

**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.



bike



trash gill net



boat wreckage



trash gill net and hand trolley



a tangled horseshoe crab on a trash net

**Figure 2.3.** Examples of photographic record of the big trashes found on the mudflat.

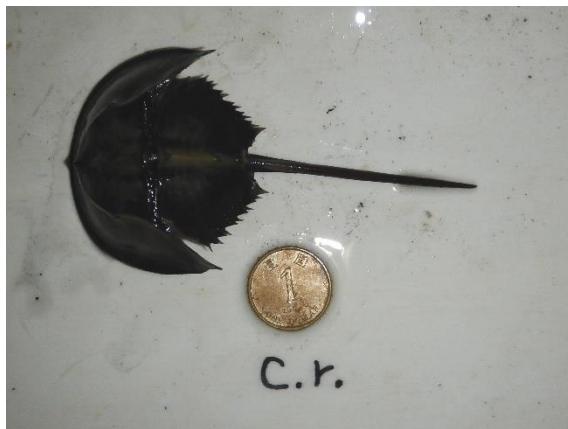
**TC1** *Carcinoscorpius rotundicauda*



**TC1** *Tachypleus tridentatus*

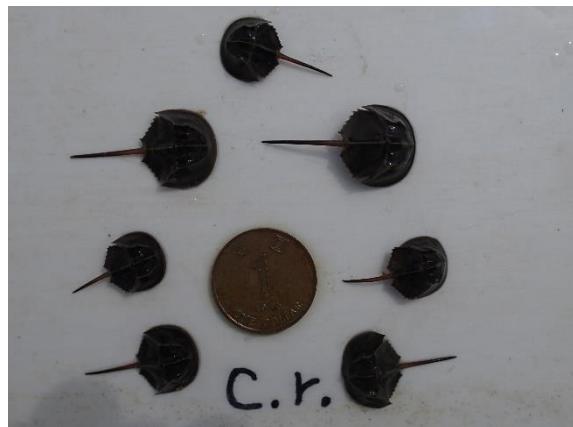


**TC2** *Carcinoscorpius rotundicauda*



**Figure 3.1.** Examples of photographic records of horseshoe crab (Jun. 2017)

**TC3** *Carcinoscorpius rotundicauda*



**TC3** *Tachypleus tridentatus*



**Figure 3.1 (Cont'd).** Examples of photographic records of horseshoe crab (Jun.. 2017)

**ST** *Carcinoscorpius rotundicauda*



**ST** *Tachypleus tridentatus*



**Figure 3.1 (Cont'd).** Examples of photographic records of horseshoe crab (Jun.. 2017)

**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	22		57	54
mean prosomal width (mm)	46.69		38.95	53.94
max. prosomal width (mm)	72.49	N.A.	86.73	83.33
min. prosomal width (mm)	15.72		14.29	38.83
Search record (ind. hr <sup>-1</sup> person <sup>-1</sup> )	5.5		9.5	9.0
<b><i>Tachypleus tridentatus</i></b>				
no. of individuals	2	1	70	52
mean prosomal width (mm)	43.90	67.42	54.24	53.74
max. prosomal width (mm)	51.47	\	93.44	76.37
min. prosomal width (mm)	36.33	\	27.57	40.41
Search record (ind. hr <sup>-1</sup> person <sup>-1</sup> )	0.5	0.3	11.7	8.7

