

**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**

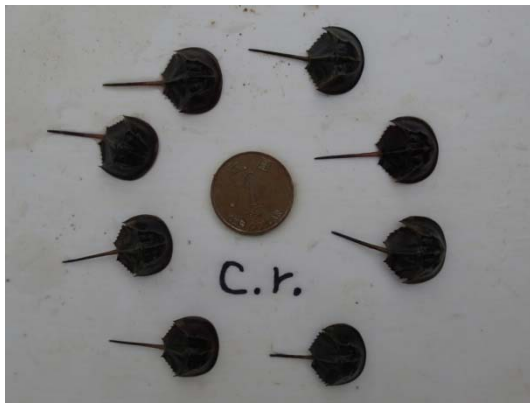


**ST**

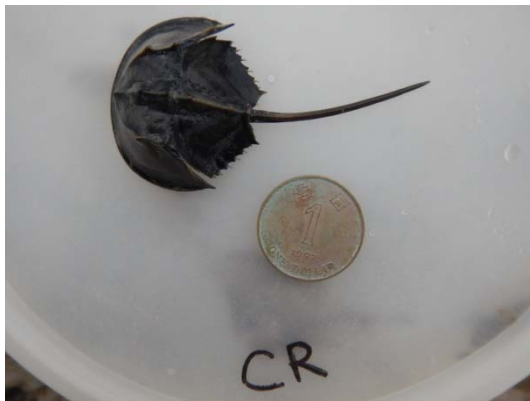


**Figure 2.2.** *Photographic record of the environment in every sampling zone.*

TC1 *Carcinoscorpius rotundicauda*



TC2 *Carcinoscorpius rotundicauda*



TC3 *Carcinoscorpius rotundicauda*

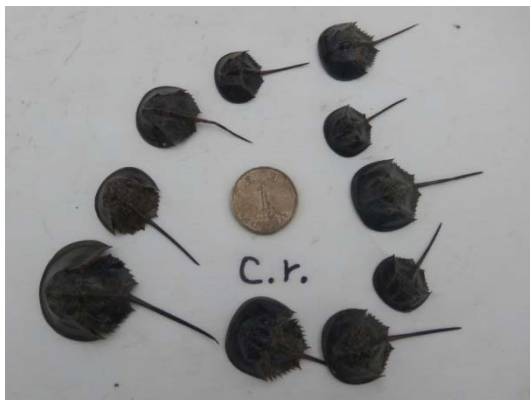


Figure 3.1. Examples of photographic records of horseshoe crab (Sep. 2016)

TC3 *Tachypleus tridentatus*



ST *Carcinoscorpius rotundicauda*



ST *Tachypleus tridentatus*



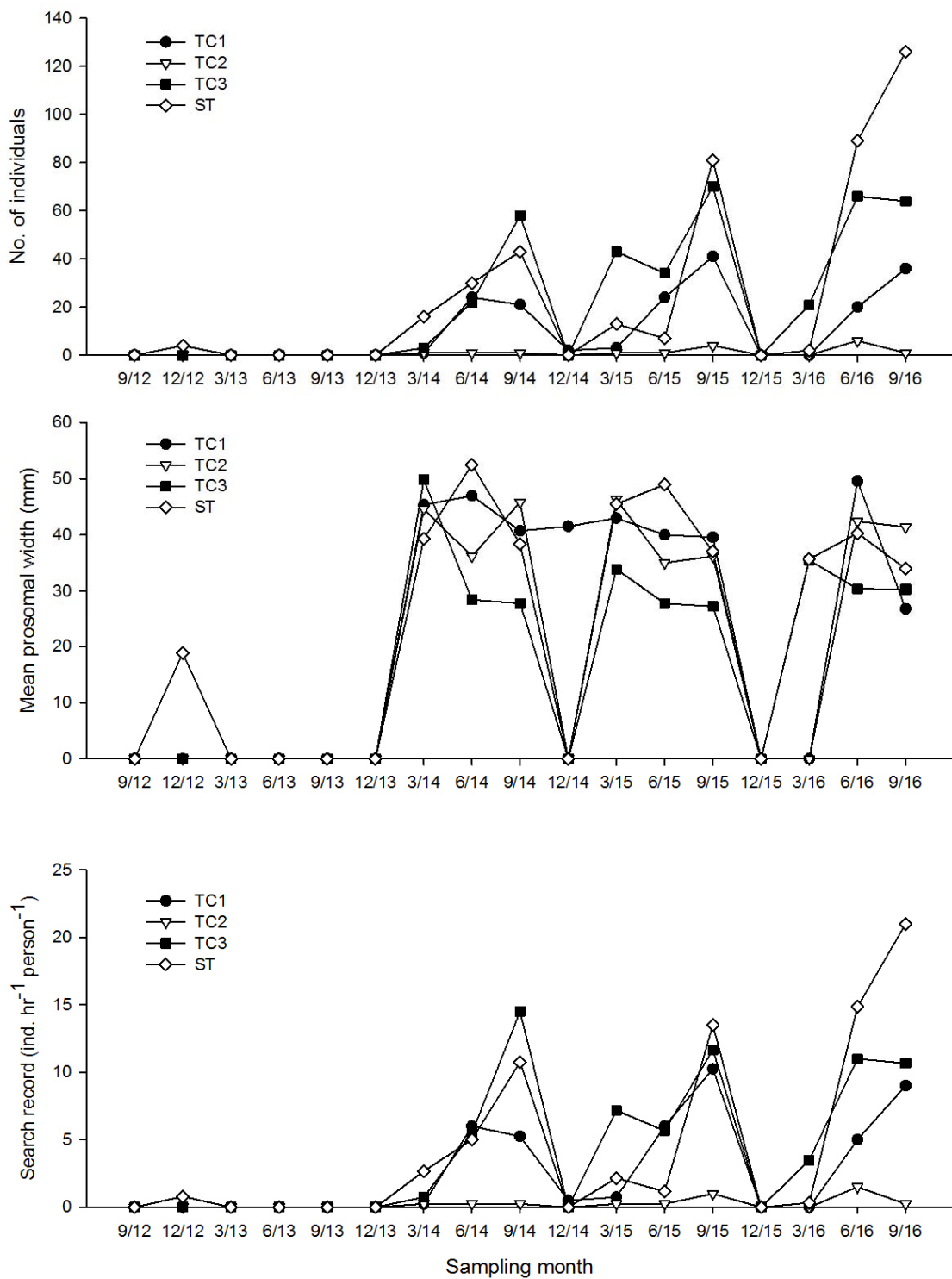
Figure 3.1 (Cont'd). Examples of photographic records of horseshoe crab (Sep. 2016)

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

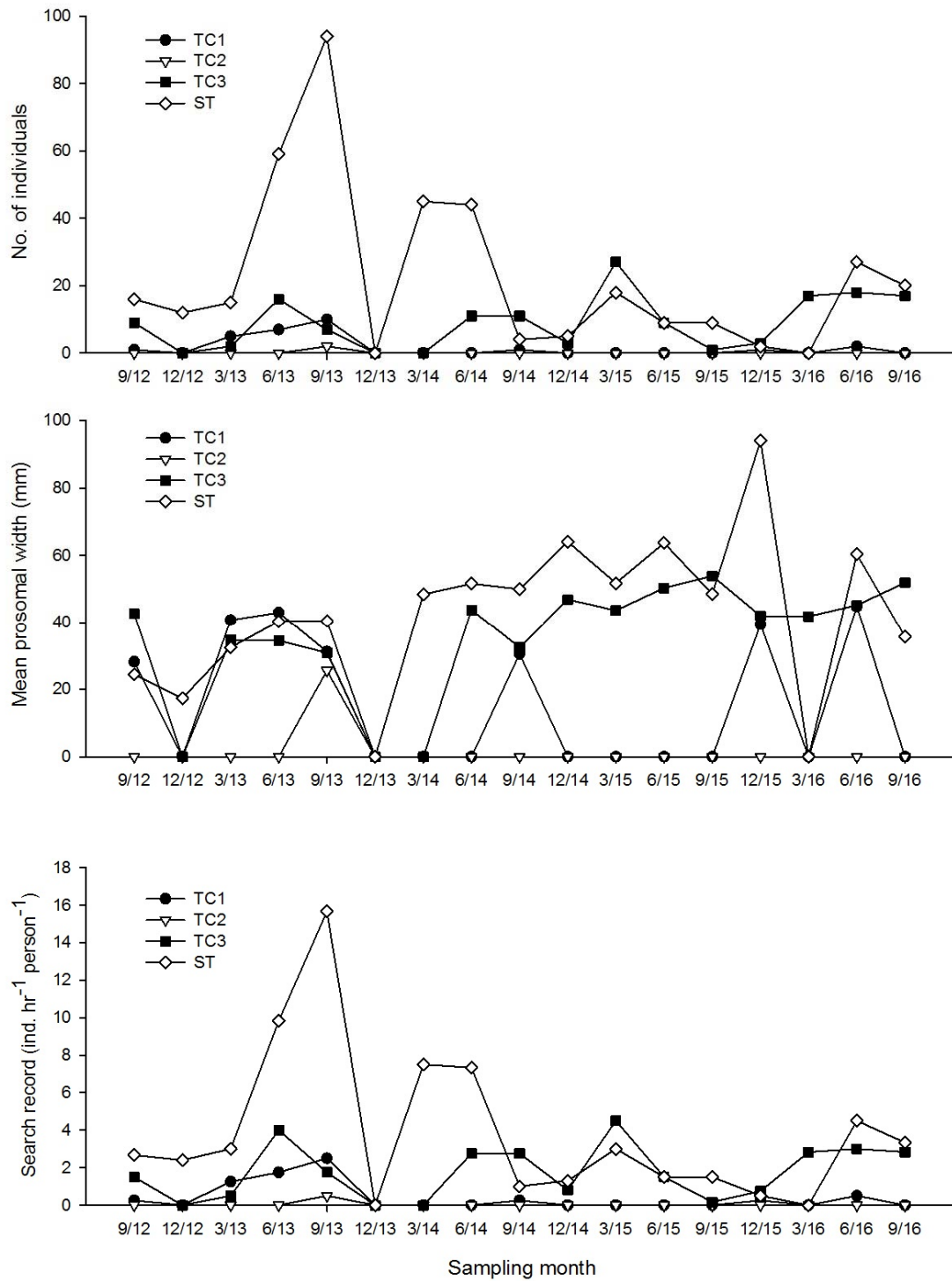
	TC1	TC2	TC3	ST
Search duration (hr)	2	2	3	3
<b><i>Carcinoscorpius rotundicauda</i></b>				
no. of individuals	36	1	64	126
mean prosomal width (mm)	26.84	41.39	30.32	33.96
max. prosomal width (mm)	64.75	\	64.01	72.34
min. prosomal width (mm)	10.93	\	14.96	14.58
Search record (ind. hr <sup>-1</sup> person <sup>-1</sup> )	9.0	0.3	10.7	21.0
<b><i>Tachypleus tridentatus</i></b>				
no. of individuals			17	20
mean prosomal width (mm)			51.88	35.69
max. prosomal width (mm)	N.A.	N.A.	79.18	72.55
min. prosomal width (mm)			34.75	27.19
Search record (ind. hr <sup>-1</sup> person <sup>-1</sup> )			2.8	3.3



