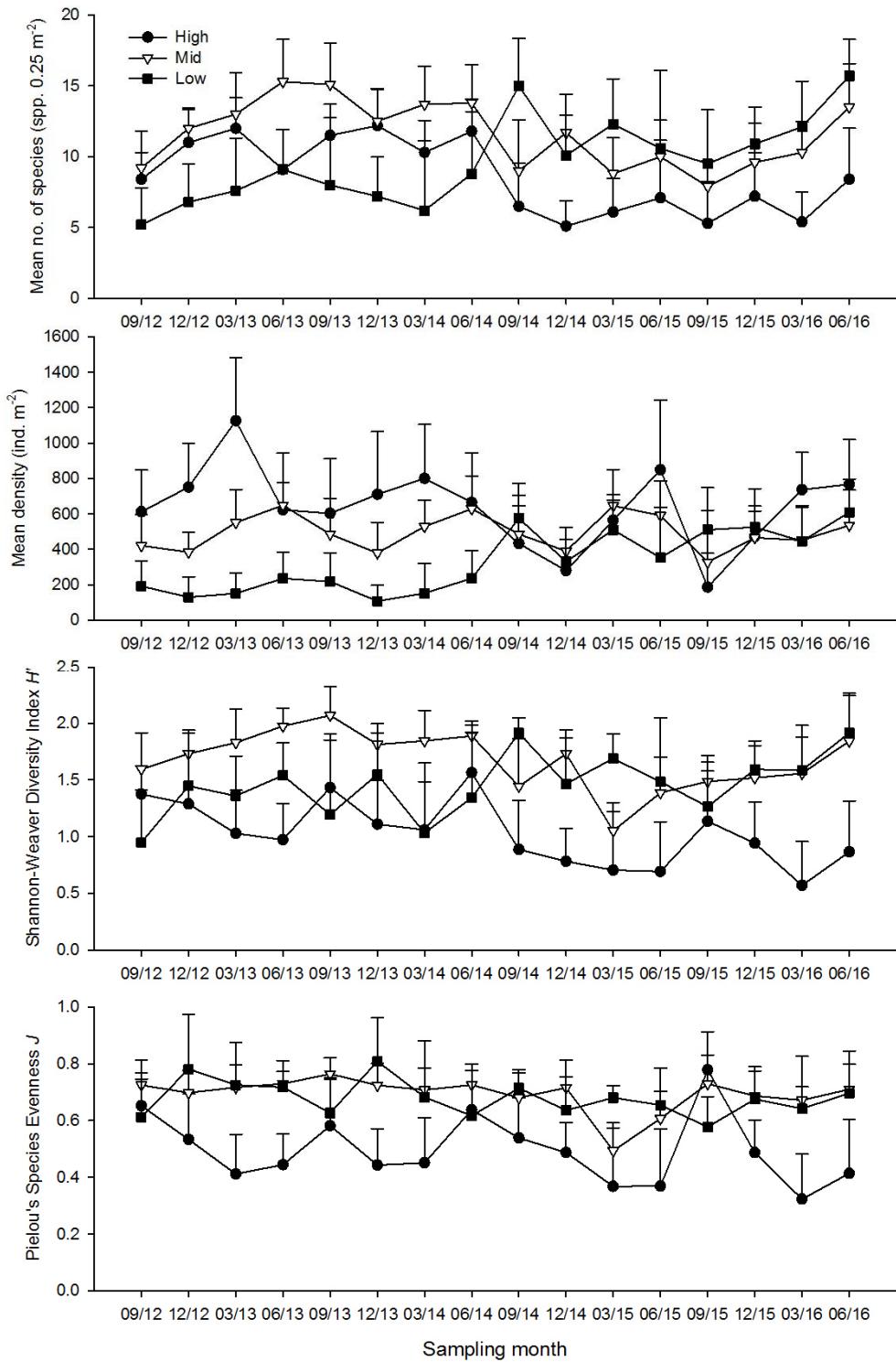
**Table 3.6 (Cont'd).** The abundant species (relative abundance >10%) in every sampling zone

Sampling zone ST	Group	Species	Mean density (ind. m <sup>-2</sup> )	Relative abundance (%)	Cumulative relative abundance (%)
High	G	<i>Monodonta labio</i>	186	36	36
	G	<i>Batillaria multiformis</i>	123	23	59
	G	<i>Cellana toreuma</i>	61	12	71
	Bi	<i>Saccostrea cucullata</i>	60	11	82
Mid	G	<i>Monodonta labio</i>	158	28	28
	Bi	<i>Saccostrea cucullata</i>	111	20	48
Low	G	<i>Cerithidea cingulata</i>	49	22	22
	G	<i>Cerithidea djadjariensis</i>	43	20	42
	G	<i>Lunella coronata</i>	29	13	55
	Bi	<i>Saccostrea cucullata</i>	26	12	67

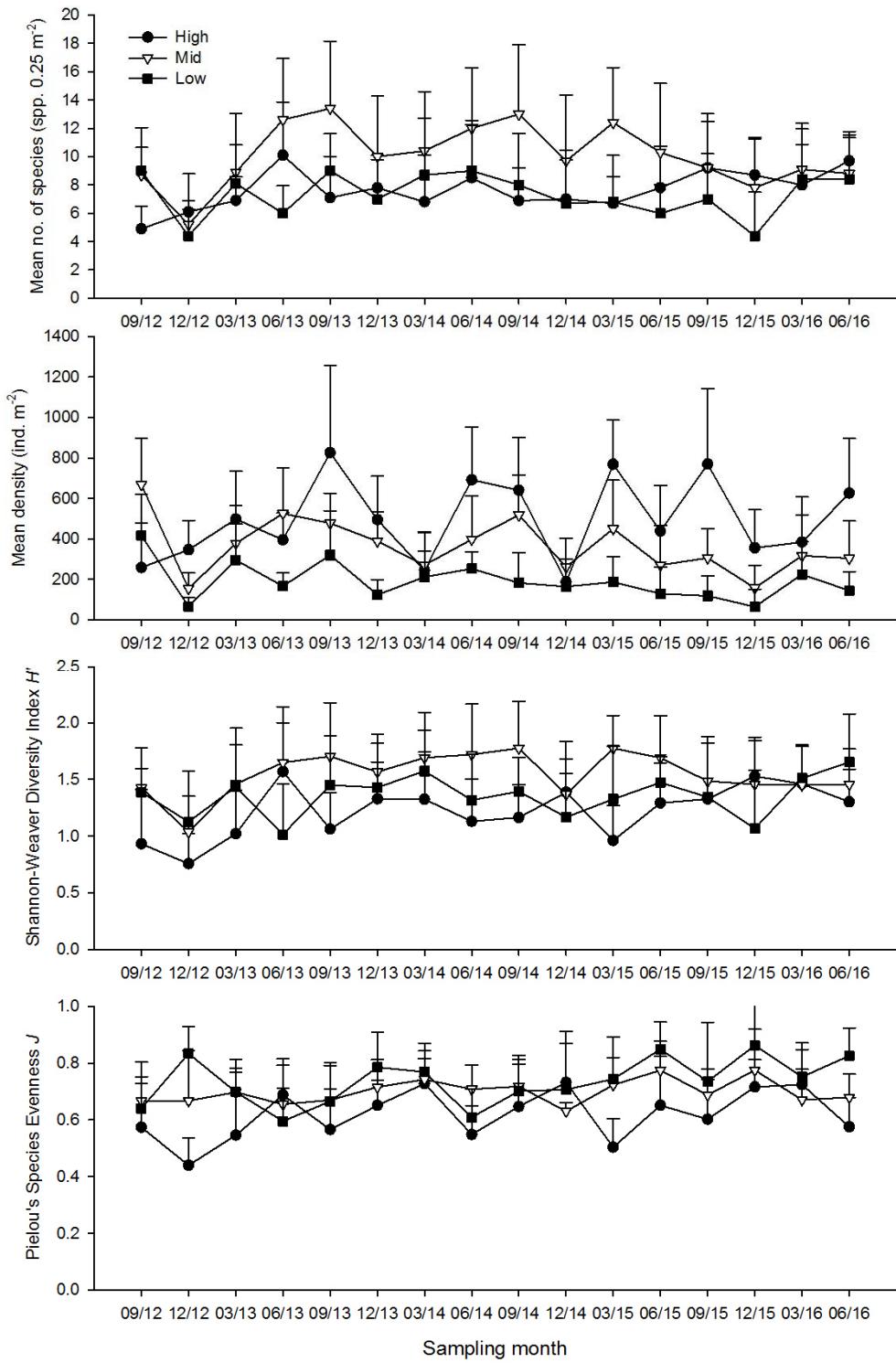
Bi = Bivalve, G = Gastropod

**Table 3.7.** Mean values of species number, density, Shannon-Weaver Diversity Index ( $H'$ ) and Pielou's Species Evenness ( $J$ ) at every tidal level and in every sampling zone