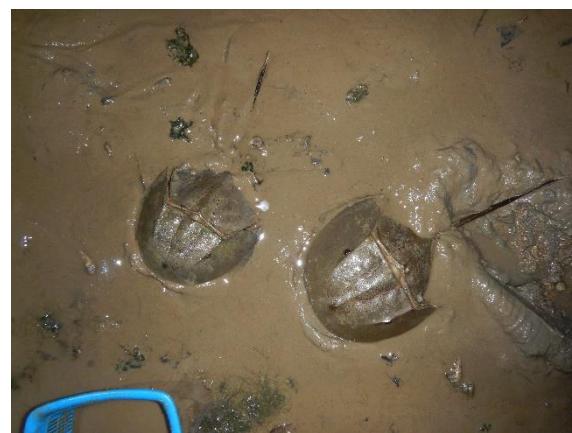
**Mar. 2015 - ST**



**Jun. 2017 – TC2**



**Female**



**Male**



**Figure 3.2. Photographic records of mating pair of *Carcinoscorpius rotundicauda***

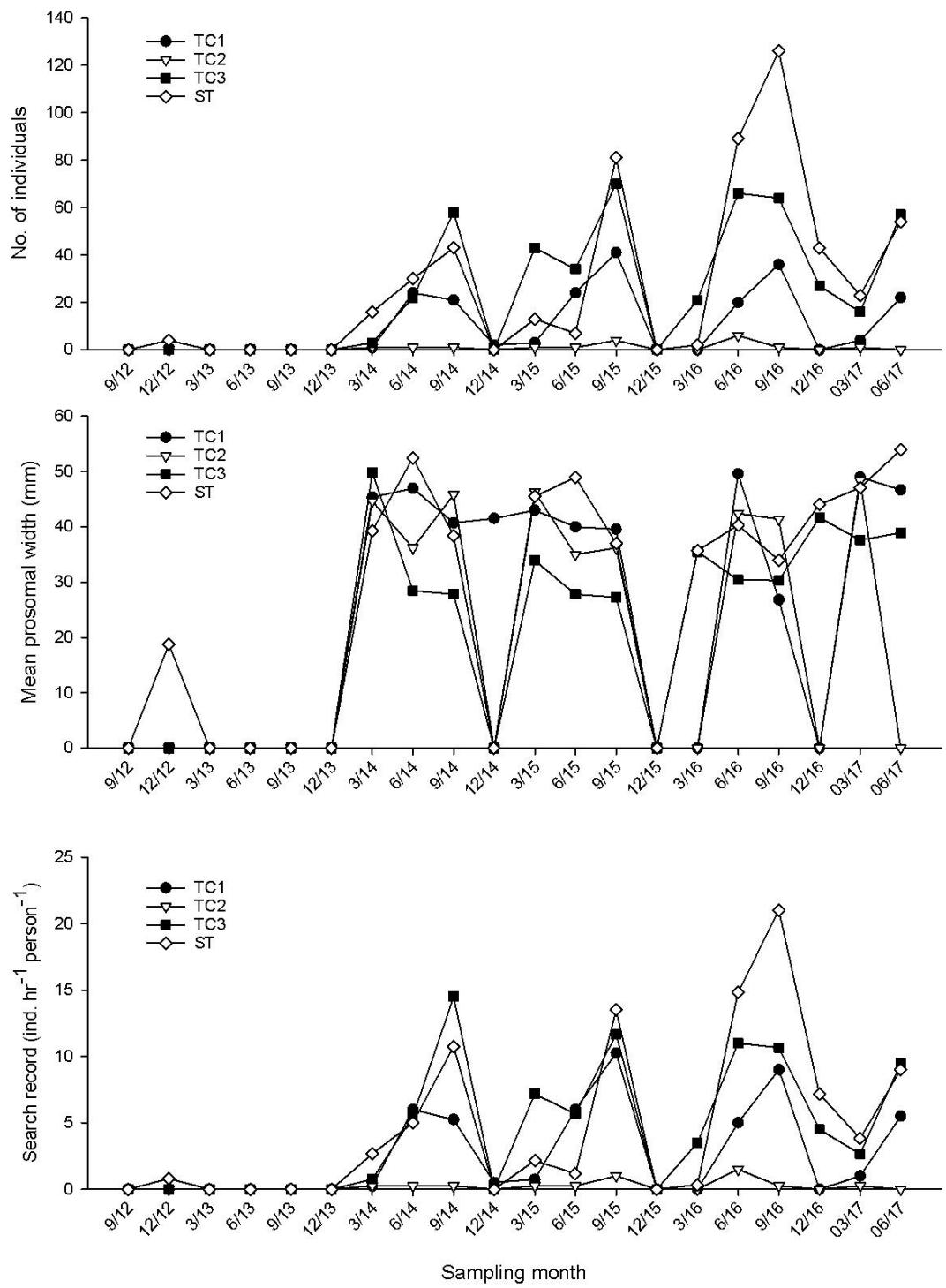
Jun. 2017 - TC3



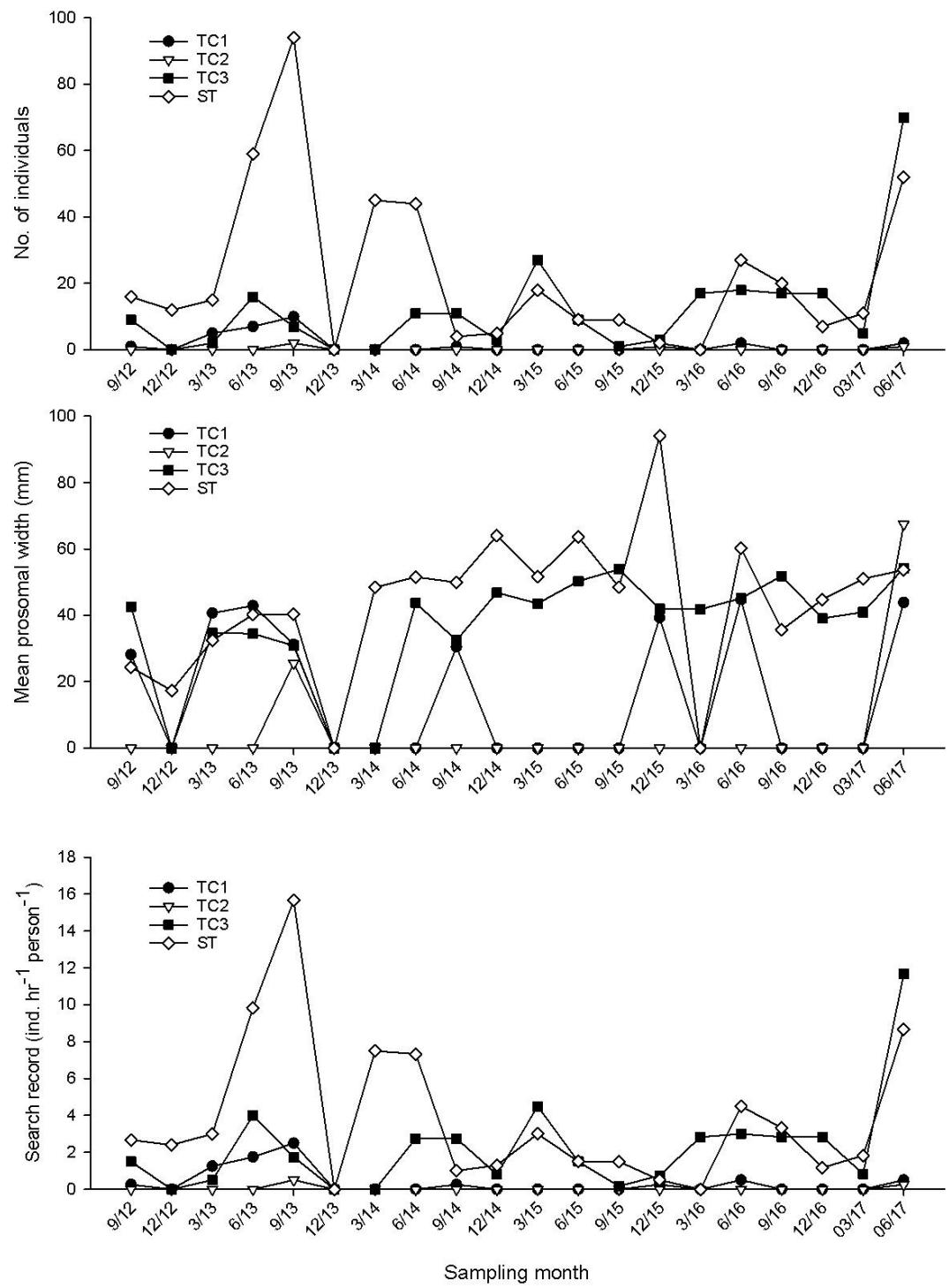
**Figure 3.2 (Cont'd).** Photographic records of mating pair of *Carcinoscorpius rotundicauda*