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

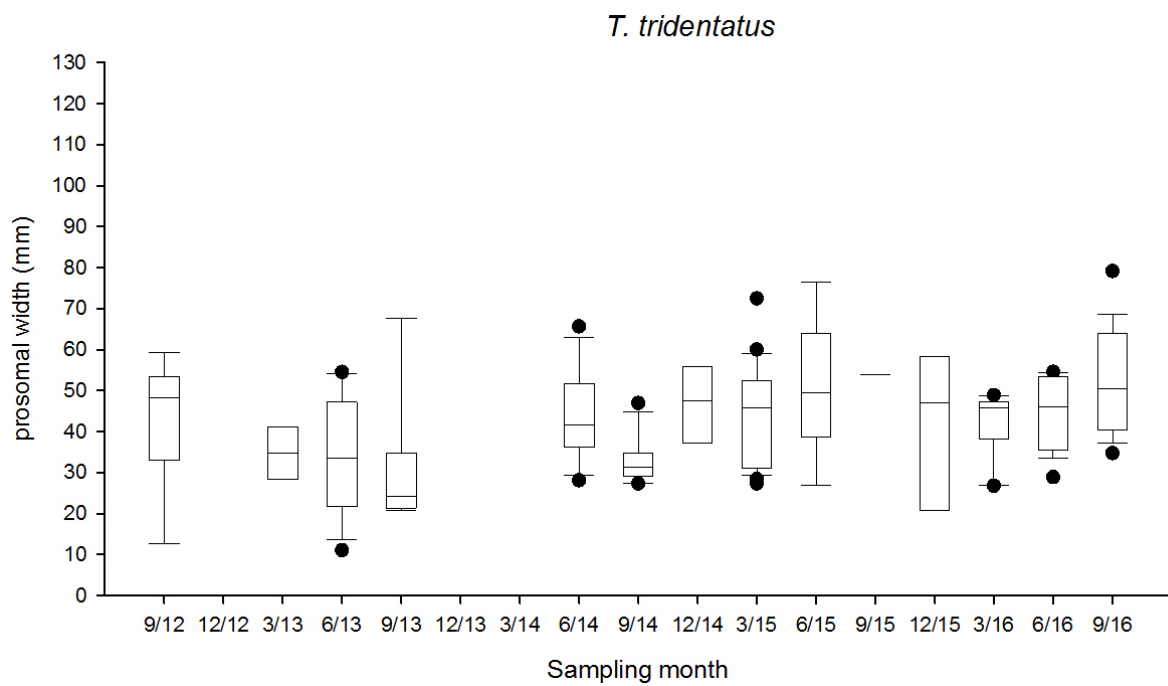
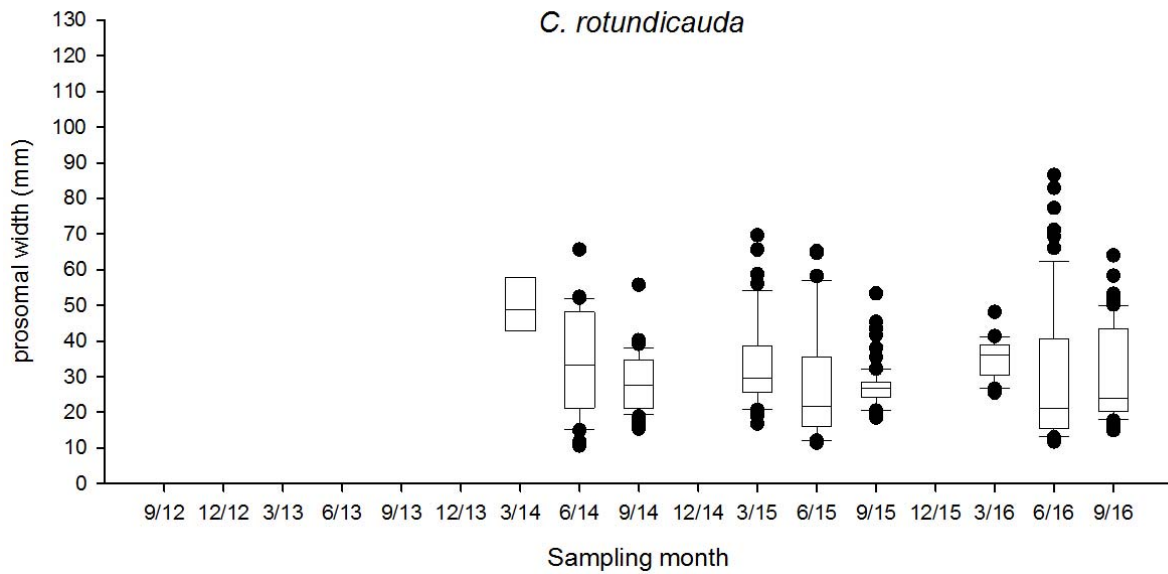


**Figure 3.3.** Changes of number of individuals, mean prosomal width and search record of horseshoe crab *Carcinoscorpius rotundicauda* in every sampling zone along the sampling months

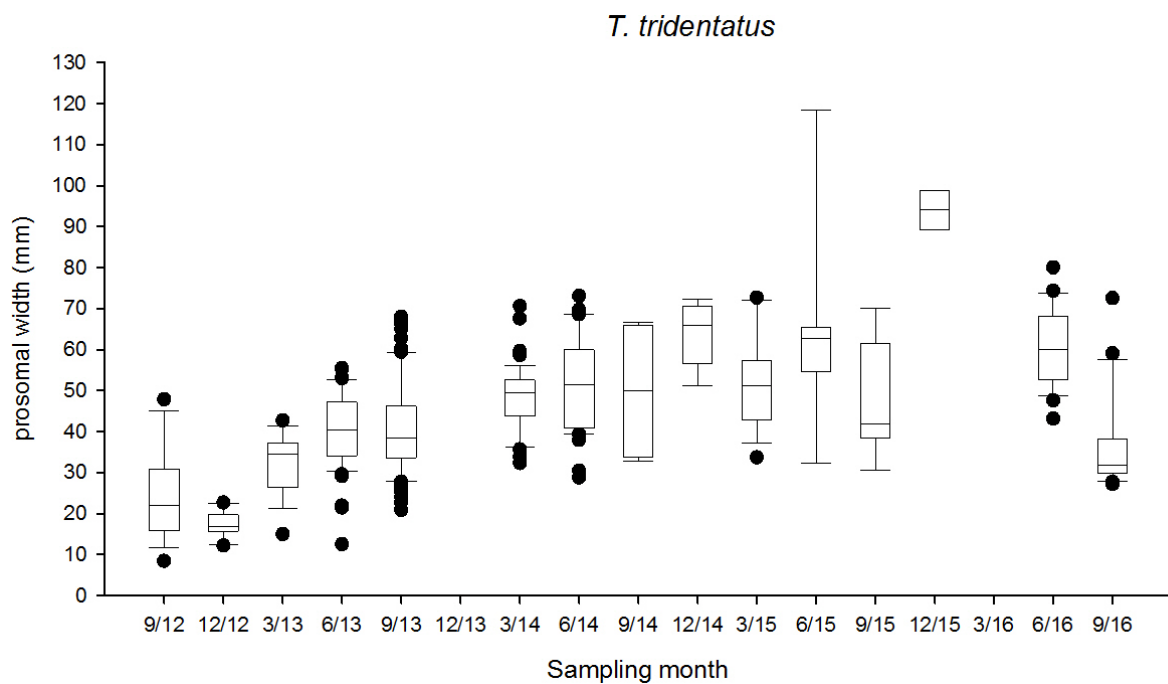
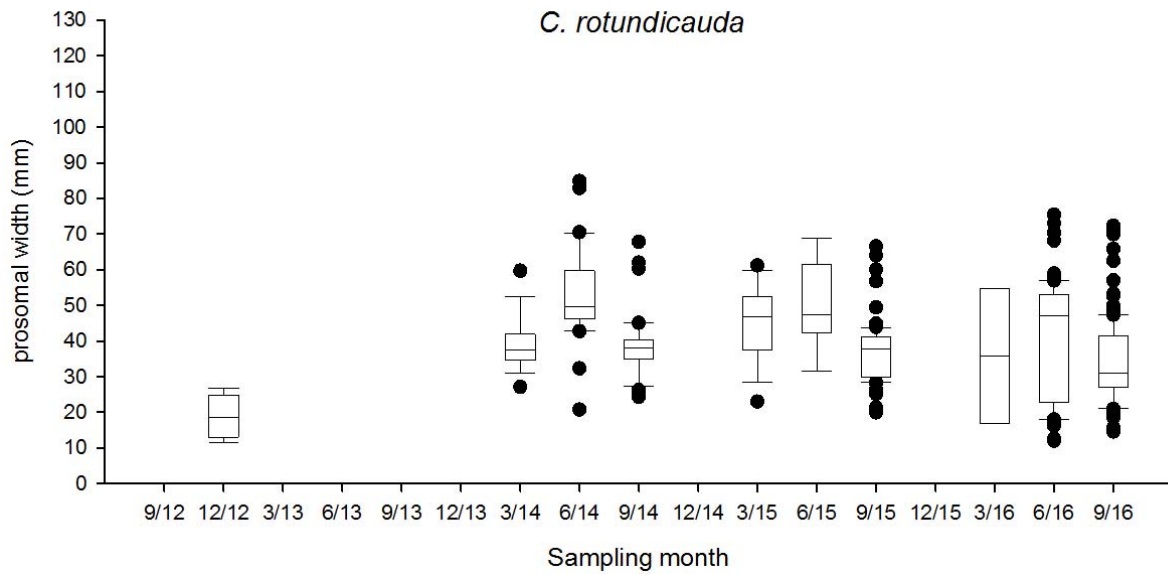


**Figure 3.4.** Changes of number of individuals, mean prosomal width and search record of horseshoe crab *Tachypleus tridentatus* in every sampling zone along the sampling months