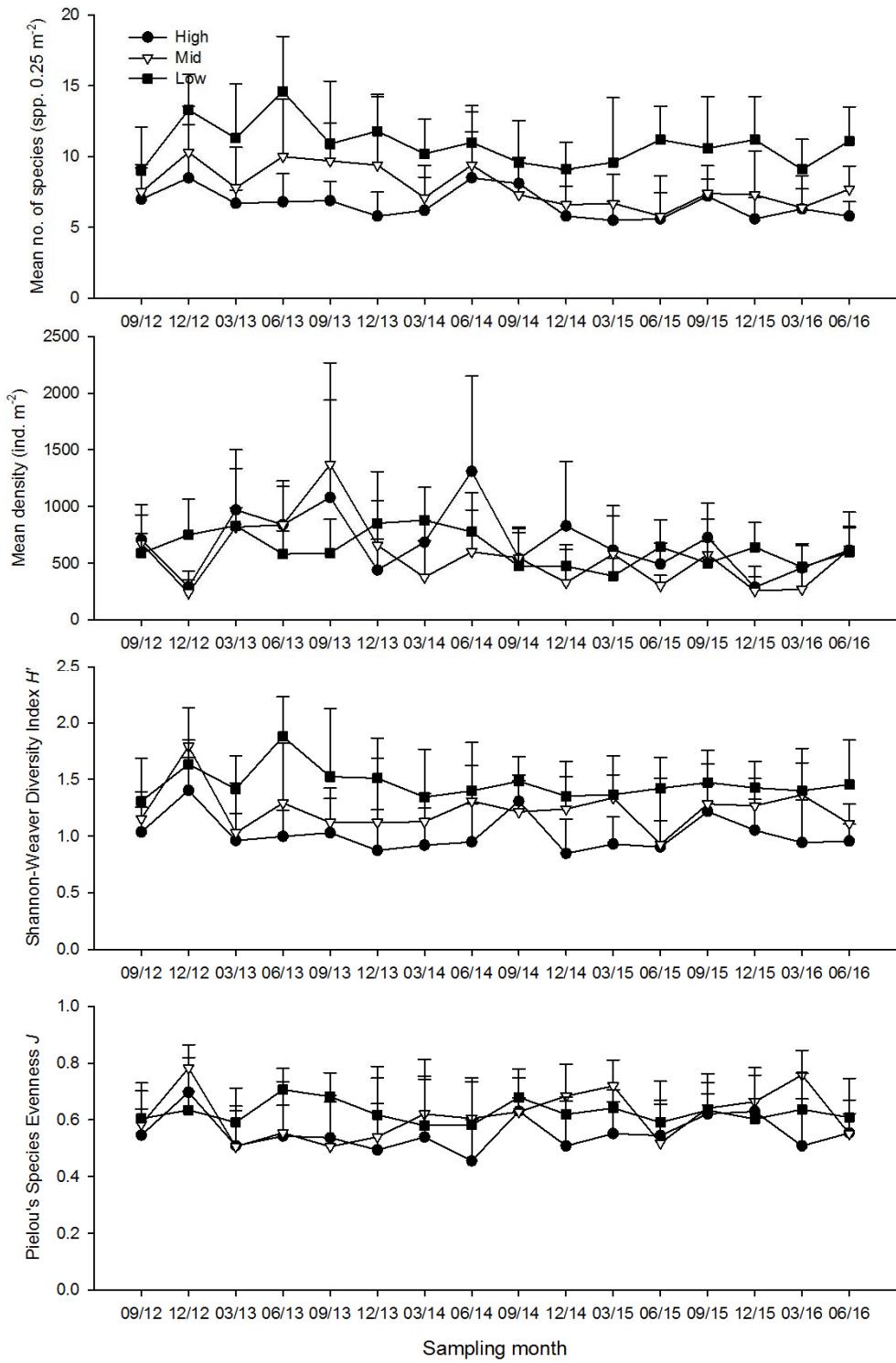
Sampling zone	Tidal level	Mean species number (spp. 0.25 m <sup>-2</sup> )	Mean species number across tidal levels	Mean density (ind. m <sup>-2</sup> )	Mean density across tidal levels	Mean $H'$	Mean $H'$ across tidal levels	Mean $J$	Mean $J$ across tidal levels
TC1	H	8		767		0.9		0.4	
	M	14	13	535	637	1.8	1.5	0.7	0.6
	L	16		608		1.9		0.7	
TC2	H	10		626		1.3		0.6	
	M	9	9	304	358	1.5	1.5	0.7	0.7
	L	8		144		1.7		0.8	
TC3	H	6		615		1.0		0.6	
	M	8	8	623	612	1.1	1.2	0.6	0.6
	L	11		599		1.5		0.6	
ST	H	12		524		1.6		0.7	
	M	14	12	558	433	1.8	1.7	0.7	0.7
	L	10		218		1.7		0.7	



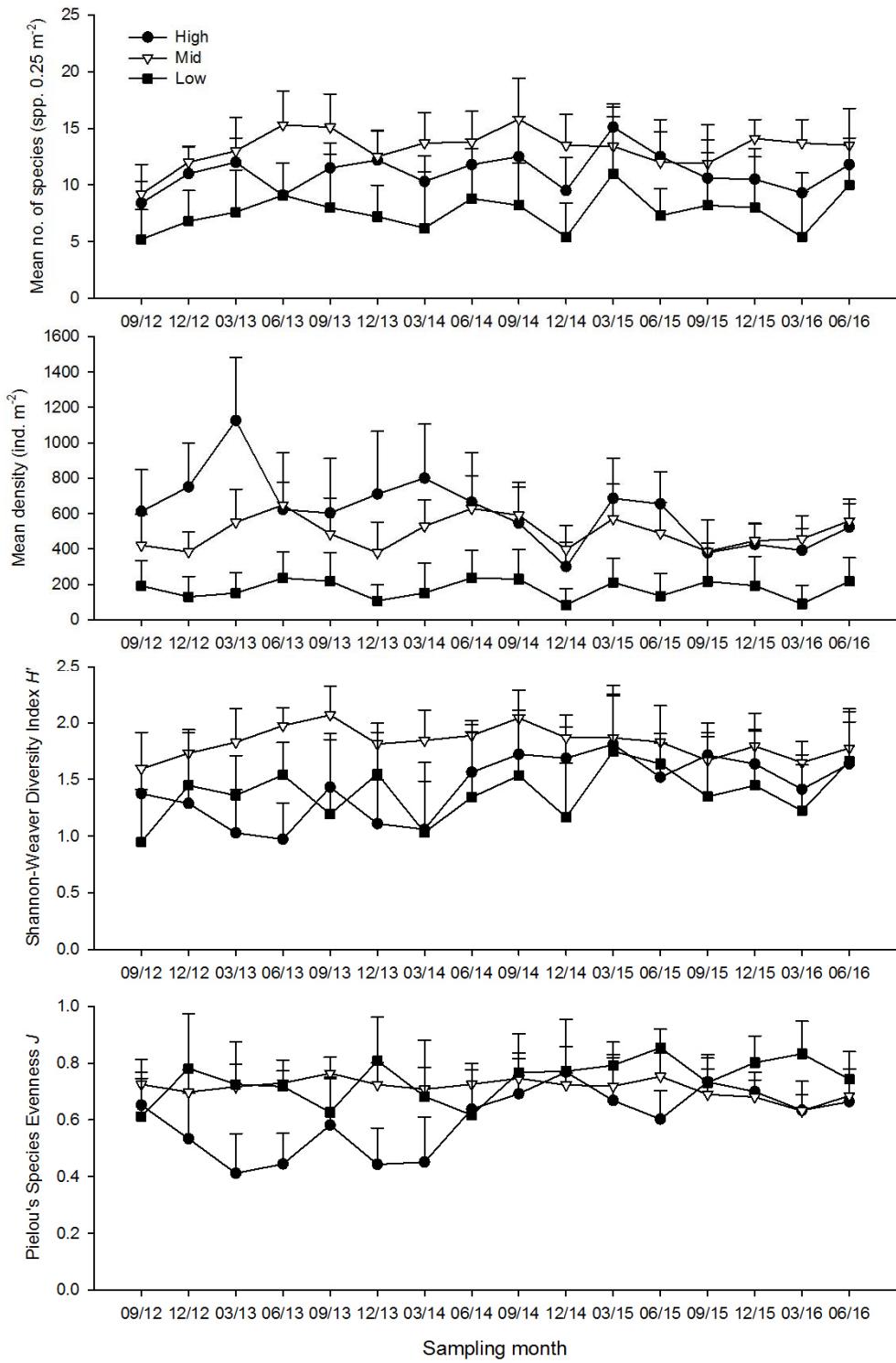
**Figure 3.11.** Temporal changes of mean number of species, mean density, Shannon-Weaver Diversity Index ( $H'$ ) and Pielou's Species Evenness ( $J$ ) (mean + SD) at every tidal level in sampling zone TC1