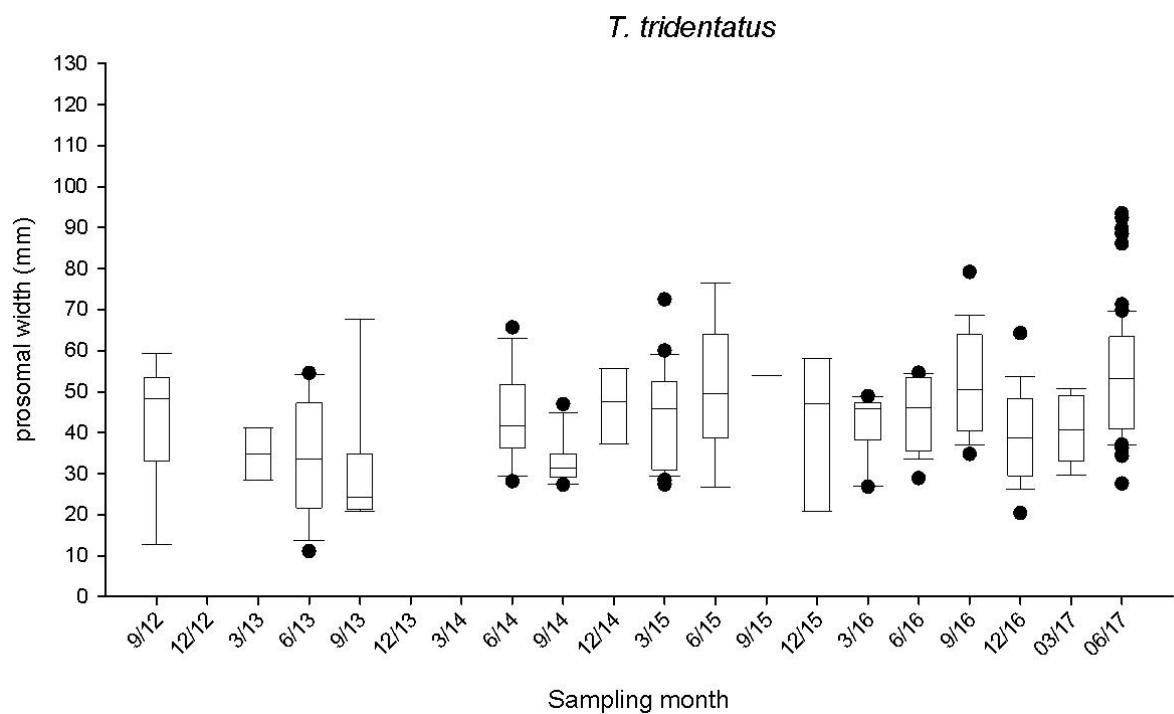
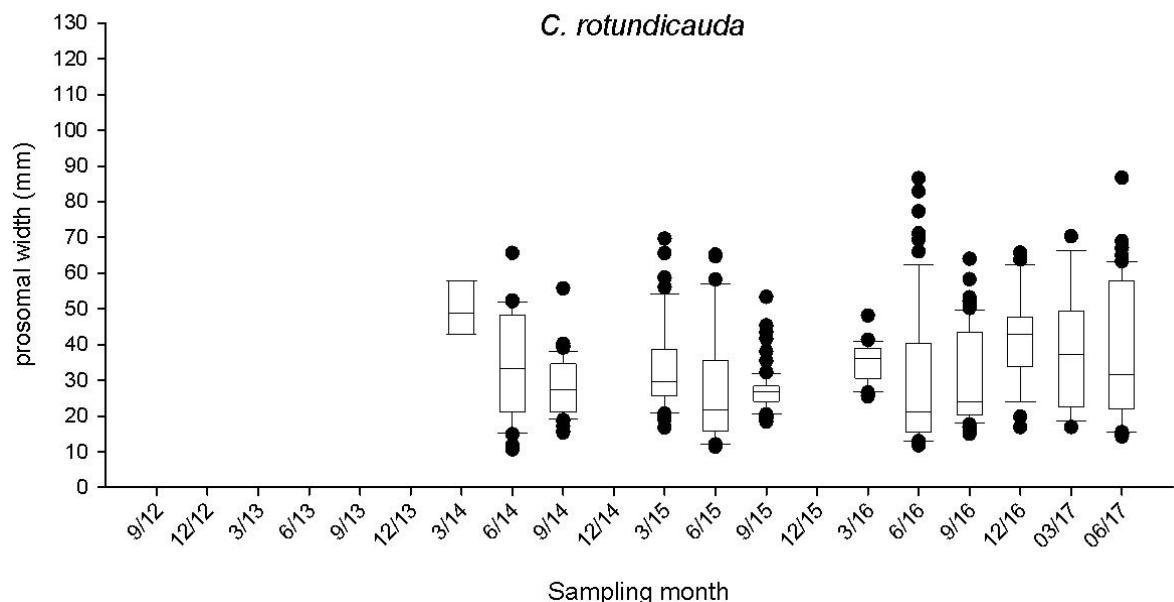
**Figure 3.3.** Photographic records of a tangled individual of *Carcinoscorpius rotundicauda* in ST (Jun. 2017)