**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*



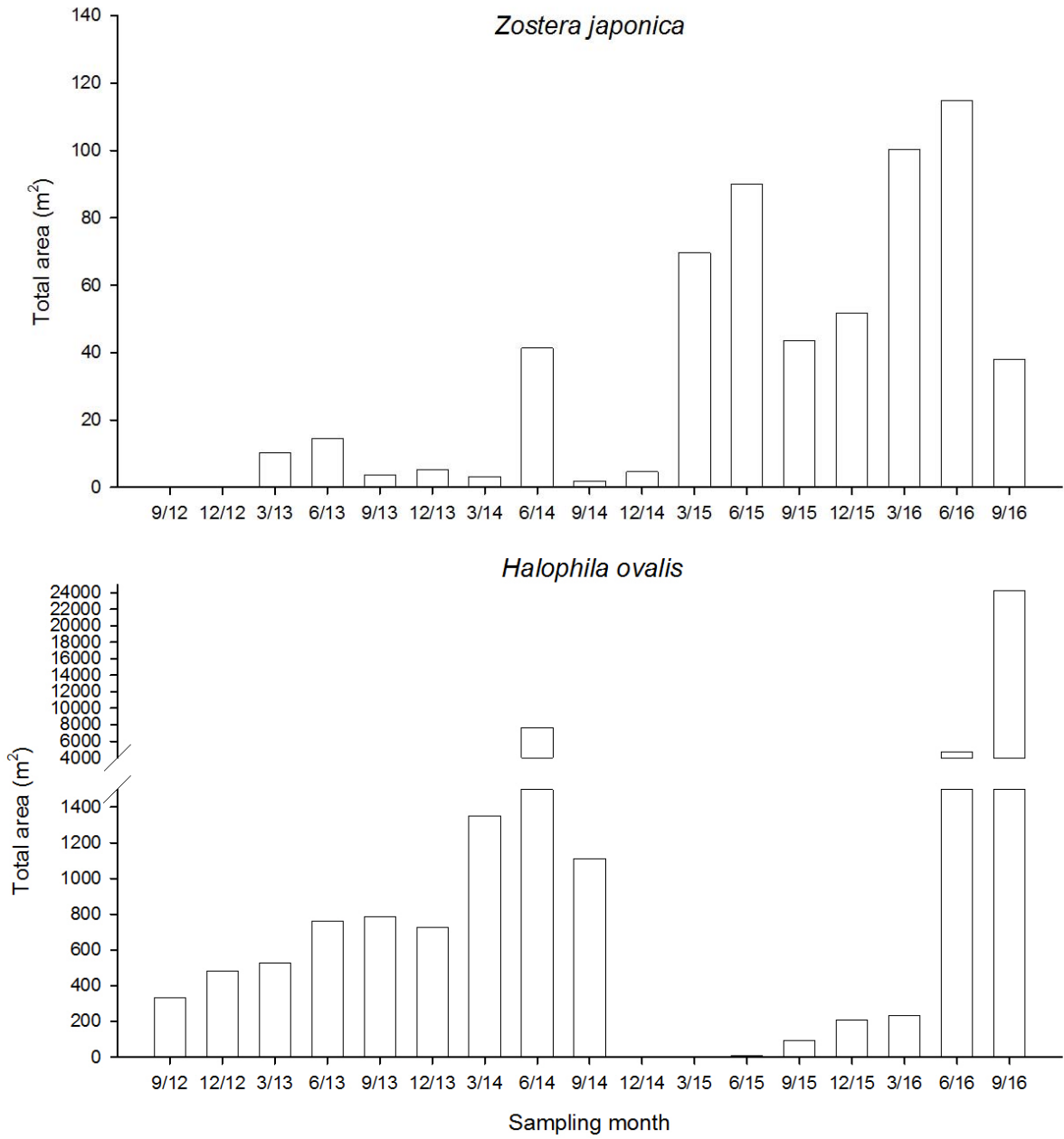
Two seagrass species coexisted in one long strand of seagrass bed



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

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

<b>Sampling zone</b>	<b>ST</b>	
	<i>Halophila ovalis</i>	<i>Zostera japonica</i>
<b>Number of patches</b>	8	2
<b>Total area (m<sup>2</sup>)</b>	24245.1	38.0
<b>Average area (m<sup>2</sup>)</b>	3030.6	19.0



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

**Jun. 2014**



**Dec. 2014**



**Mar. 2015**



**Sep. 2015**



**Mar. 2016**



**Sep. 2016**

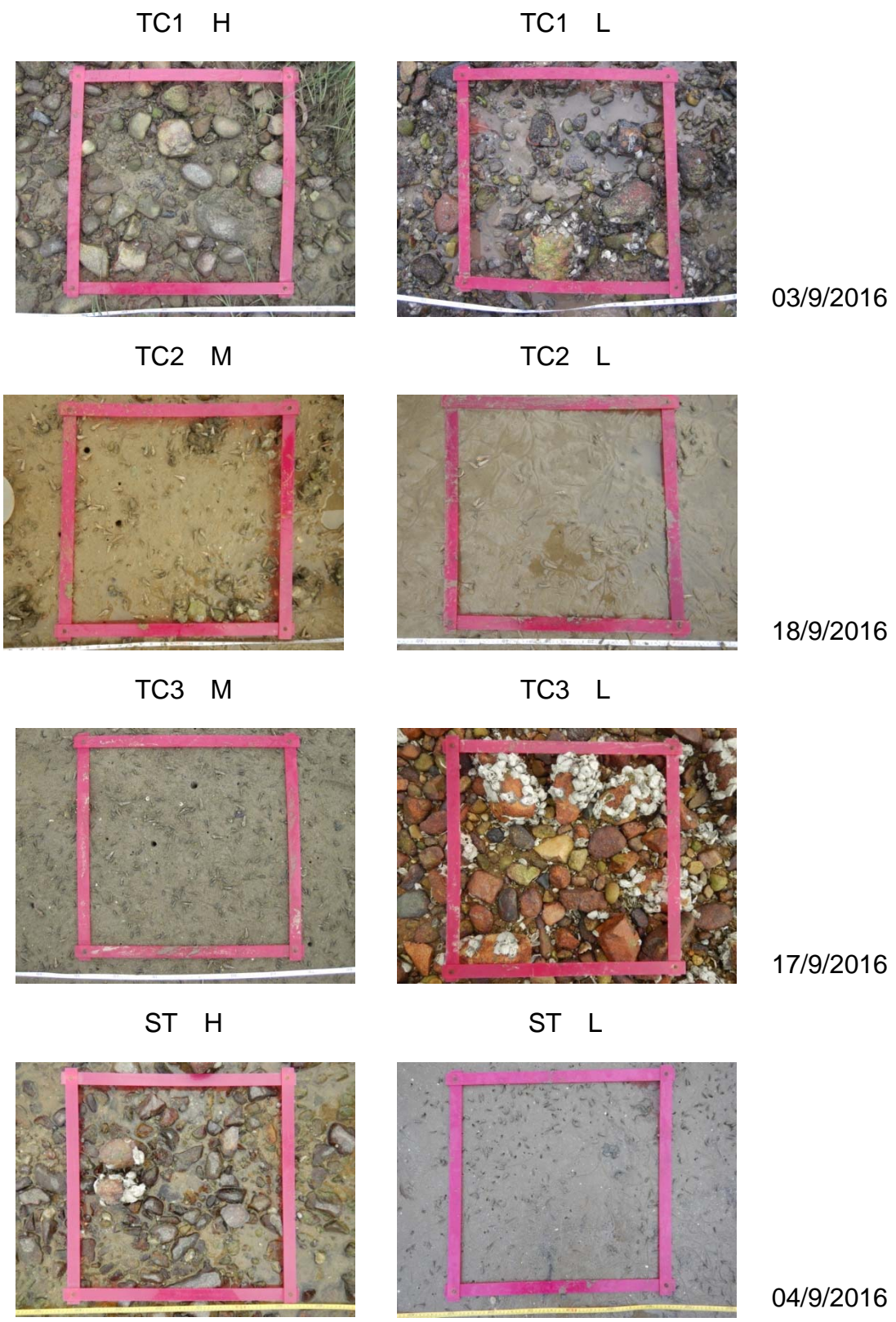


**Figure 3.9.** Comparison of pictures taken in different sampling months shows the disappearance and recolonization of seagrass beds.

**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	60	40	
	M	90	10	
	L	90		10
TC2	H		50	50
	M	10	60	30
	L		10	90
TC3	H		100	
	M		100	
	L	70	10	20
ST	H	100		
	M	90		10
	L	50	20	30

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>Sep. 2016</i>				
Mollusca	16848	95.9	562	37
Arthropoda	523	3.0	17	15
Annelida	94	0.5	3	11
Cnidaria	29	0.2	1	1
Sipuncula	23	0.1	1	1
Nemertea	20	0.1	1	1
Chordata	12	0.1	0	2
Echiura	11	0.1	0	1
Platyhelminthes	2	0.0	0	1
Echinodermata	1	0.0	0	1
<b>Total</b>	<b>17563</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	4	0.1	1	52	1.5	7	38	0.6	5			
Arthropoda	84	2.0	11	154	4.4	21	174	2.7	23	111	3.3	15
Chordata	6	0.1	1	1	0.0	0	1	0.0	0	4	0.1	1
Cnidaria				1	0.0	0	3	0.0	0	25	0.7	3
Echinodermata				1	0.0	0						
Echiura	7	0.2	1				3	0.0	0	1	0.0	0
Mollusca	4060	97.3	541	3276	93.4	437	6283	96.5	838	3229	95.6	431
Nemertea	2	0.0	0	15	0.4	2	1	0.0	0	2	0.1	0
Platyhelminthes				2	0.1	0						
Sipuncula	8	0.2	1	5	0.1	1	6	0.1	1	4	0.1	1
<b>Sub-total</b>	<b>4171</b>			<b>3507</b>			<b>6509</b>			<b>3376</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>	306	50	50
	G	<i>Cerithidea cingulata</i>	123	20	69
	G	<i>Cerithidea djadjariensis</i>	91	15	84
Mid	G	<i>Batillaria multiformis</i>	144	26	26
	G	<i>Monodonta labio</i>	122	22	49
	Bi	<i>Saccostrea cucullata</i>	86	16	64
	G	<i>Cerithidea cingulata</i>	80	15	79
Low	G	<i>Monodonta labio</i>	159	32	32
	Bi	<i>Saccostrea cucullata</i>	114	23	54

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 cingulata</i>	336	44	44
	G	<i>Cerithidea djadjariensis</i>	272	35	79
Mid	G	<i>Batillaria zonalis</i>	124	29	29
	G	<i>Cerithidea cingulata</i>	107	25	55
	G	<i>Cerithidea djadjariensis</i>	58	14	68
Low	G	<i>Batillaria zonalis</i>	74	36	36
	Ba	<i>Balanus amphitrite</i>	27	13	49
	Bi	<i>Saccostrea cucullata</i>	24	12	61
	G	<i>Cerithidea djadjariensis</i>	23	11	72
	G	<i>Cerithidea cingulata</i>	22	11	83

Ba = Barnacle, 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>	452	46	46
	G	<i>Cerithidea djadjariensis</i>	279	29	75
	G	<i>Cerithidea cingulata</i>	198	20	95
Mid	G	<i>Cerithidea cingulata</i>	327	35	35
	G	<i>Cerithidea djadjariensis</i>	234	25	59
	G	<i>Batillaria multiformis</i>	228	24	83
Low	Bi	<i>Saccostrea cucullata</i>	291	43	43
	G	<i>Monodonta labio</i>	163	24	67