**Figure 3.12.** Temporal changes of mean number of species, mean density, Shannon-Weaver Diversity Index ( $H'$ ) and Pielou's Species Evenness ( $J$ ) (mean + SD) at every tidal level in sampling zone TC2



**Figure 3.13.** Temporal changes of mean number of species, mean density, Shannon-Weaver Diversity Index ( $H'$ ) and Pielou's Species Evenness ( $J$ ) (mean + SD) at every tidal level in sampling zone TC3



**Figure 3.14.** Temporal changes of mean number of species, mean density, Shannon-Weaver Diversity Index ( $H'$ ) and Pielou's Species Evenness ( $J$ ) (mean + SD) at every tidal level in sampling zone ST

**Annex I Location of sampling zones (map from ATKINS China Ltd.)**



**Annex II. Record of horseshoe crab survey in every sampling zone.**

No.	Sub.	GPS coordinate		Record of prosomal width (mm)						
<u>Sampling site TC1 (Search hour = 2 hrs)</u>				<i>Carcinoscorpius rotundicauda</i>						
1	M	22° 17.031' N	113° 55.978' E	48.46						
2	S	22° 16.994' N	113° 55.986' E	15.58	16.45	17.69	26.85	27.76		
3	S	22° 17.007' N	113° 55.985' E	15.24					53.71	
4	S	22° 17.021' N	113° 55.983' E	50.13	31.45				35.77	
5	S	22° 17.034' N	113° 55.971' E	81.20	47.63	82.08	59.89	60.84	64.44	47.22
				142.72						
6	M	22° 17.071' N	113° 55.986' E	74.81						
7	S	22° 17.056' N	113° 56.005' E	44.53						
8	S	22° 17.047' N	113° 56.028' E	36.51						
				<b>No. of ind.</b>	<b>20</b>					<b>2</b>
<u>Sampling site TC2 (Search hour = 2 hrs)</u>				<i>Carcinoscorpius rotundicauda</i>						
1	M	22° 16.908' N	113° 55.900' E	30.38	39.07	37.58	37.51	35.85	74.17	
				<b>No. of ind.</b>	<b>6</b>					<b>0</b>

Ind. #: number of Individuals (individuals in a group are shown at the same row)

Sub.: Substratum type; G = Gravel and Boulders, M = Soft mud, S = Sand

**Annex II (Cont'd). Record of horseshoe crab survey in every sampling zone.**

No.	Sub.	GPS coordinate		Record of prosomal width (mm)							
<u>Sampling site TC3 (Search hour = 3 hrs)</u>		<i>Carcinoscorpius rotundicauda</i>								<i>Tachypleus tridentatus</i>	
1	S	22° 16.952' N	113° 55.710' E	16.71	11.76						
2	S	22° 16.946' N	113° 55.706' E	15.10	15.40						
3	S	22° 16.938' N	113° 55.717' E	16.13	14.64	15.17	15.26	16.50	15.90		
4	M	22° 17.003' N	113° 55.682' E	42.81							
5	S	22° 17.004' N	113° 55.656' E							33.94	
6	S	22° 16.997' N	113° 55.654' E							35.32	45.93
7	S	22° 16.996' N	113° 55.648' E							44.78	
8	S	22° 16.966' N	113° 55.686' E	16.32	17.15	15.75	14.41	16.57	16.58	16.30	
				16.67							
9	S	22° 16.968' N	113° 55.686' E	13.81	13.19	12.44	12.76	12.95	12.68	12.16	
10	S	22° 16.975' N	113° 55.653' E	34.76	21.20	25.49	38.75				35.11
11	S	22° 16.981' N	113° 55.650' E	36.94							54.41
12	S	22° 17.013' N	113° 55.638' E	14.83	29.16	21.03	16.65	17.74	40.89	17.23	
				56.58							

Ind. #: number of Individuals (individuals in a group are shown at the same row)

Sub.: Substratum type; G = Gravel and Boulders, M = Soft mud, S = Sand

**Annex II (Cont'd). Record of horseshoe crab survey in every sampling zone.**

No.	Sub.	GPS coordinate	Record of prosomal width (mm)														
<u>Sampling site TC3 (Search hour = 3 hrs)</u>																	
13	S	22° 17.020' N    113° 55.638' E	50.51	27.52	21.69	13.19	22.52	36.77	13.17	39.81	53.25	35.46	50.54				
			21.12	34.95													
14	S	22° 17.058' N    113° 55.621' E	32.91	71.16	34.45	39.00	47.20	45.29	69.43	52.57	28.89	54.30	51.66				
			40.30	29.71	60.27												
15	S	22° 17.066' N    113° 55.646' E	77.29	66.08	60.70	86.54	52.01	35.20	49.50	46.14	53.96	54.58	42.22				
			82.91														
			<b>No. of ind.</b> <b>66</b>														
															<b>18</b>		

Ind. #: number of Individuals (individuals in a group are shown at the same row)

Sub.: Substratum type; G = Gravel and Boulders, M = Soft mud, S = Sand

**Annex II (Cont'd). Record of horseshoe crab survey in every sampling zone.**

No.	Sub.	GPS coordinate										Record of prosomal width (mm)													
		<u>Sampling site ST</u> (Search hour = 3 hrs)																							
1	S	22° 17.165' N	113° 55.503' E									<i>Carcinoscorpius rotundicauda</i>					<i>Tachypleus tridentatus</i>								
												56.90	52.79	75.41	36.93	52.83	52.41	36.93	58.68	67.50	52.62	60.02	51.44	64.73	43.16
												68.16	54.21	52.93	72.98	50.33	70.37		53.92	62.52					
2	S	22° 17.173' N	113° 55.486' E									55.52	54.49	52.77	57.07	24.26	51.01	51.50	49.13	73.60	54.45	71.68	52.93	64.70	69.40
												22.29	48.17						73.77						
3	S	22° 17.198' N	113° 55.476' E									32.80	24.59	22.88	34.33	53.04	24.84	53.29	53.02						
												24.40	22.61	24.51	51.36	20.71	21.71	57.59							
4	S	22° 17.208' N	113° 55.492' E									46.19	54.75	52.22	54.71	34.46	50.70	52.30	80.03	51.47	47.63	61.27	49.58	74.37	61.29
												50.23	56.89	53.05	51.17	51.75	54.51	54.86	68.21						
												33.76	32.60	24.71	50.32	23.83	23.69	49.32							
												36.60	21.16	58.87	55.18	54.65	58.92	33.99							
												54.84	49.61	52.25											
5	S	22° 17.240' N	113° 55.495' E									45.35	12.51	12.00	22.44	23.74	22.07	20.83	56.33						
												21.91	22.70	16.17	21.46										

Ind. #: number of Individuals (individuals in a group are shown at the same row)

Sub.: Substratum type; G = Gravel and Boulders, M = Soft mud, S = Sand

**Annex II (Cont'd). Record of horseshoe crab survey in every sampling zone.**

No.	Sub.	GPS coordinate	Record of prosomal width (mm)
		<u>Sampling site ST (Search hour = 3 hrs)</u>	
			<i>Carcinoscorpius rotundicauda</i>
6	S	22° 17.391' N    113° 55.459' E	19.03    17.73    16.51    17.75
7	S	22° 17.388' N    113° 55.458' E	17.51    16.62
<b>No. of ind.</b>		<b>90</b>	<b>27</b>

Ind. #: number of Individuals (individuals in a group are shown at the same row)