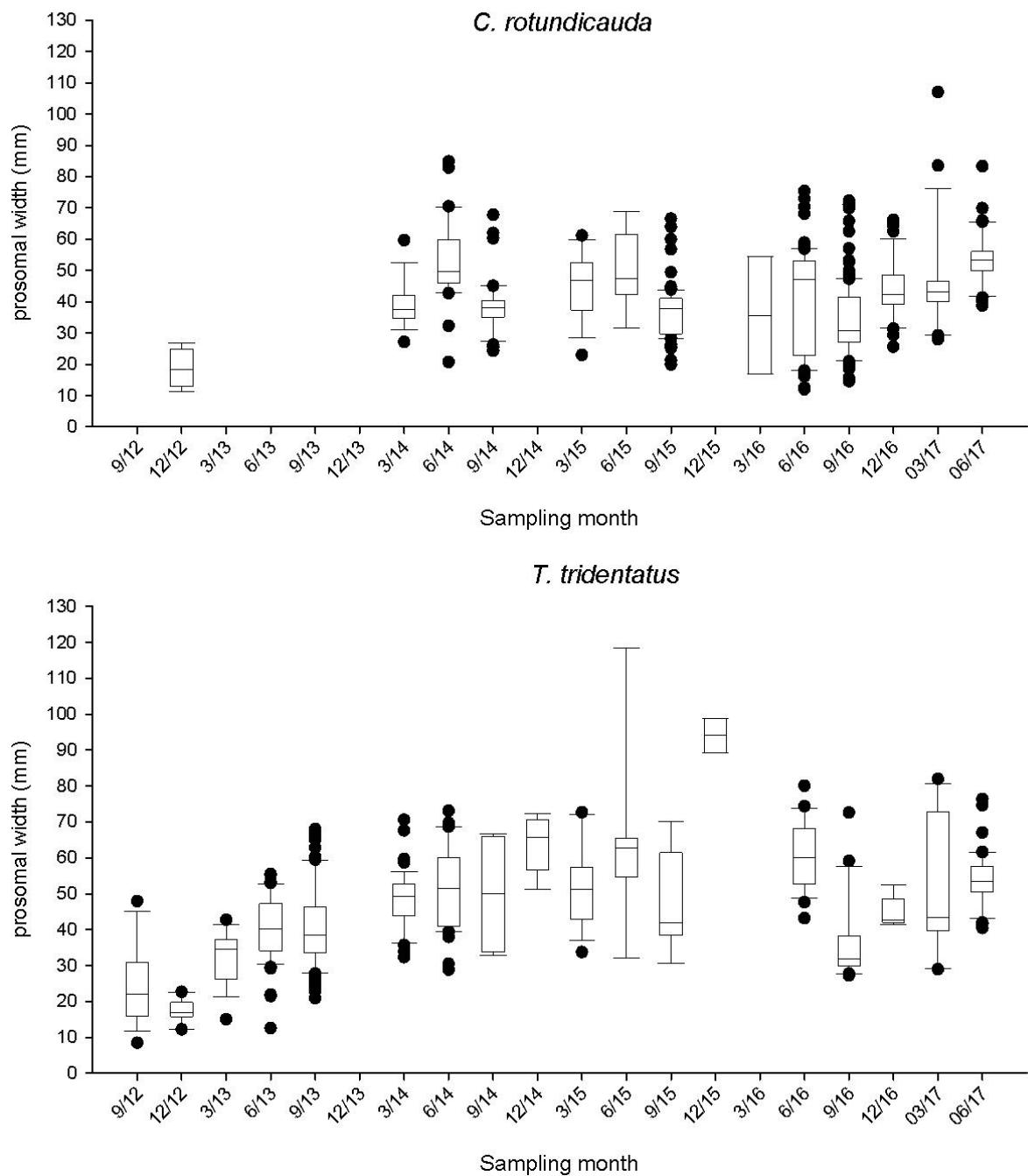
**Figure 3.4.** Changes of number of individuals, mean prosomal width and search record of horseshoe crab *Carcinoscorpius rotundicauda* in every sampling zone along the sampling months



**Figure 3.5.** 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 3.6.** 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 3.7.** 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.)