Bi = Bivalve, G = Gastropod

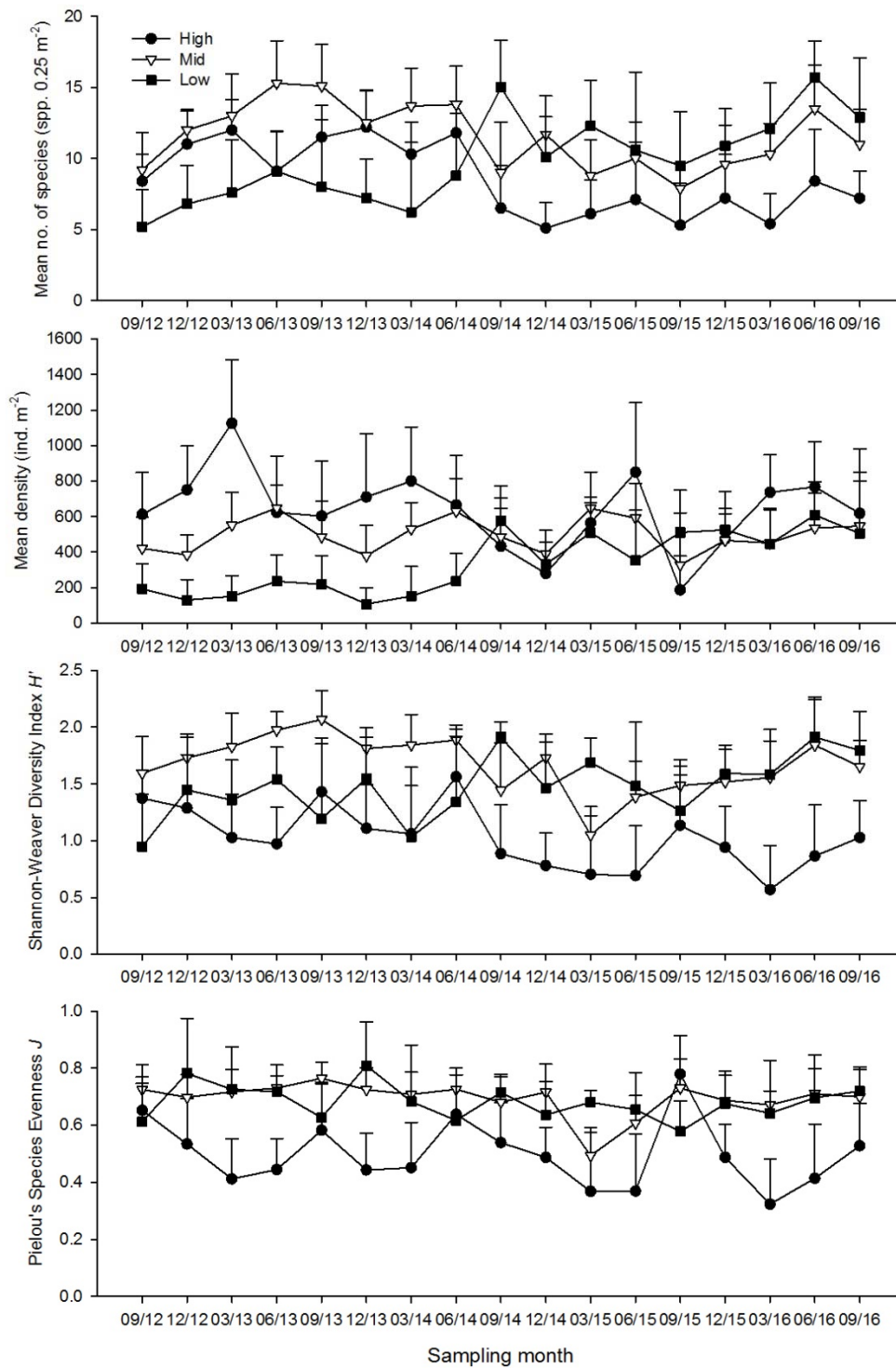
**Table 3.6 (Cont'd).** *The abundant species (relative abundance >10%) in every sampling zone*

Sampling zone ST	Group	Species	Mean density (ind. m <sup>-2</sup> )	Relative abundance (%)	Cumulative relative abundance (%)
High	G	<i>Cerithidea cingulata</i>	78	22	22
	Bi	<i>Saccostrea cucullata</i>	49	14	35
	G	<i>Lunella coronata</i>	40	11	46
	G	<i>Monodonta labio</i>	40	11	58
Mid	Bi	<i>Saccostrea cucullata</i>	136	24	24
	G	<i>Monodonta labio</i>	111	20	44
	G	<i>Lunella coronata</i>	60	11	55
Low	G	<i>Monodonta labio</i>	150	35	35
	G	<i>Batillaria multiformis</i>	86	20	55

Bi = Bivalve, G = Gastropod

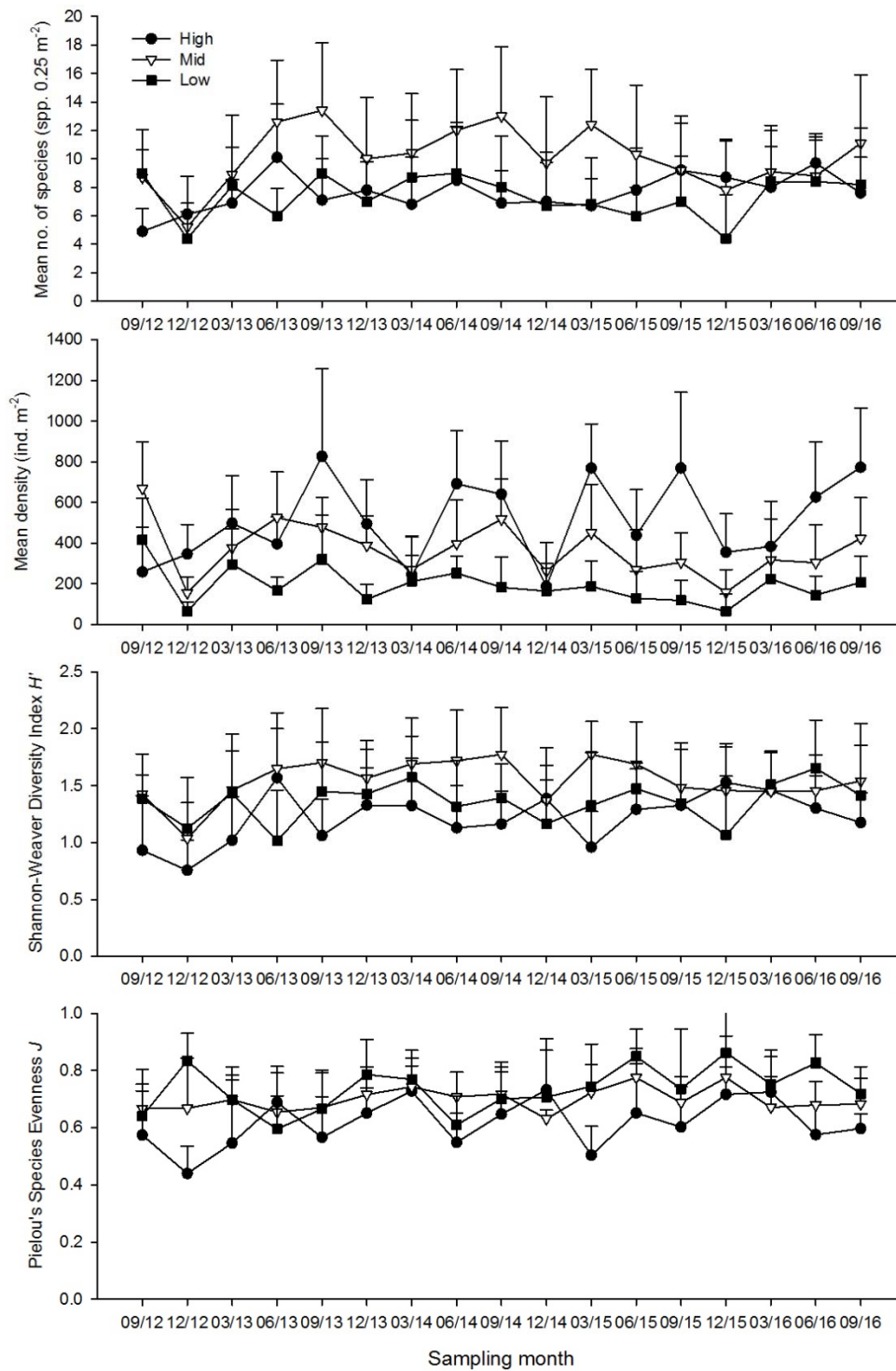
**Table 3.7.** Mean values of species number, density, Shannon-Weaver Diversity Index ( $H'$ ) and Pielou's Species Evenness ( $J$ ) at every tidal level and in every sampling zone

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	7	10	617	556	1.0	1.5	0.5	0.6
	M	11		546		1.7		0.7	
	L	13		505		1.8		0.7	
TC2	H	8	9	773	468	1.2	1.4	0.6	0.7
	M	11		423		1.5		0.7	
	L	8		207		1.4		0.7	
TC3	H	7	9	974	868	1.0	1.3	0.5	0.6
	M	9		948		1.3		0.6	
	L	12		681		1.5		0.6	
ST	H	11	12	360	450	1.9	1.9	0.8	0.8
	M	15		558		2.1		0.8	
	L	11		433		1.7		0.7	