Sub.: Substratum type; G = Gravel and Boulders, M = Soft mud, S = Sand

**Annex III. Record of seagrass beds survey in every sampling zone**

Estimated area (m <sup>2</sup> )	Estimated coverage (%)		GPS coordinate		Remark		
<b>TC1 (search hour = 2 hrs) &amp; TC2 (search hour = 2 hrs) &amp; TC3(search hour = 3 hrs)</b>							
No record							
<b>ST (search hour = 3 hrs) <i>Halophila ovalis</i></b>							
45.6	80	\	22° 17.103' N	113° 55.578' E	A small patch of seagrass bed at tidal zone 0.5-1.0 m above C.D.		
28.5	60	horizontal shoreline	22° 17.099' N 22° 17.105' N	113° 55.574' E 113° 55.570' E	-- A medium patch of seagrass bed at tidal zone 0.5-1.0 m above C.D.		
4162.7	70	horizontal shoreline	22° 17.116' N 22° 17.165' N	113° 55.554' E 113° 55.502' E	-- An extensive patch of seagrass bed at tidal zone 0.5-1.0 m above C.D.		
		vertical	22° 17.128' N	113° 55.554' E	--		
		shoreline	22° 17.119' N	113° 55.538' E			
470.5	10-100	horizontal shoreline	22° 17.220' N 22° 17.169' N	113° 55.474' E 113° 55.479' E	-- A large, horizontal strand of two coexisting seagrass species nearby the seaward side of mangrove area at tidal level 2.0m above C.D.		
<b>ST (search hour = 3 hrs) <i>Zostera japonica</i></b>							
114.9	70	horizontal	22° 17.217' N	113° 55.473' E	-- A large, horizontal strand of two coexisting seagrass species nearby the		
		shoreline	22° 17.198' N	113° 55.472' E	seaward side of mangrove area at tidal level 2.0m above C.D.		

**Annex IV Taxonomic resolution of every recorded species of intertidal soft shore community survey**

Kingdom	Phylum	Class	Order	Family	Species
Animalia	Annelida	Clitellata			Marine oligochaete spp.
Animalia	Annelida	Polychaeta	Eunicida	Eunicidae	Eunicidae spp.
Animalia	Annelida	Polychaeta	Eunicida	Lumbrineridae	Lumbrineridae spp.
Animalia	Annelida	Polychaeta	Eunicida	Onuphidae	Onuphidae spp.
Animalia	Annelida	Polychaeta	Phyllodocida	Goniadidae	Goniadidae spp.
Animalia	Annelida	Polychaeta	Phyllodocida	Nereididae	Nereididae spp.
Animalia	Annelida	Polychaeta	Phyllodocida	Polynoidae	Polynoidae spp.
Animalia	Annelida	Polychaeta	Sabellida	Oweniidae	Oweniidae spp.
Animalia	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharetidae spp.
Animalia	Annelida	Polychaeta	Terebellida	Cirratulidae	Cirratulidae spp.
Animalia	Annelida	Polychaeta	Terebellida	Pectinariidae	Pectinariidae spp.
Animalia	Annelida	Polychaeta	Terebellida	Terebellidae	Terebellidae spp.
Animalia	Annelida	Polychaeta		Maldanidae	Maldanidae spp.
Animalia	Annelida	Polychaeta		Orbiniidae	Orbiniidae spp.
Animalia	Arthropoda	Malacostraca	Amphipoda		Amphipoda spp.
Animalia	Arthropoda	Malacostraca	Decapoda	Alpheidae	<i>Alpheus brevicristatus</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Diogenidae	<i>Diogenes</i> sp.
Animalia	Arthropoda	Malacostraca	Decapoda	Grapsidae	<i>Metopograpsus latifrons</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Leucosiidae	<i>Philyra carinata</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Ocypodidae	<i>Macrophthalmus erato</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Ocypodidae	<i>Uca borealis</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Ocypodidae	<i>Uca crassipes</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Ocypodidae	<i>Uca lactea</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Ocypodidae	<i>Uca</i> sp.
Animalia	Arthropoda	Malacostraca	Decapoda	Ocypodidae	<i>Uca vocans</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Paguridae	<i>Pagurus dubius</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Penaeidae	<i>Penaeus</i> sp.
Animalia	Arthropoda	Malacostraca	Decapoda	Penaeidae	Unidentified juvenile shrimp
Animalia	Arthropoda	Malacostraca	Decapoda	Portunidae	<i>Scylla serrata</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Sesarmidae	<i>Nanosesarma minutum</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Varunidae	<i>Hemigrapsus penicillatus</i>
Animalia	Arthropoda	Maxillopoda	Sessilia	Balanidae	<i>Balanus amphitrite</i>

**Annex IV (Cont'd) Taxonomic resolution of every recorded species of intertidal soft shore community survey**

Kingdom	Phylum	Class	Order	Family	Species
Animalia	Chordata	Actinopterygii	Perciformes	Gobiidae	Gobiidae spp.
Animalia	Cnidaria	Anthozoa	Actiniaria	Diadumenidae	<i>Diadumene lineata</i>
Animalia	Echiura				<i>Echiura</i> spp.
Animalia	Mollusca	Bivalvia	Anomalodesmata	Laternulidae	<i>Laternula anatina</i>
Animalia	Mollusca	Bivalvia	Arcoida	Arcidae	<i>Barbatia virescens</i>
Animalia	Mollusca	Bivalvia	Euheterodonta	Hiatellidae	<i>Hiatella arctica</i>
Animalia	Mollusca	Bivalvia	Mytiloida	Mytilidae	<i>Xenostrobus atratus</i>
Animalia	Mollusca	Bivalvia	Ostreoida	Ostreidae	<i>Saccostrea cucullata</i>
Animalia	Mollusca	Bivalvia	Veneroida	Corbiculidae	<i>Geloina erosa</i>
Animalia	Mollusca	Bivalvia	Veneroida	Glauconomidae	<i>Glauconome chinensis</i>
Animalia	Mollusca	Bivalvia	Veneroida	Lucinidae	<i>Anodontia stearnsiana</i>
Animalia	Mollusca	Bivalvia	Veneroida	Mesodesmatidae	<i>Caecella chinensis</i>
Animalia	Mollusca	Bivalvia	Veneroida	Tellinidae	<i>Tellina</i> sp.
Animalia	Mollusca	Bivalvia	Veneroida	Veneridae	<i>Anomalocardia squamosa</i>
Animalia	Mollusca	Bivalvia	Veneroida	Veneridae	<i>Circe</i> sp.
Animalia	Mollusca	Bivalvia	Veneroida	Veneridae	<i>Cyclina sinesis</i>
Animalia	Mollusca	Bivalvia	Veneroida	Veneridae	<i>Ruditapes philippinarum</i>
Animalia	Mollusca	Gastropoda	Caenogastropoda	Batillariidae	<i>Batillaria bornii</i>
Animalia	Mollusca	Gastropoda	Caenogastropoda	Batillariidae	<i>Batillaria multiformis</i>
Animalia	Mollusca	Gastropoda	Caenogastropoda	Batillariidae	<i>Batillaria zonalis</i>
Animalia	Mollusca	Gastropoda	Caenogastropoda	Potamididae	<i>Cerithidea cingulata</i>
Animalia	Mollusca	Gastropoda	Caenogastropoda	Potamididae	<i>Cerithidea djadjariensis</i>
Animalia	Mollusca	Gastropoda	Caenogastropoda	Potamididae	<i>Cerithidea rhizophorarum</i>
Animalia	Mollusca	Gastropoda	Cephalaspidea	Philinidae	<i>Philine vitrea</i>
Animalia	Mollusca	Gastropoda	Cycloneritimorpha	Neritidae	<i>Clithon faba</i>
Animalia	Mollusca	Gastropoda	Cycloneritimorpha	Neritidae	<i>Clithon oualaniensis</i>
Animalia	Mollusca	Gastropoda	Cycloneritimorpha	Neritidae	<i>Nerita polita</i>
Animalia	Mollusca	Gastropoda	Littorinimorpha	Littorinidae	<i>Littoraria melanostoma</i>
Animalia	Mollusca	Gastropoda	Littorinimorpha	Littorinidae	<i>Littoraria articulata</i>
Animalia	Mollusca	Gastropoda	Littorinimorpha	Rissoinidae	<i>Rissoina plicatula</i>
Animalia	Mollusca	Gastropoda	Neogastropoda	Buccinidae	<i>Pisania ignea</i>
Animalia	Mollusca	Gastropoda	Neogastropoda	Muricidae	<i>Thais luteostoma</i>