**TC3 *Halophila ovalis***



**ST *Halophila ovalis***



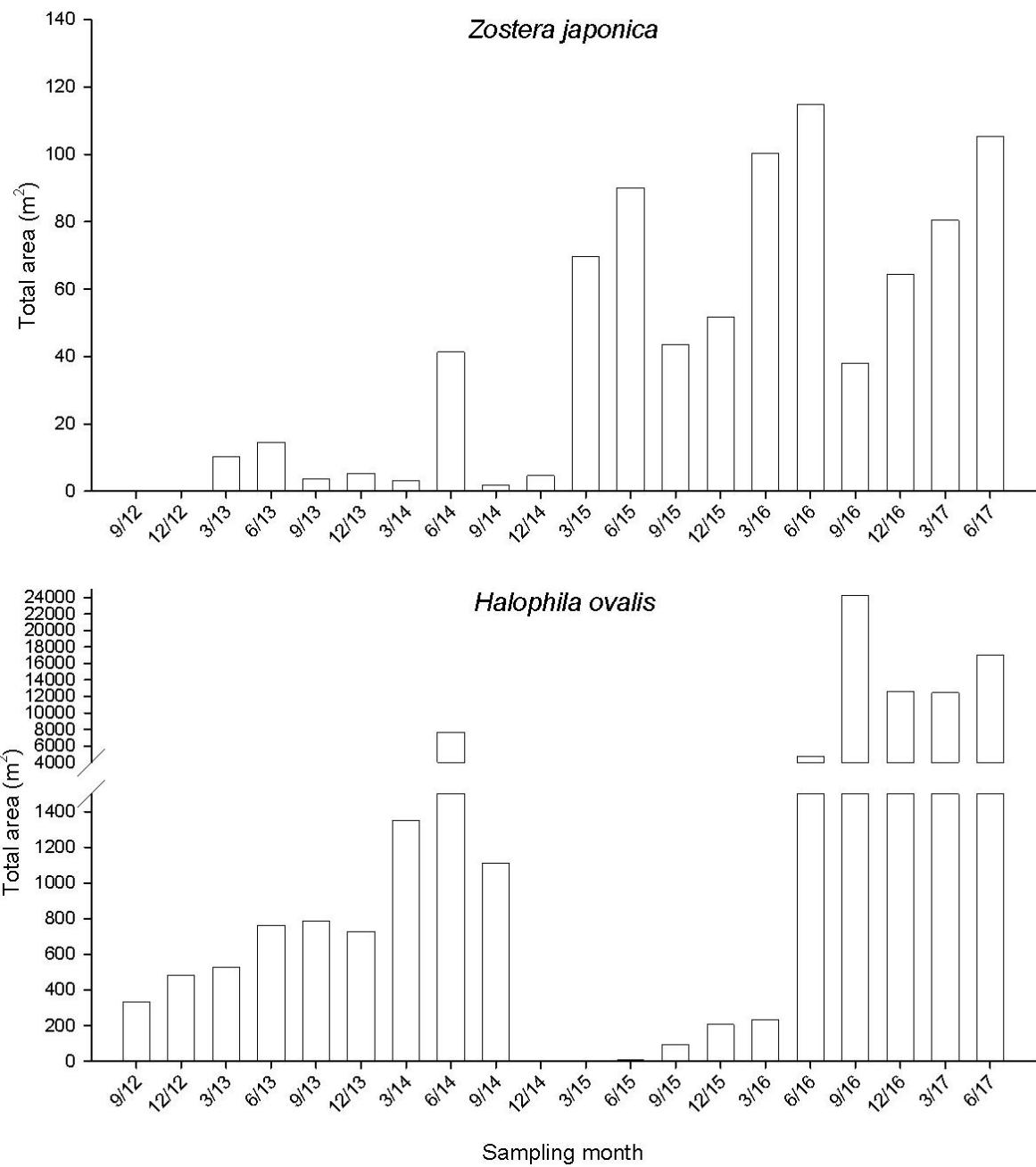
**ST *Zostera japonica***



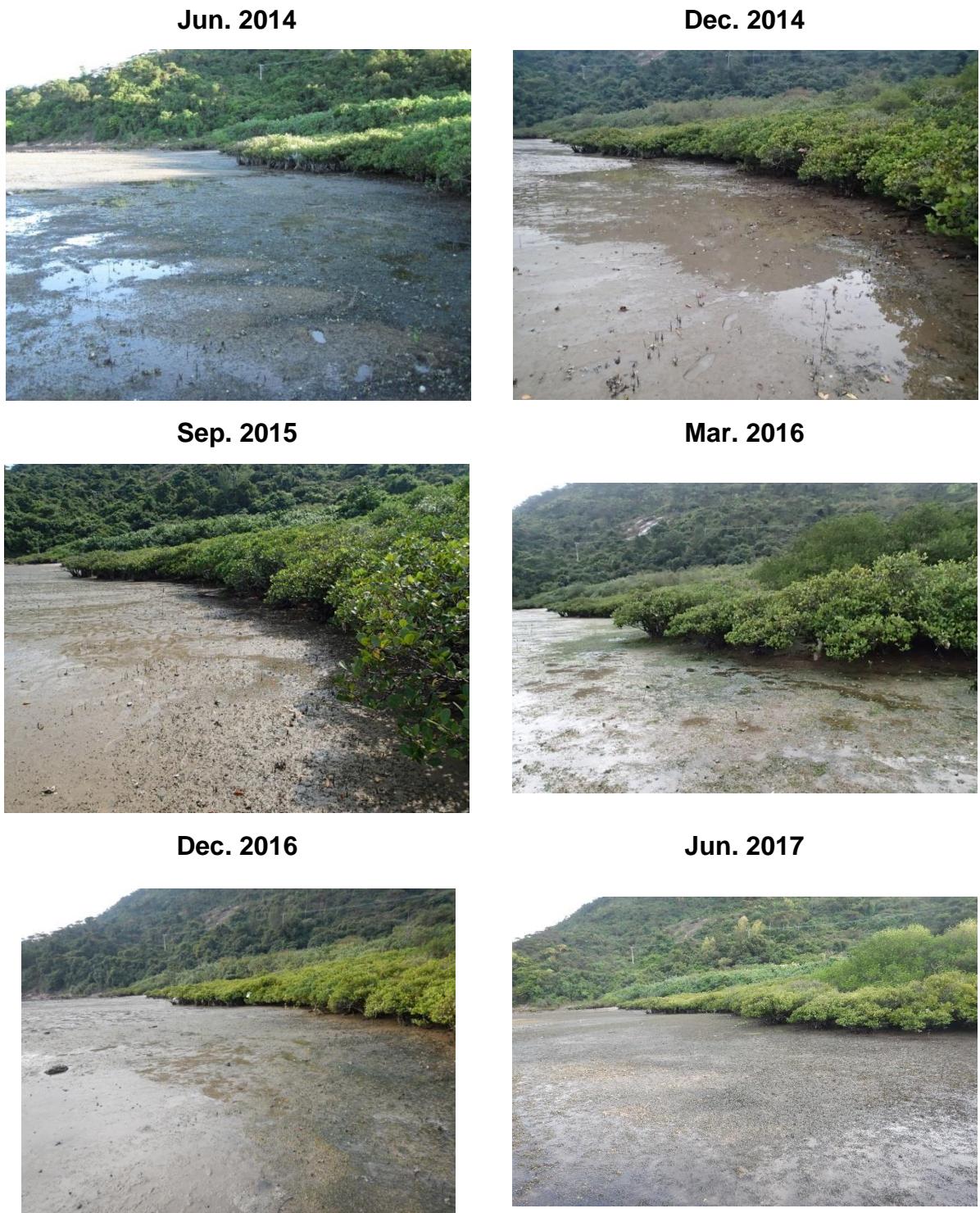
**Figure 3.8. Examples of photographic records of seagrass beds survey (Jun. 2017)**

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

<b>Sampling zone</b>	TC3	ST	
	<i>Halophila ovalis</i>	<i>Halophila ovalis</i>	<i>Zostera japonica</i>
<b>Number of patches</b>	2	2	1
<b>Total area (m<sup>2</sup>)</b>	140.4	17046.5	105.4
<b>Average area (m<sup>2</sup>)</b>	70.2	8523.2	\