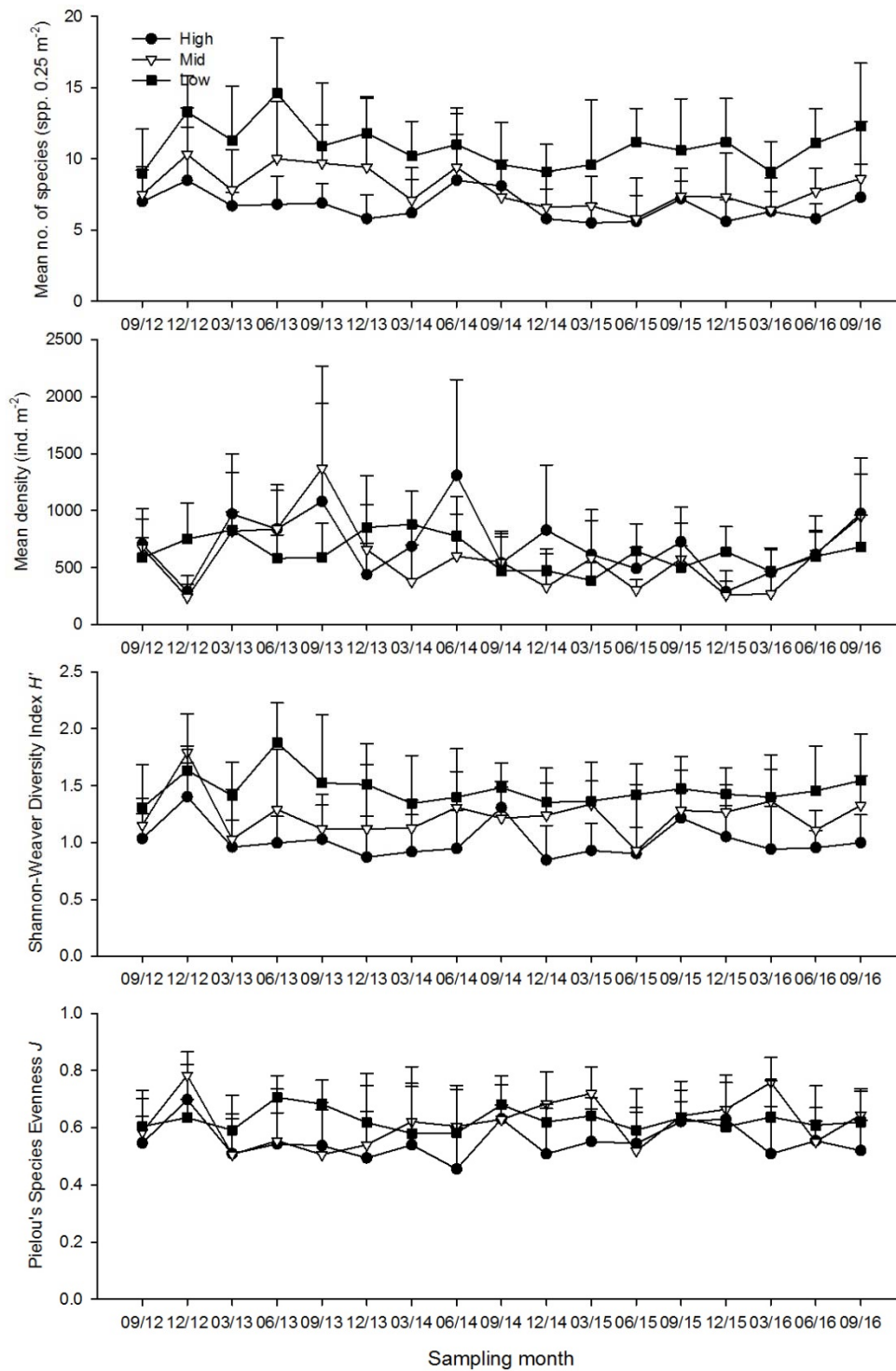


**Figure 3.11.** Temporal changes of mean number of species, mean density, Shannon-Weaver Diversity Index ( $H'$ ) and Pielou's Species Evenness ( $J$ ) (mean + SD) at every tidal level in sampling zone TC1

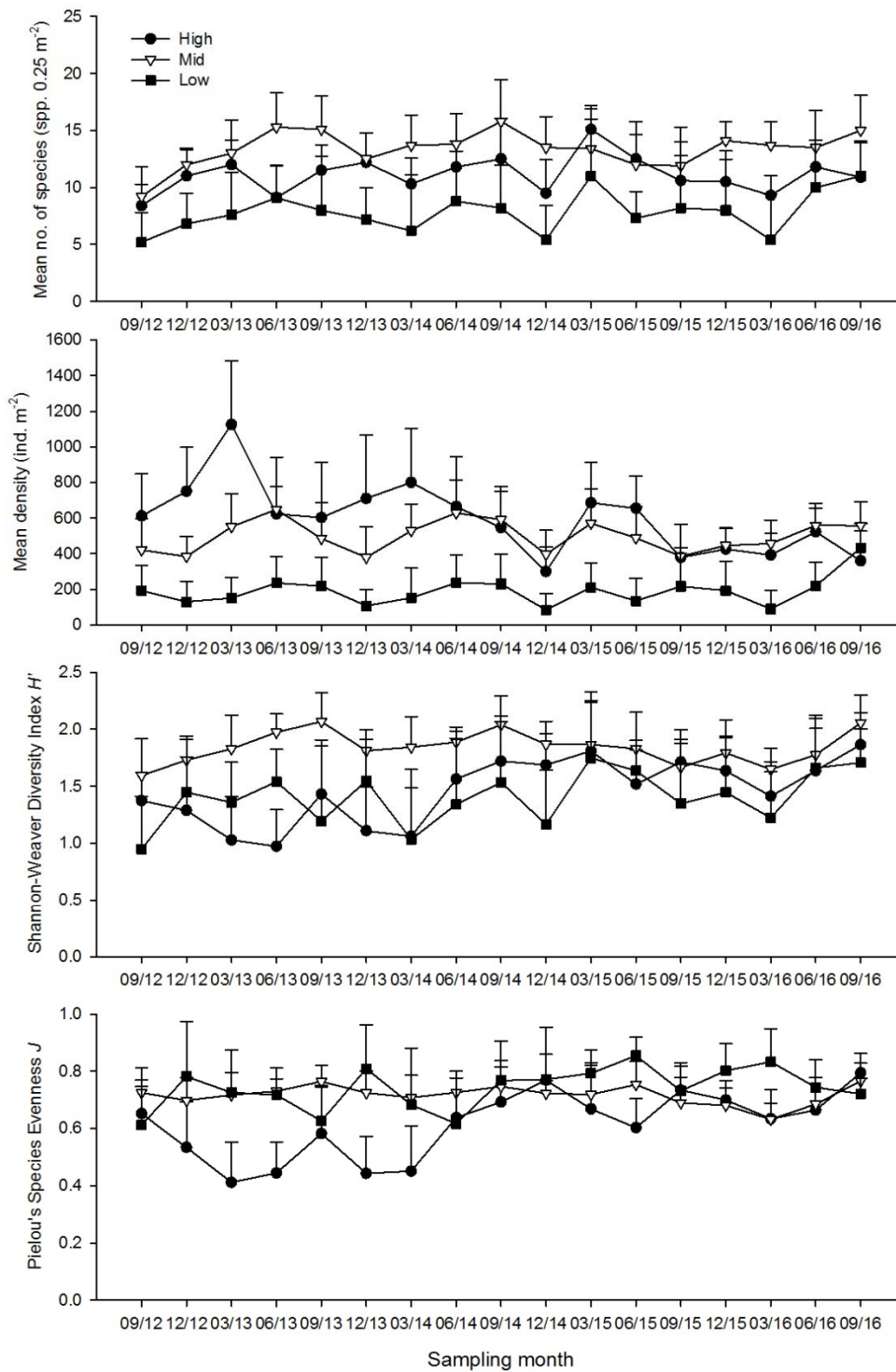




**Figure 3.12.** Temporal changes of mean number of species, mean density, Shannon-Weaver Diversity Index ( $H'$ ) and Pielou's Species Evenness ( $J$ ) (mean + SD) at every tidal level in sampling zone TC2



**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>				<i>Tachypleus tridentatus</i>				
1	S	22° 17.001' N	113° 55.990' E	28.94	22.79	27.72						
2	S	22° 17.006' N	113° 55.988' E	30.80								
3	S	22° 17.010' N	113° 55.990' E	27.09	19.00							
4	M	22° 17.018' N	113° 55.988' E	21.30	21.29	21.43	19.24	18.83	19.11	19.26		
				20.80	14.55	10.93	15.76	20.89				
5	M	22° 17.032' N	113° 55.971' E	64.75	64.33	42.38	63.53	38.18	40.47			
6	S	22° 17.062' N	113° 56.062' E	32.27	23.05	20.06	26.93	18.88	22.27	21.73		
7	S	22° 17.062' N	113° 56.064' E	21.64	19.65	22.16	23.04	21.05				
<b>No. of ind.</b>				<b>36</b>							<b>0</b>	
<u>Sampling site TC2 (Search hour = 2 hrs)</u>				<i>Carcinoscorpius rotundicauda</i>				<i>Tachypleus tridentatus</i>				
1	M	22° 16.913' N	113° 55.879' E	41.39								
<b>No. of ind.</b>				<b>1</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° 16.937' N	113° 55.734' E	21.81	18.34	26.48	22.28	28.65	30.17	38.28								
				25.37	23.48	19.48	20.36											
2	S	22° 16.968' N	113° 55.687' E	14.96	19.75	20.29	17.63	19.44	20.66	22.83								
3	S	22° 16.996' N	113° 55.647' E	24.27	25.50	23.02	20.59	22.32	23.08									
4	S	22° 17.007' N	113° 55.638' E	28.09	20.65	23.35	31.25	20.06	20.02	23.46								
5	M	22° 17.025' N	113° 55.634' E	15.45	16.21													
6	M	22° 17.045' N	113° 55.634' E	48.35	43.20	37.02	42.61	32.82			37.69	43.60						
7	M	22° 17.070' N	113° 55.645' E	64.01	51.28	26.93	43.66				65.94	63.46	56.66	34.75	55.37	44.84	47.26	
											64.27							
8	M	22° 17.066' N	113° 55.618' E	53.24	43.85	50.21	48.23	49.38	47.64	21.60	79.18	50.47	64.37	39.96	40.91	38.10	55.14	
				52.13	47.10	46.32	45.31	29.41	45.61	58.29								
9	S	22° 16.975' N	113° 55.652' E	27.23	16.14													
10	S	22° 17.002' N	113° 55.656' E	20.04	22.38	16.85	21.72	19.88	20.46									
<b>No. of ind.</b>				<b>64</b>								<b>17</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 (Search hour = 3 hrs)</u>				<i>Carcinoscorpius rotundicauda</i>						<i>Tachypleus tridentatus</i>													
1	M	22° 17.089' N	113° 55.599' E	35.36	48.39	53.20	34.03																
2	M	22° 17.156' N	113° 55.541' E	46.42	26.65																		
3	M	22° 17.154' N	113° 55.510' E	69.93	37.02	71.07								72.55									
4	M	22° 17.168' N	113° 55.497' E	62.50	52.63																		
5	M	22° 17.163' N	113° 55.480' E	65.84	72.34	40.31	26.24	40.11															
6	M	22° 17.177' N	113° 55.478' E	28.03	28.99	32.51																	
7	S	22° 17.389' N	113° 55.456' E	22.12	21.42	20.51	29.52	28.75	30.49	30.39													
				29.68	29.49	30.62																	
8	S	22° 17.391' N	113° 55.457' E	33.13	33.48	32.73	32.00	20.07	32.03	27.25	31.71	29.83	30.29	29.83	32.62	31.60							
				22.16	29.90																		
9	S	22° 17.239' N	113° 55.496' E	27.20	24.76	21.88	14.58	22.43	15.65	39.39	32.69												
				20.59	28.48	21.85	20.28	22.57	21.82	21.85													
				28.05	21.94	27.41	20.68	18.55	19.85	23.29													
				20.91	27.43	20.78	32.00	21.39															

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)											
-----	------	----------------	--	-------------------------------	--	--	--	--	--	--	--	--	--	--	--

Sampling site ST (Search hour = 3 hrs)				<i>Carcinoscorpius rotundicauda</i>								<i>Tachypileus tridentatus</i>			
10	S	22° 17.230' N	113° 55.493' E	29.20	30.19	26.13	29.16	22.86	41.97	29.83	39.99	27.19	31.77	27.73	28.87
				36.23	30.87										
11	S	22° 17.207' N	113° 55.493' E	31.55							30.63				
12	S	22° 17.211' N	113° 55.488' E	41.14	30.46	31.48	37.75	40.63	42.97		40.66	43.73			
13	S	22° 17.210' N	113° 55.476' E	42.19	27.76	20.23	30.64	31.72	30.87	39.40	32.56	28.42			
				44.01	43.11										
14	S	22° 17.204' N	113° 55.477' E	45.58	47.33	42.53	46.98	44.29	42.76	44.50	32.05				
				49.93	45.62	30.54	38.84	42.64	43.00	47.34					
				27.67	31.22	29.00	38.76	33.20	30.83	41.44					
				30.15	30.57	29.37	30.59	31.38	40.49	24.15					
15	S	22° 17.190' N	113° 55.478' E	41.74	23.95	43.06	43.39	39.97	31.99	33.15					
16	S	22° 17.197' N	113° 55.494' E	49.01	57.02						59.08				
<b>No. of ind.</b>				<b>126</b>								<b>20</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
----------------------------------	------------------------	----------------	--------