**Annex IV (Cont'd) Taxonomic resolution of every recorded species of intertidal soft shore community survey**

Kingdom	Phylum	Class	Order	Family	Species
Animalia	Mollusca	Gastropoda	Neogastropoda	Nassariidae	<i>Nassarius festivus</i>
Animalia	Mollusca	Gastropoda	Systellommatophora	Oncidiidae	<i>Onchidium</i> sp.
Animalia	Mollusca	Gastropoda		Lottiidae	<i>Nipponacmea concinna</i>
Animalia	Mollusca	Gastropoda		Lottiidae	<i>Patelloidea pygmaea</i>
Animalia	Mollusca	Gastropoda		Nacellidae	<i>Cellana grata</i>
Animalia	Mollusca	Gastropoda		Nacellidae	<i>Cellana toreuma</i>
Animalia	Mollusca	Gastropoda		Trochidae	<i>Euchelus scaber</i>
Animalia	Mollusca	Gastropoda		Trochidae	<i>Monodonta labio</i>
Animalia	Mollusca	Gastropoda		Turbinidae	<i>Lunella coronata</i>
Animalia	Mollusca	Polyplacophora	Chitonida	Ischnochitonidae	<i>Lepidozona</i> sp.
Animalia	Mollusca	Scaphopoda	Dentaliida	Dentaliidae	<i>Dentalium sinuosum</i>
Animalia	Nemertea				<i>Nemertea</i> spp.
Animalia	Sipuncula	Sipunculidea	Golfingiida	Sipunculidae	<i>Siphonosoma cumanense</i>
Animalia	Sipuncula	Sipunculidea	Golfingiida	Sipunculidae	<i>Sipunculus nudus</i>

**Annex V List of recorded fauna of intertidal soft shore community survey in every sampling zone**

Jun 2016 Sampling zone TC 1 High tidal level (2.0 m above C.D.)

Gp	Taxon	1		2		3		4		5		6		7		8		9		10		sub-total	
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C		
Ba	<i>Balanus amphitrite</i>					1																1	
Bi	<i>Cyclina sinesis</i>					1																1	
Bi	<i>Geloina erosa</i>							3														3	
Bi	<i>Glauconome chinensis</i>					1																1	
Bi	<i>Saccostrea cucullata</i>	5		5				8				4		2							6		30
Bi	<i>Xenostrobus atratus</i>							3		1		2		1						1		8	
C	<i>Hemigrapsus penicillatus</i>							1														1	
C	<i>Nanosesarma minutum</i>							2				1		1								4	
C	<i>Uca vocans</i>					4												1				5	
Eh	Echiura spp.									2		1						3				6	
G	<i>Batillaria bornii</i>																			1		1	
G	<i>Batillaria multiformis</i>	14		31	1	18		191		221		142		128		127		125		34		1032	
G	<i>Batillaria zonalis</i>	1																				1	
G	<i>Cerithidea cingulata</i>	252		91	4	44		1		9								4		4		413	
G	<i>Cerithidea djadjariensis</i>	13		78	2	113		10		13								13		7		25	274
G	<i>Cerithidea rhizophorarum</i>						2				2							2				6	
G	<i>Clithon faba</i>	6																4		4		14	
G	<i>Clithon oualaniensis</i>					1				1								5		4		12	
G	<i>Littoraria melanostoma</i>	1																				1	

**Annex V (Cont'd) List of recorded fauna of intertidal soft shore community survey in every sampling zone**

Jun 2016 Sampling zone TC 1 High tidal level (2.0 m above C.D.)

Gp	Taxon	1		2		3		4		5		6		7		8		9		10		sub-total
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	
G	<i>Littoraria articulata</i>									5				2				5				12
G	<i>Lunella coronata</i>			2																		2
G	<i>Monodonta labio</i>					14				2				27		18		8				69
G	<i>Nerita polita</i>																	1				1
G	<i>Onchidium</i> sp.																	1				1
G	<i>Patelloidea pygmaea</i>					2		1														3
G	<i>Rissoina plicatula</i>																	6				6
Ne	Nemertea spp.					3																3
Ol	Marine oligochaete spp.									1												1
P	Ampharetidae spp.			3																		3
P	Nereididae spp.				1																	1
S	Unidentified juvenile shrimp	1																				1
Sp	<i>Sipunculus nudus</i>									1												1
																					Total	1918

**Annex V (Cont'd) List of recorded fauna of intertidal soft shore community survey in every sampling zone**

Jun 2016 Sampling zone TC 1 Mid tidal level (1.5 m above C.D.)

Gp	Taxon	1		2		3		4		5		6		7		8		9		10		sub-total
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	
Ba	<i>Balanus amphitrite</i>		2																			2
Bi	<i>Barbatia virescens</i>																				1	4
Bi	<i>Geloina erosa</i>			1																		1
Bi	<i>Hiatella arctica</i>					2		1		1		2		7							4	17
Bi	<i>Ruditapes philippinarum</i>									1											2	3
Bi	<i>Saccostrea cucullata</i>	13		5		46		22		9		21		26		25		9		11		187
Bi	<i>Xenostrobus atratus</i>		4						2		1		4		4						2	17
C	<i>Nanosesarma minutum</i>									2				1		2						5
C	<i>Uca lactea</i>			8						2												10
Eh	Echiura spp.					3							2									5
G	<i>Batillaria bornii</i>	1	3																			4
G	<i>Batillaria multiformis</i>	9				44		27		22		39		14		52		9		3		219
G	<i>Batillaria zonalis</i>	4		1	2																	7
G	<i>Cellana grata</i>																				1	1
G	<i>Cellana toreuma</i>	6				4		3		3		6		6		10		10		12		60
G	<i>Cerithidea cingulata</i>	133		77	2	21		9		21							1	1		7		272
G	<i>Cerithidea djadjariensis</i>	7		8		26		10		18				4		6		4		4		87
G	<i>Cerithidea rhizophorarum</i>						1		2								3		1		7	
G	<i>Clithon faba</i>	1											2		5		3		4		15	

**Annex V (Cont'd) List of recorded fauna of intertidal soft shore community survey in every sampling zone**

Jun 2016 Sampling zone TC 1 Mid tidal level (1.5 m above C.D.)

Gp	Taxon	1		2		3		4		5		6		7		8		9		10		sub-total
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	
G	<i>Clithon oualaniensis</i>					1				1				9		6		2		3		22
G	<i>Euchelus scaber</i>															1						1
G	<i>Lepidozona</i> sp.	1						3						1								5
G	<i>Littoraria articulata</i>													7							1	8
G	<i>Lunella coronata</i>	11				2		1		3							12		8		6	43
G	<i>Monodonta labio</i>	9				23		13		2		110		48		47		23		22		297
G	<i>Nerita polita</i>							1				1		1		2						4
G	<i>Nipponacmea concinna</i>											1		1		2				3		9
G	<i>Patelloidea pygmaea</i>					3		2		2		2								1		10
Ne	<i>Nemertea</i> spp.	1					2		5		1				1							10
P	<i>Ampharetidae</i> spp.			1																		1
P	<i>Maldanidae</i> spp.				1																	1
P	<i>Oweniidae</i> spp.		1												1							1
P	<i>Polynoidae</i> spp.															1						1
S	<i>Penaeus</i> sp.		1																			1
Sp	<i>Sipunculus nudus</i>									1												1
																				Total	1338	

**Annex V (Cont'd) List of recorded fauna of intertidal soft shore community survey in every sampling zone**

Jun 2016

Sampling zone TC 1 Low tidal level (1.0 m above C.D.)