**Figure 3.9.** Temporal changes of estimated total area of seagrass beds in ST

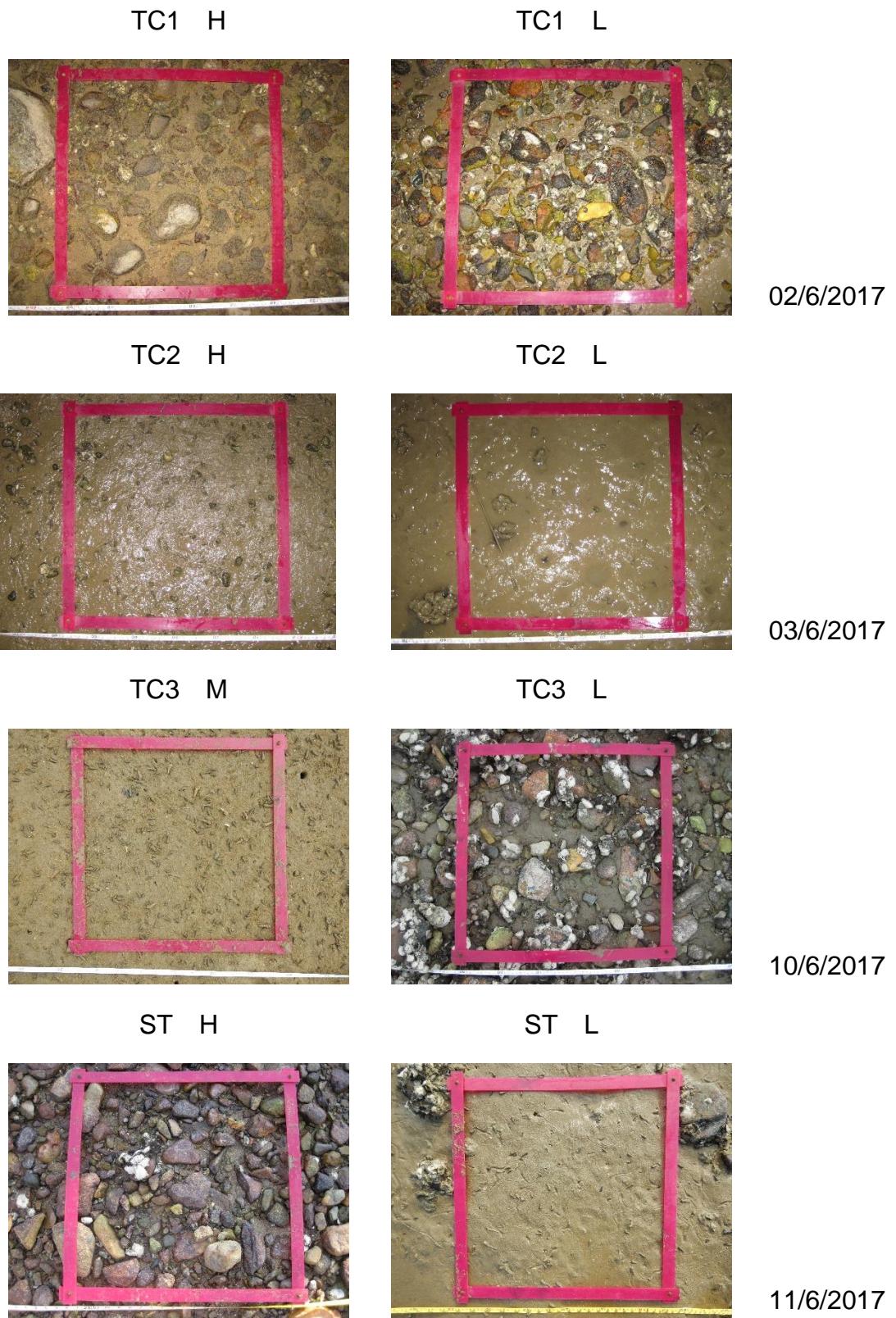


**Figure 3.10.** Comparison of pictures taken in different sampling months shows the disappearance and recolonization of seagrass beds.

**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	70	20	10
TC2	H	30	60	10
	M	30	30	40
	L	20	10	70
TC3	H		100	
	M	10	90	
	L	90		10
ST	H	100		
	M	80	20	
	L	30	40	30

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



**Figure 3.11.** 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. 2017</i>				
Mollusca	15648	95.3	522	40
Arthropoda	578	3.5	19	14
Annelida	91	0.6	3	11
Sipuncula	32	0.2	1	1
Nemertea	31	0.2	1	1
Cnidaria	28	0.2	1	1
Chordata	7	0.0	0	3
Echiura	4	0.0	0	1
Platyhelminthes	1	0.0	0	1
<b>Total</b>	<b>16420</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	6	0.1	1	40	1.4	5	33	0.6	4	12	0.4	2
Arthropoda	123	2.6	16	164	5.8	22	119	2.2	16	172	5.1	23
Chordata	1	0.0	0				3	0.1	0	3	0.1	0
Cnidaria	3	0.1	0	9	0.3	1	2	0.0	0	14	0.4	2
Echiura							4	0.1	1			
Mollusca	4548	97.0	606	2589	91.5	345	5336	96.7	711	3175	93.9	423
Nemertea	5	0.1	1	17	0.6	2	4	0.1	1	5	0.1	1
Platyhelminthes				1	0.0	0						
Sipuncula	5	0.1	1	10	0.4	1	16	0.3	2	1	0.0	0
<b>Sub-total</b>	<b>4691</b>			<b>2830</b>			<b>5517</b>			<b>3382</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>	291	50	50
	G	<i>Cerithidea djadjariensis</i>	155	26	76
Mid	G	<i>Batillaria multiformis</i>	248	35	35
	G	<i>Monodonta labio</i>	209	29	64
	G	<i>Cerithidea djadjariensis</i>	84	12	75
	Bi	<i>Saccostrea cucullata</i>	78	11	86
Low	G	<i>Monodonta labio</i>	138	24	24
	Bi	<i>Saccostrea cucullata</i>	104	18	42
	G	<i>Cerithidea djadjariensis</i>	94	16	58

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>	297	60	60
	G	<i>Batillaria multiformis</i>	50	10	70
Mid	G	<i>Cerithidea djadjariensis</i>	164	42	42
	G	<i>Batillaria zonalis</i>	64	16	59
	Bi	<i>Saccostrea cucullata</i>	44	11	70
Low	G	<i>Cerithidea djadjariensis</i>	62	25	25
	Bi	<i>Saccostrea cucullata</i>	49	20	45
	G	<i>Batillaria zonalis</i>	39	16	61
	Ba	<i>Balanus amphitrite</i>	38	15	76