TC1 (search hour = 2 hrs) & TC2 (search hour = 2 hrs) & TC3 (search hour = 3 hrs)



No record

**ST (search hour = 3 hrs) *Halophila ovalis***

14.8	80	a single patch	22° 17.096' N	113° 55.590' E	A small patch of seagrass bed at tidal zone 0.5-1.0 m above C.D.	
341.0	80	a single patch	22° 17.104' N	113° 55.574' E	A medium patch of seagrass bed at tidal zone 0.5-1.0 m above C.D.	
21446.9	30-80	horizontal line	22° 17.101' N	113° 55.563' E	--	
			22° 17.166' N	113° 55.505' E	--	
		vertical line	22° 17.117' N	113° 55.540' E	--	An extensive patch of seagrass bed at tidal zone 0.5-1.5 m above C.D.
			22° 17.190' N	113° 55.557' E	--	
2007.0	10-80	horizontal line	22° 17.155' N	113° 55.495' E	--	
			22° 17.176' N	113° 55.487' E	--	
		vertical line	22° 17.169' N	113° 55.475' E	--	A large patch of seagrass bed at tidal zone 0.5-1.5 m above C.D.
			22° 17.178' N	113° 55.501' E	--	
401.3	70	horizontal line	22° 17.173' N	113° 55.475' E	-- A medium, horizontal strand of seagrass bed nearby the seaward side of mangrove area at tidal level 2.0m above C.D.	
			22° 17.181' N	113° 55.475' E	--	
8.3	85	a single patch	22° 17.195' N	113° 55.473' E	A small patch of seagrass bed nearby the seaward side of mangrove area at tidal level 2.0m above C.D.	

**Annex III (Cont'd). Record of seagrass beds survey in every sampling zone**

Estimated area (m <sup>2</sup> )	Estimated coverage (%)		GPS coordinate		Remark
<b>ST (search hour = 3 hrs) <i>Halophila ovalis</i></b>					
3.0	80	a single patch	22° 17.201' N	113° 55.472' E	A small patch of seagrass bed nearby the seaward side of mangrove area at tidal level 2.0m above C.D.
22.8	30-100	horizontal line	22° 17.214' N	113° 55.473' E	-- A medium, horizontal strand of two coexisting seagrass species nearby the seaward side of mangrove area at tidal level 2.0m above C.D.
			22° 17.227' N	113° 55.475' E	
<b>ST (search hour = 3 hrs) <i>Zostera japonica</i></b>					
15.2	10-30	horizontal line	22° 17.208' N	113° 55.475' E	A small, horizontal strand of seagrass bed nearby the seaward side of mangrove area at tidal level 2.0m above C.D.
22.8	30-50	horizontal line	22° 17.214' N	113° 55.473' E	-- A medium, horizontal strand of two coexisting seagrass species nearby the seaward side of mangrove area at tidal level 2.0m above C.D.
			22° 17.227' N	113° 55.475' E	

|

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

Kingdom	Phylum	Class	Order	Family	Species
Animalia	Annelida	Polychaeta	Eunicida	Lumbrineridae	Lumbrineridae spp.
Animalia	Annelida	Polychaeta	Eunicida	Onuphidae	Onuphidae spp.
Animalia	Annelida	Polychaeta	Phyllodocida	Glyceridae	Glyceridae spp.
Animalia	Annelida	Polychaeta	Phyllodocida	Goniadidae	Goniadidae spp.
Animalia	Annelida	Polychaeta	Phyllodocida	Nereididae	Nereididae spp.
Animalia	Annelida	Polychaeta	Sabellida	Oweniidae	Oweniidae spp.
Animalia	Annelida	Polychaeta	Sabellida	Sabellidae	Sabellidae spp.
Animalia	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharetidae spp.
Animalia	Annelida	Polychaeta	Terebellida	Cirratulidae	Cirratulidae spp.
Animalia	Annelida	Polychaeta		Capitellidae	Capitellidae spp.
Animalia	Annelida	Polychaeta		Maldanidae	Maldanidae spp.
Animalia	Arthropoda	Malacostraca	Decapoda	Alpheidae	<i>Alpheus brevicristatus</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Diogenidae	<i>Clibanarius</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 lactea</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Ocypodidae	<i>Uca</i> sp.
Animalia	Arthropoda	Malacostraca	Decapoda	Paguridae	<i>Pagurus dubius</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Penaeidae	<i>Penaeus</i> sp.
Animalia	Arthropoda	Malacostraca	Decapoda	Sesarmidae	<i>Clistocoeloma</i> sp.
Animalia	Arthropoda	Malacostraca	Decapoda	Sesarmidae	<i>Nanosesarma minutum</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Sesarmidae	<i>Perisesarma bidens</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Varunidae	<i>Hemigrapsus penicillatus</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Xanthidae	<i>Etisus laevimanus</i>
Animalia	Arthropoda	Maxillopoda	Sessilia	Balanidae	<i>Balanus amphitrite</i>
Animalia	Chordata	Actinopterygii	Perciformes	Blenniidae	<i>Omobranchus fasciolatoceps</i>
Animalia	Chordata	Actinopterygii	Perciformes	Gobiidae	<i>Periophthalmus cantonensis</i>
Animalia	Cnidaria	Anthozoa	Actiniaria	Diadumenidae	<i>Diadumene lineata</i>
Animalia	Echinodermata	Ophiuroidea	Ophiurida	Amphiuridae	<i>Amphioplus depressus</i>
Animalia	Echiura				Echiura spp.
Animalia	Mollusca	Bivalvia	Arcoida	Arcidae	<i>Barbatia virescens</i>

|

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

<b>Kingdom</b>	<b>Phylum</b>	<b>Class</b>	<b>Order</b>	<b>Family</b>	<b>Species</b>
Animalia	Mollusca	Bivalvia	Euheterodonta	Hiatellidae	<i>Hiatella arctica</i>
Animalia	Mollusca	Bivalvia	Mytiloidea	Mytilidae	<i>Xenostrobus atratus</i>
Animalia	Mollusca	Bivalvia	Ostreoida	Ostreidae	<i>Saccostrea cucullata</i>
Animalia	Mollusca	Bivalvia	Veneroidea	Corbiculidae	<i>Geloina erosa</i>
Animalia	Mollusca	Bivalvia	Veneroidea	Mesodesmatidae	<i>Caecella chinensis</i>
Animalia	Mollusca	Bivalvia	Veneroidea	Tellinidae	<i>Tellina</i> sp.
Animalia	Mollusca	Bivalvia	Veneroidea	Veneridae	<i>Anomalocardia squamosa</i>
Animalia	Mollusca	Bivalvia	Veneroidea	Veneridae	<i>Circe</i> sp.
Animalia	Mollusca	Bivalvia	Veneroidea	Veneridae	<i>Cyclina sinesis</i>
Animalia	Mollusca	Bivalvia	Veneroidea	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	Caenogastropoda	Potamididae	<i>Terebralia sulcata</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>Neripteron violaceum</i>
Animalia	Mollusca	Gastropoda	Cycloneritimorpha	Neritidae	<i>Nerita polita</i>
Animalia	Mollusca	Gastropoda	Littorinimorpha	Littorinidae	<i>Littoraria articulata</i>
Animalia	Mollusca	Gastropoda	Littorinimorpha	Littorinidae	<i>Peasiella</i> spp.
Animalia	Mollusca	Gastropoda	Littorinimorpha	Rissoinidae	<i>Rissoina plicatula</i>
Animalia	Mollusca	Gastropoda	Neogastropoda	Nassariidae	<i>Nassarius festivus</i>
Animalia	Mollusca	Gastropoda	Neogastropoda	Nassariidae	<i>Nassarius hepaticus</i>
Animalia	Mollusca	Gastropoda	Neogastropoda	Nassariidae	<i>Nassarius</i> sp.
Animalia	Mollusca	Gastropoda	Systellommatophora	Onchidiidae	<i>Onchidium</i> sp.
Animalia	Mollusca	Gastropoda		Lottiidae	<i>Nipponacmea concinna</i>
Animalia	Mollusca	Gastropoda		Lottiidae	<i>Patelloida pygmaea</i>
Animalia	Mollusca	Gastropoda		Nacellidae	<i>Cellana toreuma</i>
Animalia	Mollusca	Gastropoda		Trochidae	<i>Euchelus scaber</i>

|

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

<b>Kingdom</b>	<b>Phylum</b>	<b>Class</b>	<b>Order</b>	<b>Family</b>	<b>Species</b>
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				Nemertea spp.
Animalia	Platyhelminthes				Platyhelminthes spp.
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**

Sep 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	
Bi	<i>Geloina erosa</i>																				1	1
Bi	<i>Saccostrea cucullata</i>	9		5		16		6		4											2	42
C	<i>Perisesarma bidens</i>																				1	1
C	<i>Uca lactea</i>											6		2		4		1				13
F	<i>Periophthalmus cantonensis</i>																	1				1
G	<i>Batillaria multiformis</i>	11				4				121		15		149		39		136		289		764
G	<i>Batillaria zonalis</i>	10																				10
G	<i>Cerithidea cingulata</i>	110		70		59		26								7		12		23		307
G	<i>Cerithidea djadjariensis</i>	18		14		98		63		2						15		8		10		228
G	<i>Cerithidea rhizophorarum</i>	1		1		14		1		2		3				5		1				28
G	<i>Clithon faba</i>	1		4												1		5		3		14
G	<i>Clithon oualaniensis</i>												1		4					3		8
G	<i>Littoraria articulata</i>									5		1		16		2				2		26
G	<i>Lunella coronata</i>					1																1
G	<i>Monodonta labio</i>	9		1		2		2				1		26				3				44
G	<i>Onchidium</i> sp.													1								1
G	<i>Rissoina plicatula</i>											1				1		32				34
G	<i>Terebralia sulcata</i>																	2		18		20
																					<b>Total</b>	<b>1543</b>

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

Sep 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>																		1			1
Bi	<i>Barbatia virescens</i>													1								1
Bi	<i>Geloina erosa</i>													1					1			2
Bi	<i>Hiatella arctica</i>									1												1
Bi	<i>Ruditapes philippinarum</i>													1								1
Bi	<i>Saccostrea cucullata</i>	24		30				52		41		6		31		12		7		11		214
Bi	<i>Xenostrobus atratus</i>											8		9						1		18
C	<i>Hemigrapsus penicillatus</i>							2		1						1		1				5
C	<i>Macrophthalmus erato</i>					1																1
C	<i>Metopograpsus latifrons</i>													1		1						2
C	<i>Nanosesarma minutum</i>	1						3		1				1		1				2		9
C	<i>Uca lactea</i>					5																5
Eh	<i>Echiura</i> spp.	1		2				1		3												7
F	<i>Omobranchus fasciolatoceps</i>													2		2						4
G	<i>Batillaria bornii</i>	5																				5
G	<i>Batillaria multiformis</i>	1		14				42		6		101		21		50		3		123		361
G	<i>Cellana toreuma</i>							1														1