Gp	Taxon	1		2		3		4		5		6		7		8		9		10		sub-total
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	
Ba	<i>Balanus amphitrite</i>			1				1				3		1								6
Bi	<i>Anodontia stearnsiana</i>																					1
Bi	<i>Barbatia virescens</i>			12				9		1		4				6		1		5		38
Bi	<i>Circe</i> sp.					1																1
Bi	<i>Hiatella arctica</i>	9		1				3		6		5		5		1		7				37
Bi	<i>Ruditapes philippinarum</i>													1		2			4			7
Bi	<i>Saccostrea cucullata</i>	85		93		6		33		35		34		11		35		6		9		347
Bi	<i>Xenostrobus atratus</i>	11		8					2		3											24
C	<i>Hemigrapsus penicillatus</i>													1				1				2
C	<i>Nanosesarma minutum</i>			2								1		2				1		1		7
C	<i>Uca lactea</i>					5																5
Cn	<i>Diadumene lineata</i>	2																				2
G	<i>Batillaria bornii</i>							3		1				2								6
G	<i>Batillaria multiformis</i>	13		1		1		3			2		3		39		6		5		3	76
G	<i>Batillaria zonalis</i>					4		1														5
G	<i>Cellana toreuma</i>	22		5				5		17		13		33		15		20		9		139
G	<i>Cerithidea cingulata</i>	1				3		84		2		3		1		1		1		9		105
G	<i>Cerithidea djadjariensis</i>	9		3		62		18		5		3		7		2		4		4		117
G	<i>Cerithidea rhizophorarum</i>	1				4		2										1		2		10

**Annex V (Cont'd) List of recorded fauna of intertidal soft shore community survey in every sampling zone**

Jun 2016 Sampling zone TC 1 Low tidal level (1.0 m above C.D.)

Gp	Taxon	1		2		3		4		5		6		7		8		9		10		sub-total
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	
G	<i>Clithon faba</i>											4				3		2		5		14
G	<i>Clithon oualaniensis</i>	1						3		5		5		6		2						22
G	<i>Euchelus scaber</i>			1						6		3		3		2		2				17
G	<i>Lepidozona</i> sp.	2								2				1		3						8
G	<i>Lunella coronata</i>	6		5		1		4		24		18		19		9		5		8		99
G	<i>Monodonta labio</i>	16		108						4		39		32		55		74		32		360
G	<i>Nerita polita</i>			1								1				3						5
G	<i>Nipponacmea concinna</i>	3		1								4		1		3		4		6		22
G	<i>Patelloidea pygmaea</i>	2						2		5								2				11
Hc	<i>Pagurus dubius</i>															1						1
Ne	<i>Nemertea</i> spp.			1																		1
P	<i>Ampharetidae</i> spp.													1								1
P	<i>Cirratulidae</i> spp.													1			1					2
P	<i>Maldanidae</i> spp.					1																1
P	<i>Nereididae</i> spp.					1										1						2
Sp	<i>Sipunculus nudus</i>	3		11				4											2		20	
																				Total	1521	

**Annex V (Cont'd) List of recorded fauna of intertidal soft shore community survey in every sampling zone**

Jun 2016

Sampling zone TC 2

High tidal level (2.0 m above C.D.)

Gp	Taxon	1		2		3		4		5		6		7		8		9		10		sub-total
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	
Ba	<i>Balanus amphitrite</i>	1				2						8				1		1		1		14
Bi	<i>Barbatia virescens</i>			1		1																2
Bi	<i>Laternula anatina</i>																			2		2
Bi	<i>Saccostrea cucullata</i>	12		6		12				1		2				7		18		36		94
Bi	<i>Xenostrobus atratus</i>	3																				3
C	<i>Hemigrapsus penicillatus</i>																		1			1
C	<i>Metopograpsus latifrons</i>					1																1
C	<i>Uca lactea</i>			4		6		1		1							1					13
C	<i>Uca</i> sp.											1										1
G	<i>Batillaria bornii</i>																			2		2
G	<i>Batillaria multiformis</i>	11				1				4		5		7	1	1		1		11		42
G	<i>Batillaria zonalis</i>											8		1	2		9					20
G	<i>Cerithidea cingulata</i>	1		17	2	11		17		71	2	97	1	34		55		66	2	43		417
G	<i>Cerithidea djadjariensis</i>	17		45	2	59		73	1	124	1	144	1	81		86	2	114	1	55		806
G	<i>Cerithidea rhizophorarum</i>	3				2		3		7		7	1	3		5		1		3		35
G	<i>Clithon oualaniensis</i>					3			1		3						3		1		11	
G	<i>Littoraria articulata</i>	9																				9
G	<i>Lunella coronata</i>													1		1		2		4		8
G	<i>Monodonta labio</i>	38				3										4		11		9		65

**Annex V (Cont'd) List of recorded fauna of intertidal soft shore community survey in every sampling zone**

Jun 2016

Sampling zone TC 2

High tidal level (2.0 m above C.D.)

Gp	Taxon	1		2		3		4		5		6		7		8		9		10		sub-total
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	
G	<i>Philine vitrea</i>			1						2												3
P	Ampharetidae spp.				1					2		3					1			2		9
P	Cirratulidae spp.									1												1
P	Lumbrineridae spp.				1																	1
P	Maldanidae spp.								1													1
P	Nereididae spp.											1							2		1	4
Sp	<i>Sipunculus nudus</i>					1																1
																					Total	1566

**Annex V (Cont'd) List of recorded fauna of intertidal soft shore community survey in every sampling zone**

Jun 2016 Sampling zone TC 2 Mid tidal level (1.5 m above C.D.)

Gp	Taxon	1		2		3		4		5		6		7		8		9		10		sub-total	
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C		
Ba	<i>Balanus amphitrite</i>																				2	2	
Bi	<i>Anomalocardia squamosa</i>																		1			1	
Bi	<i>Barbatia virescens</i>														1								1
Bi	<i>Laternula anatina</i>							1									1						2
Bi	<i>Ruditapes philippinarum</i>														1								1
Bi	<i>Saccostrea cucullata</i>	5		23								12		2		71		11		60		3	187
Bi	<i>Xenostrobus atratus</i>	1									2												3
C	<i>Hemigrapsus penicillatus</i>															1							1
C	<i>Nanosesarma minutum</i>											1				1							2
C	<i>Uca lactea</i>					14								11				1					26
G	<i>Batillaria bornii</i>										2								1	1			4
G	<i>Batillaria multiformis</i>						1				1				3		1		8				14
G	<i>Batillaria zonalis</i>					5	1	2			18		3		4	1	13	7	48	1	35	1	139
G	<i>Cellana toreuma</i>										1										1		2
G	<i>Cerithidea cingulata</i>					10		4			6		4		11		34		8		6	2	85
G	<i>Cerithidea djadjariensis</i>					1	34		19		19		14		20		34		24		46	1	212
G	<i>Cerithidea rhizophorarum</i>	1							1												2		4
G	<i>Euchelus scaber</i>											2											2
G	<i>Littoraria articulata</i>	1		1																			2

**Annex V (Cont'd) List of recorded fauna of intertidal soft shore community survey in every sampling zone**

Jun 2016

Sampling zone TC 2

Mid tidal level (1.5 m above C.D.)

Gp	Taxon	1	2	3	4	5	6	7	8	9	10	Q	C	Q	C	sub-total
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	
G	<i>Lunella coronata</i>			1		9		1	4	1	10					26
G	<i>Monodonta labio</i>	11		6					2		1					20
G	<i>Nerita polita</i>								1							1
G	<i>Patelloidea pygmaea</i>		1						1							2
Hc	<i>Pagurus dubius</i>										1					1
P	Ampharetidae spp.			1	1				1			1		1	1	5
P	Maldanidae spp.					6		1	1					1	1	9
P	Nereididae spp.					2										2
S	Unidentified juvenile shrimp										1					1
Sp	<i>Sipunculus nudus</i>						2									2
															Total	759

**Annex V (Cont'd) List of recorded fauna of intertidal soft shore community survey in every sampling zone**

Jun 2016

Sampling zone TC 2

Low tidal level (1.0 m above C.D.)

Gp	Taxon	1		2		3		4		5		6		7		8		9		10		sub-total		
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C			
Ba	<i>Balanus amphitrite</i>	1		2				3		16										11		33		
Bi	<i>Anodontia stearnsiana</i>					1		3									2		2		3		11	
Bi	<i>Anomalocardia squamosa</i>						1											1					2	
Bi	<i>Barbatia virescens</i>								2		1												3	
Bi	<i>Laternula anatina</i>					1																	1	
Bi	<i>Saccostrea cucullata</i>	3		11					7		39								14		13		87	
Bi	<i>Tellina</i> sp.																	1					1	
Bi	<i>Xenostrobus atratus</i>									2													2	
C	<i>Nanosesarma minutum</i>			1																			1	
C	<i>Philyra carinata</i>	1																					1	
C	<i>Scylla serrata</i>					1																	1	
G	<i>Batillaria bornii</i>																			1			1	
G	<i>Batillaria zonalis</i>	1			1	18			5	1	3			12		4		12	1	14		18		90
G	<i>Cerithidea cingulata</i>						1									2		4	2			1		10
G	<i>Cerithidea djadjariensis</i>	2		1		3	2	2			3					5		10	4		18		50	
G	<i>Euchelus scaber</i>									1											1		2	
G	<i>Lepidozona</i> sp.			1					1														2	
G	<i>Lunella coronata</i>				3						14												17	
G	<i>Monodonta labio</i>	1																					1	

**Annex V (Cont'd) List of recorded fauna of intertidal soft shore community survey in every sampling zone**

Jun 2016 Sampling zone TC 2 Low tidal level (1.0 m above C.D.)

Gp	Taxon	1		2		3		4		5		6		7		8		9		10		sub-total
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	
G	<i>Nassarius festivus</i>																	1				1
G	<i>Nipponacmea concinna</i>															1						1
G	<i>Patelloidea pygmaea</i>														3							3
G	<i>Pisania ignea</i>													1								1
Hc	<i>Pagurus dubius</i>													1								1
Ne	Nemertea spp.												1		2							3
P	Ampharetidae spp.												1									1
P	Lumbrineridae spp.																	1				1
P	Maldanidae spp.	1		1						2							2			2	1	9
P	Nereididae spp.	1		3		2									7	1	1	2		1		18
P	Onuphidae spp.	1		1	1				1											1		5
P	Pectinariidae spp.								1													1
																					Total	361

## **Annex V (Cont'd)** List of recorded fauna of intertidal soft shore community survey in every sampling zone

Jun 2016

### Sampling zone TC 3

### High tidal level (2.0 m above C.D.)

Gp	Taxon	1	2	3	4	5	6	7	8	9	10			
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	sub-total	
A	<i>Amphipoda</i> spp.							1					1	
Bi	<i>Caecella chinensis</i>					1							1	
Bi	<i>Geloina erosa</i>							1					1	
Bi	<i>Saccostrea cucullata</i>								3			3	6	
C	<i>Uca lactea</i>	1						2	4	3	6	7	23	
G	<i>Batillaria multiformis</i>	43	11	41	12	283	28	69	1	4	8	1	1	23
G	<i>Batillaria zonalis</i>			1		5							6	
G	<i>Cerithidea cingulata</i>	74	13	57		52	2	104	72	52	1	23	1	480
G	<i>Cerithidea djadjariensis</i>	51	2	55		12	2	18	7	1	59	89	1	487
G	<i>Cerithidea rhizophorarum</i>	2						2		1	2	1	1	9
G	<i>Clithon ovalaniensis</i>				3			3					1	7
G	<i>Lunella coronata</i>									1				1
G	<i>Monodonta labio</i>	2												2
P	<i>Ampharetidae</i> spp.					1								1
P	<i>Cirratulidae</i> spp.											1		1
P	<i>Maldanidae</i> spp.					2			1					3
P	<i>Nereididae</i> spp.						1							1

**Annex V (Cont'd) List of recorded fauna of intertidal soft shore community survey in every sampling zone**

Jun 2016 Sampling zone TC 3 Mid tidal level (1.5 m above C.D.)

Gp	Taxon	1		2		3		4		5		6		7		8		9		10		sub-total
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	
Bi	<i>Cyclina sinesis</i>					1																1
Bi	<i>Hiatella arctica</i>																					1
Bi	<i>Saccostrea cucullata</i>																	6		6	5	17
Bi	<i>Tellina</i> sp.							1														1
Bi	<i>Xenostrobus atratus</i>																	1				1
C	<i>Nanosesarma minutum</i>	1		1				1														3
C	<i>Uca borealis</i>											1										1
C	<i>Uca lactea</i>			14		13		19		21							2					69
G	<i>Batillaria multiformis</i>	5		2		2					1		2		1	3	72		24			112
G	<i>Batillaria zonalis</i>	10		14		14	1	1			1	1	1	2		3	1					49
G	<i>Cerithidea cingulata</i>	95		69		31		5		3		67	1	33		119	16	63	47			549
G	<i>Cerithidea djadjariensis</i>	64		74	1	106		96		47		24		61		45		58		129		705
G	<i>Cerithidea rhizophorarum</i>	3		1		4		3		3				2			3		1			20
G	<i>Clithon oualaniensis</i>	3																		1		4
G	<i>Littoraria articulata</i>	1																1		1		3
G	<i>Monodonta labio</i>															3		1		3		7
G	<i>Nassarius festivus</i>									1												1
Hc	<i>Diogenes</i> sp.	2																				2
P	Maldanidae spp.					1		1	1	1	1	1	1	1								8

**Annex V (Cont'd)** List of recorded fauna of intertidal soft shore community survey in every sampling zone

Jun 2016 Sampling zone TC 3 Mid tidal level (1.5 m above C.D.)

Gp	Taxon	1	2	3	4	5	6	7	8	9	10		
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	sub-total
P	Nereididae spp.					2							2
P	Onuphidae spp.					1							1

**Annex V (Cont'd) List of recorded fauna of intertidal soft shore community survey in every sampling zone**

Jun 2016 Sampling zone TC 3 Low tidal level (1.0 m above C.D.)

Gp	Taxon	1		2		3		4		5		6		7		8		9		10		sub-total
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	
Ba	<i>Balanus amphitrite</i>											2										2
Bi	<i>Barbatia virescens</i>																			1		1
Bi	<i>Hiatella arctica</i>			5		3																8
Bi	<i>Saccostrea cucullata</i>	131		97		104		28		17				41		56		14		18		506
Bi	<i>Xenostrobus atratus</i>	9		2												22		11		3		47
C	<i>Hemigrapsus penicillatus</i>													1				1				2
C	<i>Metopograpsus latifrons</i>					1																1
C	<i>Nanosesarma minutum</i>	1		2						2												5
Eh	<i>Echiura spp.</i>			2		7														1		10
G	<i>Batillaria bornii</i>							4				1										5
G	<i>Batillaria multiformis</i>	5				4		2		2						1		22		18		54
G	<i>Batillaria zonalis</i>									9		5		5					1			20
G	<i>Cellana toreuma</i>			9		14		2														25
G	<i>Cerithidea cingulata</i>	1						2												4		7
G	<i>Cerithidea djadjariensis</i>	1						35		40		74		68	6			3		39		266
G	<i>Cerithidea rhizophorarum</i>								1		6		1		1			1		5		15
G	<i>Clithon oualaniensis</i>							1				1							1			3
G	<i>Euchelus scaber</i>													1								1
G	<i>Littoraria articulata</i>	10		2		1										5		9				27

**Annex V (Cont'd) List of recorded fauna of intertidal soft shore community survey in every sampling zone**

Jun 2016

Sampling zone TC 3

Low tidal level (1.0 m above C.D.)

Gp	Taxon	1		2		3		4		5		6		7		8		9		10		sub-total	
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C		
G	<i>Lunella coronata</i>	5		12		13		11		10				2			3		8		64		
G	<i>Monodonta labio</i>	45		70		93		3		2		1			59		64		31		368		
G	<i>Nassarius festivus</i>											1									1		
G	<i>Nerita polita</i>	1				3				1											5		
G	<i>Nipponacmea concinna</i>	4		3		3		2								1		13		2		28	
G	<i>Patelloidea pygmaea</i>			3		1													1		5		
Ne	Nemertea spp.									1			1								2		
P	Maldanidae spp.											1	1		4							6	
P	Nereididae spp.					1							1									2	
S	Unidentified juvenile shrimp													1								1	
Sp	<i>Siphonosoma cumanense</i>					1																1	
Sp	<i>Sipunculus nudus</i>	3				2				3									1		9		
																				Total	1497		

**Annex V (Cont'd) List of recorded fauna of intertidal soft shore community survey in every sampling zone**

Jun 2016 Sampling zone ST High tidal level (2.0 m above C.D.)