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

Sep 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>Cerithidea cingulata</i>	57		81		7		11		7						3		7		27		200
G	<i>Cerithidea djadjariensis</i>	24		7		8		10		6						17		8		23		103
G	<i>Cerithidea rhizophorarum</i>			6		3		2		4						1				5		21
G	<i>Clithon faba</i>	1		1												3		13		2		20
G	<i>Clithon oualaniensis</i>	1				1		1				2						2		2		9
G	<i>Littoraria articulata</i>	1		3				1				18		19		3		2		5		52
G	<i>Lunella coronata</i>	4						2														6
G	<i>Monodonta labio</i>	6		19		3		48		25		56		102		27		3		17		306
G	<i>Nerita polita</i>					1								1								2
G	<i>Nipponacmea concinna</i>													1								1
G	<i>Rissoina plicatula</i>																	1				1
P	Capitellidae spp.											2										2
P	Nereididae spp.	1												1								2
Sp	<i>Sipunculus nudus</i>	3																				3
																					<b>Total</b>	<b>1366</b>



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

Sep 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>			3				2				4				2		5				16
Bi	<i>Barbatia virescens</i>											1				14		2		5		22
Bi	<i>Hiatella arctica</i>	3						5		3		4				15		7		7		44
Bi	<i>Ruditapes philippinarum</i>							1										1				2
Bi	<i>Saccostrea cucullata</i>	28				43		16		9		18		14		57		52		47		284
Bi	<i>Xenostrobus atratus</i>																	5		3		8
C	<i>Clistocoeloma</i> sp.																			2		2
C	<i>Hemigrapsus penicillatus</i>					1														1		2
C	<i>Nanosesarma minutum</i>					1				1						6		3		2		13
C	<i>Uca lactea</i>			8		6																14
F	<i>Periophthalmus cantonensis</i>							1														1
G	<i>Batillaria bornii</i>													3		1		1				5
G	<i>Batillaria multiformis</i>			9		2		1				5		31		16		28		6		98
G	<i>Batillaria zonalis</i>	1		16		3		1														21
G	<i>Cellana toreuma</i>											11		3		32		4		2		52
G	<i>Cerithidea cingulata</i>			1		3		32		2		14		7				7		21		87
G	<i>Cerithidea djadjariensis</i>					5		8		1		4		1				2		3		24
G	<i>Cerithidea rhizophorarum</i>	1						4				1		2								8
G	<i>Clithon faba</i>											2		4		7		1		4		18

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

Sep 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 oualaniensis</i>											1		1		1		1		5		9
G	<i>Euchelus scaber</i>									3		4				2						9
G	<i>Lepidozona sp.</i>															2						2
G	<i>Littoraria articulata</i>															5		1		3		9
G	<i>Lunella coronata</i>	3				4		2		15		7		6		12		15		4		68
G	<i>Monodonta labio</i>	25				3		5		46		10		60		125		82		42		398
G	<i>Nerita polita</i>	2						1		1								5				9
G	<i>Nipponacmea concinna</i>	1								1		5				16		2				25
G	<i>Patelloida pygmaea</i>															4				1		5
Ne	Nemertea spp.	1				1																2
Sp	<i>Sipunculus nudus</i>	3				2																5
																					<b>Total</b>	<b>1262</b>

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

Sep 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>							2														2
Bi	<i>Barbatia virescens</i>									1												1
Bi	<i>Hiatella arctica</i>							1														1
Bi	<i>Saccostrea cucullata</i>	2				37		11		7						2		22		12		93
Bi	<i>Xenostrobus atratus</i>							1														1
C	<i>Hemigrapsus penicillatus</i>							1														1
C	<i>Macrophthalmus erato</i>					1																1
C	<i>Nanosesarma minutum</i>					1																1
C	<i>Uca lactea</i>	5		11				5				9		4		3						37
G	<i>Batillaria bornii</i>																		3			3
G	<i>Batillaria multiformis</i>											9		2	1	7	1	4		10		34
G	<i>Batillaria zonalis</i>									1		14	1	24	6	21		20	2	41	1	131
G	<i>Cerithidea cingulata</i>	49		1		25	5	67		69		104		121	4	139	2	137	8	106	4	841
G	<i>Cerithidea djadjariensis</i>	180		2		57	5	80		87		121	1	64		28		30	3	22		680
G	<i>Cerithidea rhizophorarum</i>					11		8		16		7		3		11		5		3		64
G	<i>Clithon oualaniensis</i>																			1		1
G	<i>Lunella coronata</i>																	1		1		2
G	<i>Monodonta labio</i>						2			1								4		8		15
G	<i>Nassarius festivus</i>																	1				1

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

Sep 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			
G	<i>Patelloida pygmaea</i>																		1			1
Ne	Nemertea spp.	12																				12
P	Ampharetidae spp.						1							1							4	6
Sp	<i>Sipunculus nudus</i>					1		1									1					3
																				<b>Total</b>	<b>1932</b>	

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

Sep 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				1		2		1				6
Bi	<i>Barbatia virescens</i>											2	1	2				1		1		7
Bi	<i>Cyclina sinesis</i>																	1				1
Bi	<i>Hiatella arctica</i>													2								2
Bi	<i>Saccostrea cucullata</i>	3		2		5				11				25		19		10				75
Bi	<i>Tellina</i> sp.							1														1
C	<i>Etisus laevimanus</i>											1										1
C	<i>Hemigrapsus penicillatus</i>	2											2	1						1		6
C	<i>Metopograpsus latifrons</i>											1										1
C	<i>Nanosesarma minutum</i>									1						1						2
C	<i>Uca lactea</i>					1								5				7				13
Cn	<i>Diadumene lineata</i>	1																				1
F	<i>Periopthalmus cantonensis</i>							1														1
G	<i>Batillaria bornii</i>											4	1	1		2		2		5		15
G	<i>Batillaria multiformis</i>					1		5		13		4		3		7	4	9		1	2	49
G	<i>Batillaria zonalis</i>					21		27		58	2	41	5	23	1	30		56		43	2	309
G	<i>Cerithidea cingulata</i>					84		3		25		46	1	38		44	1	19		7		268
G	<i>Cerithidea djadjariensis</i>					14		29		9		23		23		24		20		3		145
G	<i>Cerithidea rhizophorarum</i>											1		5		12		1		1		20

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

Sep 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	
G	<i>Euchelus scaber</i>											3				1		1		1		6
G	<i>Littoraria articulata</i>	7																				7
G	<i>Lunella coronata</i>									2		7		3		5		5		1		23
G	<i>Monodonta labio</i>	36		6						1		9		5		4				1		62
G	<i>Nassarius festivus</i>					1				1						1	1					4
G	<i>Nassarius hepaticus</i>							2														2
G	<i>Nerita polita</i>	1																				1
G	<i>Patelloida pygmaea</i>																			1		1
Hc	<i>Pagurus dubius</i>																1					1
Ne	Nemertea spp.	2																				2
P	Ampharetidae spp.														2		2	2	1		2	9
P	Maldanidae spp.								9						1		1	1				12
P	Onuphidae spp.							1														1
P	Sabellidae spp.																				1	1
Sp	<i>Sipunculus nudus</i>											1								1		2
																					<b>Total</b>	<b>1057</b>

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

Sep 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>					19		21		28												68
Bi	<i>Anomalocardia squamosa</i>			1										1								2
Bi	<i>Caecella chinensis</i>																	1				1
Bi	<i>Circe</i> sp.														1							1
Bi	<i>Cyclina sinesis</i>		1																			1
Bi	<i>Saccostrea cucullata</i>					1		29		22				9								61
Bi	<i>Tellina</i> sp.														1							1
C	<i>Macrophthalmus erato</i>			1																		1
C	<i>Philyra carinata</i>					1																1
C	<i>Uca lactea</i>	5		5																		10
Ec	<i>Amphioplus depressus</i>																				1	1
G	<i>Batillaria bornii</i>							2		1												3
G	<i>Batillaria multiformis</i>					3		6		5					1							15
G	<i>Batillaria zonalis</i>			10		14		22		25		7		39		17	1	21		28	2	186
G	<i>Cellana toreuma</i>							1														1
G	<i>Cerithidea cingulata</i>			1		1		5						2		9		24		14		56
G	<i>Cerithidea djadjariensis</i>							5		5		4		2		12		11		19		58
G	<i>Cerithidea rhizophorarum</i>																			2		2
G	<i>Euchelus scaber</i>					1																1

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

Sep 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>Lepidozona</i> sp.							1		1												2
G	<i>Lunella coronata</i>							5		4												9
G	<i>Monodonta labio</i>							1														1
G	<i>Nassarius hepaticus</i>																	2		4		6
G	<i>Nipponacmea concinna</i>							1														1
G	<i>Patelloida pygmaea</i>							1														1
Hc	<i>Clibanarius</i> sp.									1		1										2
Ne	Nemertea spp.																				1	1
P	Ampharetidae spp.								1								1					2
P	Glyceridae spp.										1											1
P	Goniadidae spp.										1											1
P	Lumbrineridae spp.																				1	1
P	Maldanidae spp.				2	1			1				1		1		2				2	10
P	Nereididae spp.								1		1											2
P	Onuphidae spp.				2								1								1	4
P	Oweniidae spp.												1				1					2
Pl	Platyhelminthes spp.			2																		2

**Total 518**

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

Sep 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		sub-total		
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C			
Bi	<i>Circe</i> sp.				1								2		1							4		
Bi	<i>Cyclina sinesis</i>												1									1		
Bi	<i>Geloina erosa</i>															1	1					2		
Bi	<i>Saccostrea cucullata</i>	1		1										1		2						5		
C	<i>Macrophthalmus erato</i>															1	1					2		
C	<i>Uca lactea</i>									5						4		7		13		29		
C	<i>Uca</i> sp.																		1			1		
G	<i>Batillaria multiformis</i>	18		269	23	299	10	2				4		10	1	202	7	23		252	10	1130		
G	<i>Batillaria zonalis</i>			1										1								2		
G	<i>Cerithidea cingulata</i>	98		11		56		86		34		56		36		53		36		28	1	495		
G	<i>Cerithidea djadjariensis</i>	102	2	24	2	47		50		50	1	47		69	1	80		149		71	2	697		
G	<i>Cerithidea rhizophorarum</i>	14		1		2				1				2		3		5		3		31		
G	<i>Clithon oualaniensis</i>	2										2										4		
G	<i>Nassarius festivus</i>													2								2		
G	<i>Rissoina plicatula</i>																			1		1		
Hc	<i>Pagurus dubius</i>													2		1						3		
Ne	Nemertea spp.															1						1		
P	Ampharetidae spp.									2						2		2		1		4	6	17

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

Sep 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		sub-total
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	