Gp	Taxon	1		2		3		4		5		6		7		8		9		10		sub-total
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	
Bi	<i>Barbatia virescens</i>							1				1										2
Bi	<i>Hiatella arctica</i>				1																	1
Bi	<i>Saccostrea cucullata</i>	3		12		17		8		15		30		13		14		21		17		150
Bi	<i>Xenostrobus atratus</i>									6				1				4		1		12
C	<i>Hemigrapsus penicillatus</i>			1		1																2
C	<i>Macrophthalmus erato</i>			1																1		2
C	<i>Nanosesarma minutum</i>			1						1		1		1		1		1		1		7
C	<i>Philyra carinata</i>																			1		1
C	<i>Uca crassipes</i>	1																				1
Cn	<i>Diadumene lineata</i>	4		7		3		1		3				2		1						21
G	<i>Batillaria bornii</i>							2		1										7		10
G	<i>Batillaria multiformis</i>	1		64		36		45		13		32		9		48		1		58		307
G	<i>Cellana toreuma</i>			5		4		5		17		34		32		39		10		7		153
G	<i>Cerithidea cingulata</i>					1						1				1			3		5	
G	<i>Cerithidea djadjariensis</i>							1								3			3		7	
G	<i>Cerithidea rhizophorarum</i>																		4		4	
G	<i>Clithon faba</i>			2		1										2					5	
G	<i>Clithon oualaniensis</i>	1		2		9		2		3		10		9					5		41	
G	<i>Euchelus scaber</i>								1		1										2	

**Annex V (Cont'd) List of recorded fauna of intertidal soft shore community survey in every sampling zone**

Jun 2016 Sampling zone ST High tidal level (2.0 m above C.D.)

Gp	Taxon	1		2		3		4		5		6		7		8		9		10		sub-total
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	
G	<i>Lepidozona</i> sp.									1		1										2
G	<i>Littoraria articulata</i>	25				1		5											2			33
G	<i>Lunella coronata</i>					1				11		5		1		6		1		14		39
G	<i>Monodonta labio</i>	47		36		59		85		11		31		8		38		111		39		465
G	<i>Nerita polita</i>			1				1										4				6
G	<i>Nipponacmea concinna</i>					1				3								4				8
G	<i>Patelloidea pygmaea</i>			2		2		1		3		4		4		3						19
Ne	<i>Nemertea</i> spp.												2						1			3
P	<i>Polynoidae</i> spp.		1																			1
																				Total	1309	

**Annex V (Cont'd) List of recorded fauna of intertidal soft shore community survey in every sampling zone**

Jun 2016 Sampling zone ST Mid tidal level (1.5 m above C.D.)

Gp	Taxon	1		2		3		4		5		6		7		8		9		10		sub-total
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	
Bi	<i>Barbatia virescens</i>	1								3				9		2		20		3		38
Bi	<i>Circe</i> sp.							1		2												3
Bi	<i>Hiatella arctica</i>			1						6		3		4		4		7		9		34
Bi	<i>Ruditapes philippinarum</i>	1										1										3
Bi	<i>Saccostrea cucullata</i>	42		33				3		29		14		44		15		54		44		278
Bi	<i>Xenostrobus atratus</i>	4		1						1		2		2								10
C	<i>Hemigrapsus penicillatus</i>													1							2	3
C	<i>Nanosesarma minutum</i>	3		4						2		1		2		3		3		3		21
Cn	<i>Diadumene lineata</i>	2		3						1		1		3				2		2		14
G	<i>Batillaria bornii</i>			3						1		5		2		6						17
G	<i>Batillaria multiformis</i>					1		3		1		10		1		19				8		43
G	<i>Batillaria zonalis</i>					9		9		4			1									23
G	<i>Cellana toreuma</i>			12						12		25		6		26		6		22		109
G	<i>Cerithidea cingulata</i>			5		8		50		1										1		65
G	<i>Cerithidea djadjariensis</i>			4		68		36		1								2		2		113
G	<i>Cerithidea rhizophorarum</i>			2		3		5									1					11
G	<i>Clithon oualaniensis</i>									1		2				1			1		5	
G	<i>Dentalium sinuosum</i>					1		2						1			5				3	
G	<i>Euchelus scaber</i>									1				1		5		9			16	

**Annex V (Cont'd) List of recorded fauna of intertidal soft shore community survey in every sampling zone**

Jun 2016 Sampling zone ST Mid tidal level (1.5 m above C.D.)

Gp	Taxon	1		2		3		4		5		6		7		8		9		10		sub-total
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	
G	<i>Littoraria articulata</i>	4																				4
G	<i>Lunella coronata</i>	4		18						16		17		10		25		11		31		132
G	<i>Monodonta labio</i>	48		54						57		34		93		29		29		51		395
G	<i>Nassarius festivus</i>									1												1
G	<i>Nerita polita</i>										1											10
G	<i>Nipponacmea concinna</i>										8											13
G	<i>Patelloidea pygmaea</i>			3							1		3		4		4		1		4	20
G	<i>Thais luteostoma</i>																					1
Hc	<i>Pagurus dubius</i>													2								2
Ne	Nemertea spp.	3				1								1								5
P	Nereididae spp.			1			1															2
S	<i>Penaeus</i> sp.						1															1
Sp	<i>Sipunculus nudus</i>																		1		1	
																				Total	1396	

**Annex V (Cont'd) List of recorded fauna of intertidal soft shore community survey in every sampling zone**

Jun 2016 Sampling zone ST Low tidal level (1.0 m above C.D.)

Gp	Taxon	1		2		3		4		5		6		7		8		9		10		sub-total
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	
Ba	<i>Balanus amphitrite</i>					3				4												7
Bi	<i>Anodontia stearnsiana</i>															3						3
Bi	<i>Barbatia virescens</i>					3				3								1		2		9
Bi	<i>Circe</i> sp.																				1	1
Bi	<i>Hiatella arctica</i>	2				3				1						1						7
Bi	<i>Saccostrea cucullata</i>	17	1			20											17		9			64
Bi	<i>Xenostrobus atratus</i>					3		1		2							2		1			9
C	<i>Hemigrapsus penicillatus</i>					3																3
C	<i>Nanosesarma minutum</i>	1				8											3		2			14
C	<i>Uca borealis</i>														1							1
Cn	<i>Diadumene lineata</i>									1												1
F	Gobiidae spp.															1						1
G	<i>Batillaria bornii</i>	3	1			2														1		7
G	<i>Batillaria multiformis</i>	1				1														1		3
G	<i>Batillaria zonalis</i>			4		1		5			1									2	2	15
G	<i>Cellana toreuma</i>	1				8												8				17
G	<i>Cerithidea cingulata</i>	2		15					14		18		12		38		16		7			122
G	<i>Cerithidea djadjariensis</i>			63		1			7		5		16		4		1		10			107
G	<i>Cerithidea rhizophorarum</i>				5																	5

**Annex V (Cont'd) List of recorded fauna of intertidal soft shore community survey in every sampling zone**

Jun 2016 Sampling zone ST Low tidal level (1.0 m above C.D.)

Gp	Taxon	1		2		3		4		5		6		7		8		9		10		sub-total	
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C		
G	<i>Dentalium sinuosum</i>															1							1
G	<i>Euchelus scaber</i>							3										6		11			20
G	<i>Lepidozona</i> sp.	1						1										1		1			4
G	<i>Lunella coronata</i>	4		3		14												32		19			72
G	<i>Monodonta labio</i>																	1		1			2
G	<i>Nassarius festivus</i>									1											2		3
G	<i>Nerita polita</i>				2		2																4
G	<i>Nipponacmea concinna</i>	3				13													1				17
G	<i>Patelloidea pygmaea</i>	1																1					2
Ne	<i>Nemertea</i> spp.									1													1
P	<i>Eunicidae</i> spp.															1							1
P	<i>Goniadidae</i> spp.															1							1
P	<i>Maldanidae</i> spp.														2								2
P	<i>Nereididae</i> spp.							2	2						1								5
P	<i>Onuphidae</i> spp.															1					1		2
P	<i>Orbiniidae</i> spp.													1									1
P	<i>Terebellidae</i> spp.															1							1
S	<i>Alpheus brevicristatus</i>					1																	1

## **Annex V (Cont'd)** List of recorded fauna of intertidal soft shore community survey in every sampling zone

Jun 2016 Sampling zone ST Low tidal level (1.0 m above C.D.)

Gp	Taxon	1	2	3	4	5	6	7	8	9	10		
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	sub-total
S	<i>Penaeus</i> sp.				1								1
Sp	<i>Sipunculus nudus</i>						6					1	7

## Key for faunal groups (Gp):

Ba: Barnacle, Bi: Bivalve, C: Crab, Cn: Cnidarin, Eh: Echiuran, F: Fish, G: Gastropod, Hc: Hermit crab, Ne: Nemertean, OI: Oligochaete, P: Polychaete, Pl: Platyhelminthes, Po: Polyplacophores, S: Shrimp, Sc: Scaphopods, Sp: Sipunculan