P	Maldanidae spp.		1	1			2	2	6
S	<i>Penaeus</i> sp.	1	1						3
<hr/>									
									<b>Total</b>
									<b>2436</b>

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

Sep 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	
Ba	<i>Balanus amphitrite</i>															8		2		1		11
Bi	<i>Barbatia virescens</i>															6						6
Bi	<i>Ruditapes philippinarum</i>	1																				1
Bi	<i>Saccostrea cucullata</i>	1						1								63		5		6		76
Bi	<i>Tellina</i> sp.												1									1
Bi	<i>Xenostrobus atratus</i>																11					11
C	<i>Hemigrapsus penicillatus</i>											8		2		8						18
C	<i>Nanosesarma minutum</i>															1						1
C	<i>Uca lactea</i>			8												5		7		4		24
C	<i>Uca</i> sp.			1																		1
Cn	<i>Diadumene lineata</i>															1						1
Eh	Echiura spp.															1						1
G	<i>Batillaria bornii</i>																		1			1
G	<i>Batillaria multiformis</i>	20		17	1	3		8		3			4			110	4	224		175		569
G	<i>Batillaria zonalis</i>	30	1	12		26		19		25		4				1						118
G	<i>Cerithidea cingulata</i>	133		130	2	84		72		66		50	1	34		60	5	79		102		818
G	<i>Cerithidea djadjariensis</i>	54		37		54		79		78		57	2	79	4	29	2	64		47		586
G	<i>Cerithidea rhizophorarum</i>	15		4		13		7		7		11		4		4		9		9		83
G	<i>Clithon faba</i>																		1			1

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

Sep 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	
G	<i>Lunella coronata</i>															3		1				4
G	<i>Monodonta labio</i>															12		4		3		19
G	<i>Nassarius festivus</i>													2								2
G	<i>Patelloida pygmaea</i>																4					4
Hc	<i>Pagurus dubius</i>																1					1
P	Ampharetidae spp.															2		1				3
P	Maldanidae spp.								2				4		1							7
P	Onuphidae spp.							1														1
P	Oweniidae spp.															1						1
																					<b>Total</b>	<b>2370</b>

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

Sep 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>									11		3				8		4		10		36
Bi	<i>Barbatia virescens</i>											26				4		3				33
Bi	<i>Hiatella arctica</i>	10		3		11						7						3				34
Bi	<i>Saccostrea cucullata</i>	56		87		135		108		51		70		17		96		95		12		727
Bi	<i>Xenostrobus atratus</i>			1				10				5		5		22		2				45
C	<i>Etisus laevimanus</i>	3		1																		4
C	<i>Hemigrapsus penicillatus</i>					2						1				4		4				11
C	<i>Macrophthalmus erato</i>																			1		1
C	<i>Metopograpsus latifrons</i>											2										2
C	<i>Nanosesarma minutum</i>	3		2		3		2		3		5						6		1		25
Cn	<i>Diadumene lineata</i>			1						1												2
Eh	<i>Echiura</i> spp.							1				1										2
F	<i>Omobranchus fasciolatocephus</i>																	1				1
G	<i>Batillaria bornii</i>							1										5				6
G	<i>Batillaria multiformis</i>					2		7						2				6		10		27
G	<i>Batillaria zonalis</i>									1								15		44		60
G	<i>Cellana toreuma</i>	3				1								7		13		16				40
G	<i>Cerithidea cingulata</i>							1		9	1							11		16		38
G	<i>Cerithidea djadjariensis</i>							4		9								6		4		23

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

Sep 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>Cerithidea rhizophorarum</i>									4								2		12		18
G	<i>Dentalium sinuosum</i>													1								1
G	<i>Euchelus scaber</i>											4						3				7
G	<i>Lepidozona</i> sp.																	1				1
G	<i>Littoraria articulata</i>	1												2		6						9
G	<i>Lunella coronata</i>	7		10		7		8		1		9		5		5		31		10		93
G	<i>Monodonta labio</i>	50		23		18		14		1		67		60		131		43				407
G	<i>Nassarius festivus</i>																	2				2
G	<i>Nerita polita</i>			1				1				5				3						10
G	<i>Nipponacmea concinna</i>	1								1						1		1		1		5
G	<i>Patelloida pygmaea</i>											10		1		7		4		1		23
Hc	<i>Clibanarius</i> sp.																	1				1
P	Cirratulidae spp.									1												1
P	Glyceridae spp.											1										1
P	Onuphidae spp.									1												1
Sp	<i>Sipunculus nudus</i>							4		2												6
																					<b>Total</b>	<b>1703</b>

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

Sep 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	
Ba	<i>Balanus amphitrite</i>							1														1
Bi	<i>Hiatella arctica</i>									2		3		1				2		1		9
Bi	<i>Saccostrea cucullata</i>	2		4		11		20		8		10		9		27		15		16		122
Bi	<i>Xenostrobus atratus</i>	2		2				4		2		2		1		1				2		16
C	<i>Hemigrapsus penicillatus</i>	1				1												2				4
C	<i>Nanosesarma minutum</i>			1				3								3		1				8
Cn	<i>Diadumene lineata</i>			4		2		3						1		1		1		1		13
F	<i>Omobranchus fasciolatoceps</i>					2																2
G	<i>Batillaria bornii</i>	5										23				16		11		10		65
G	<i>Batillaria multiformis</i>	7						5						1	1	3		9		3		29
G	<i>Batillaria zonalis</i>			11	2	11	1	20	2	2		1		2								52
G	<i>Cellana toreuma</i>											23		4		1		7		5		40
G	<i>Cerithidea cingulata</i>	10		9				79			1			42	3	36		15				195
G	<i>Cerithidea djadjariensis</i>	5		14	3		1	34	7	2				3	12	4						85
G	<i>Cerithidea rhizophorarum</i>	6						5														11
G	<i>Euchelus scaber</i>	2										13		2		2		3				22
G	<i>Lepidozona sp.</i>											1								2		3
G	<i>Lunella coronata</i>	15								4		20		7		22		21		12		101
G	<i>Monodonta labio</i>	10										22				17		38		13		100

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

Sep 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>Nassarius festivus</i>					1																1
G	<i>Nassarius</i> sp.	1																				1
G	<i>Neripteron violaceum</i>													1								1
G	<i>Nerita polita</i>																			1		1
G	<i>Nipponacmea concinna</i>											2		3		1		6		1		13
G	<i>Peasiella</i> spp.																			1		1
Ne	Nemertea spp.																	1				1
S	<i>Penaeus</i> sp.															1						1
Sp	<i>Sipunculus nudus</i>	1																				1
																				Total	899	



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

Sep 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	
Ba	<i>Balanus amphitrite</i>	1												1								2
Bi	<i>Barbatia virescens</i>	2								10				2		2		2		17		35
Bi	<i>Circe</i> sp.									1												1
Bi	<i>Hiatella arctica</i>	1						1		10		1		4		4		3		12		36
Bi	<i>Saccostrea cucullata</i>	86		18		4		44		22		26		31		34		28		47		340
Bi	<i>Xenostrobus atratus</i>	22						6				2		3		16		6		5		60
C	<i>Hemigrapsus penicillatus</i>	3												1				1				5
C	<i>Macrophthalmus erato</i>					1																1
C	<i>Metopograpsus latifrons</i>															2						2
C	<i>Nanosesarma minutum</i>	4						7		5		5		2		6		2		8		39
C	<i>Uca</i> sp.					1																1
Cn	<i>Diadumene lineata</i>	4								1		3						1		2		11
F	<i>Omobranchus fasciolatoceps</i>									1												1
G	<i>Batillaria bornii</i>			1				16		3		13		17		3		5		18		76
G	<i>Batillaria multiformis</i>	5		46		1		8		9		13		10		13		3		14		122
G	<i>Batillaria zonalis</i>	1		3		7	5															16
G	<i>Cellana toreuma</i>	3		2				13		18		5		13		8		8		8		78
G	<i>Cerithidea cingulata</i>			8		11	1	3		4		1		5				1		3		37
G	<i>Cerithidea djadjariensis</i>	1		10		24	3			1										1		40

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

Sep 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>Cerithidea rhizophorarum</i>			3		2								1								6
G	<i>Clithon faba</i>							2												1		3
G	<i>Clithon oualaniensis</i>							4				1								2		7
G	<i>Euchelus scaber</i>							2		1										1		4
G	<i>Lepidozona</i> sp.																		1			1
G	<i>Littoraria articulata</i>	2																				2
G	<i>Lunella coronata</i>	6		29		4		16		18		22		16		10		13		15		149
G	<i>Monodonta labio</i>	22		12				15		38		30		34		49		43		35		278
G	<i>Nassarius festivus</i>																			1		1
G	<i>Nerita polita</i>											1										1
G	<i>Nipponacmea concinna</i>	1						5		2				4		6		2		3		23
G	<i>Patelloida pygmaea</i>	1								3		2		1		1		3				11
Hc	<i>Pagurus dubius</i>							1														1
Ne	Nemertea spp.																		1			1
S	<i>Alpheus brevicristatus</i>													1								1
Sp	<i>Sipunculus nudus</i>			1												1				1		3
																					<b>Total</b>	<b>1395</b>

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

Sep 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>																	1		1		2
Bi	<i>Barbatia virescens</i>									1												1
Bi	<i>Hiatella arctica</i>	2										2		1		3		1				9
Bi	<i>Saccostrea cucullata</i>	26		4						5		13		11		20		9		2		90
Bi	<i>Xenostrobus atratus</i>	2																1				3
C	<i>Hemigrapsus penicillatus</i>	5				3								1				1				10
C	<i>Nanosesarma minutum</i>					1						1				2						4
C	<i>Philyra carinata</i>									1												1
C	<i>Uca lactea</i>			22		1				2												25
Cn	<i>Diadumene lineata</i>																	1				1
Eh	Echiura spp.															1						1
F	<i>Omobranchus fasciolatoceps</i>													1								1
G	<i>Batillaria bornii</i>	1				1		8		13		15		6		4		8		38		94
G	<i>Batillaria multiformis</i>			4		19		59		36		26		19		4		12		37		216
G	<i>Cellana toreuma</i>	13										23				16		5				57
G	<i>Cerithidea cingulata</i>							1		5				2								8
G	<i>Cerithidea djadjariensis</i>	2								6				1		2				1		12
G	<i>Clithon faba</i>							3		1		1										5
G	<i>Clithon oualaniensis</i>	1		2				2		9		6		5		2		2		8		37

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

Sep 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>Lepidozона sp.</i>	1										4						1				6
G	<i>Littoraria articulata</i>			5		23		4						1								33
G	<i>Lunella coronata</i>									10		12		6		5		12		16		61
G	<i>Monodonta labio</i>	38		38		42		39		16		42		32		58		41		29		375
G	<i>Nassarius festivus</i>											1										1
G	<i>Nerita polita</i>							4				4						2		1		11
G	<i>Nipponacmea concinna</i>	6										1				1		1				9
G	<i>Patelloida pygmaea</i>	1																3		2		6
Hc	<i>Pagurus dubius</i>							3														3
																					<b>Total</b>	<b>1082</b>

Key for faunal groups (Gp):

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