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>Cerithidea djadjariensis</i>	444	57	57
	G	<i>Batillaria multiformis</i>	185	24	81
	G	<i>Cerithidea cingulata</i>	98	13	94
Mid	G	<i>Cerithidea djadjariensis</i>	412	53	53
	G	<i>Batillaria multiformis</i>	142	18	71
	G	<i>Cerithidea cingulata</i>	130	17	88
Low	Bi	<i>Saccostrea cucullata</i>	265	40	40
	G	<i>Monodonta labio</i>	194	30	70

Bi = Bivalve, G = Gastropod

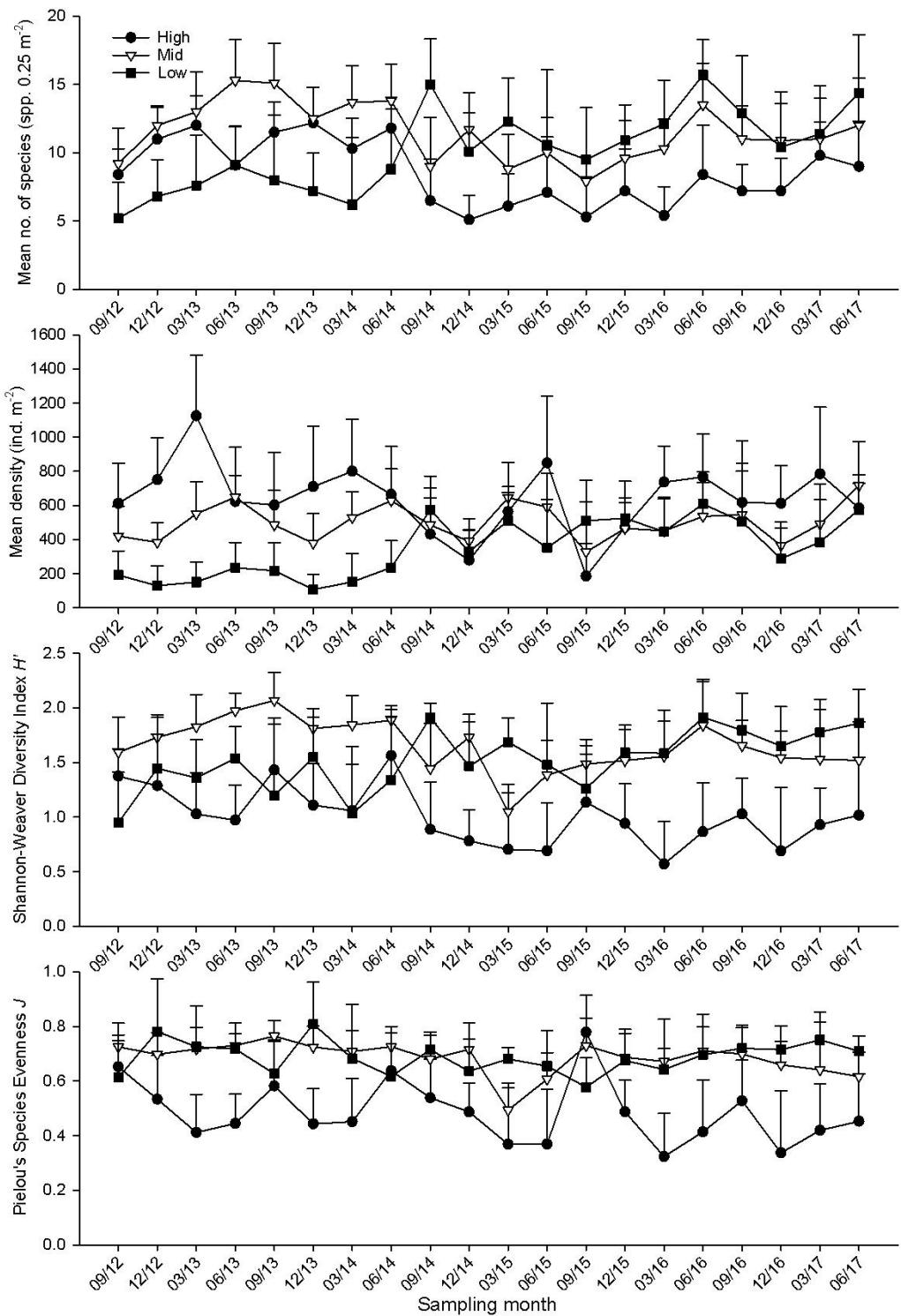
**Table 3.6 (Cont'd).** The abundant species (relative abundance >10%) in every sampling zone

Sampling zone ST	Group	Species	Mean density (ind. m <sup>-2</sup> )	Relative abundance (%)	Cumulative relative abundance (%)
High	G	<i>Batillaria multiformis</i>	207	35	35
	G	<i>Monodonta labio</i>	143	24	59
	G	<i>Cellana toreuma</i>	97	16	76
Mid	G	<i>Monodonta labio</i>	90	18	18
	Bi	<i>Saccostrea cucullata</i>	88	18	36
	G	<i>Cerithidea djadjariensis</i>	82	16	52
Low	G	<i>Cerithidea djadjariensis</i>	75	28	28
	G	<i>Lunella coronata</i>	42	16	44
	Bi	<i>Saccostrea cucullata</i>	37	14	58

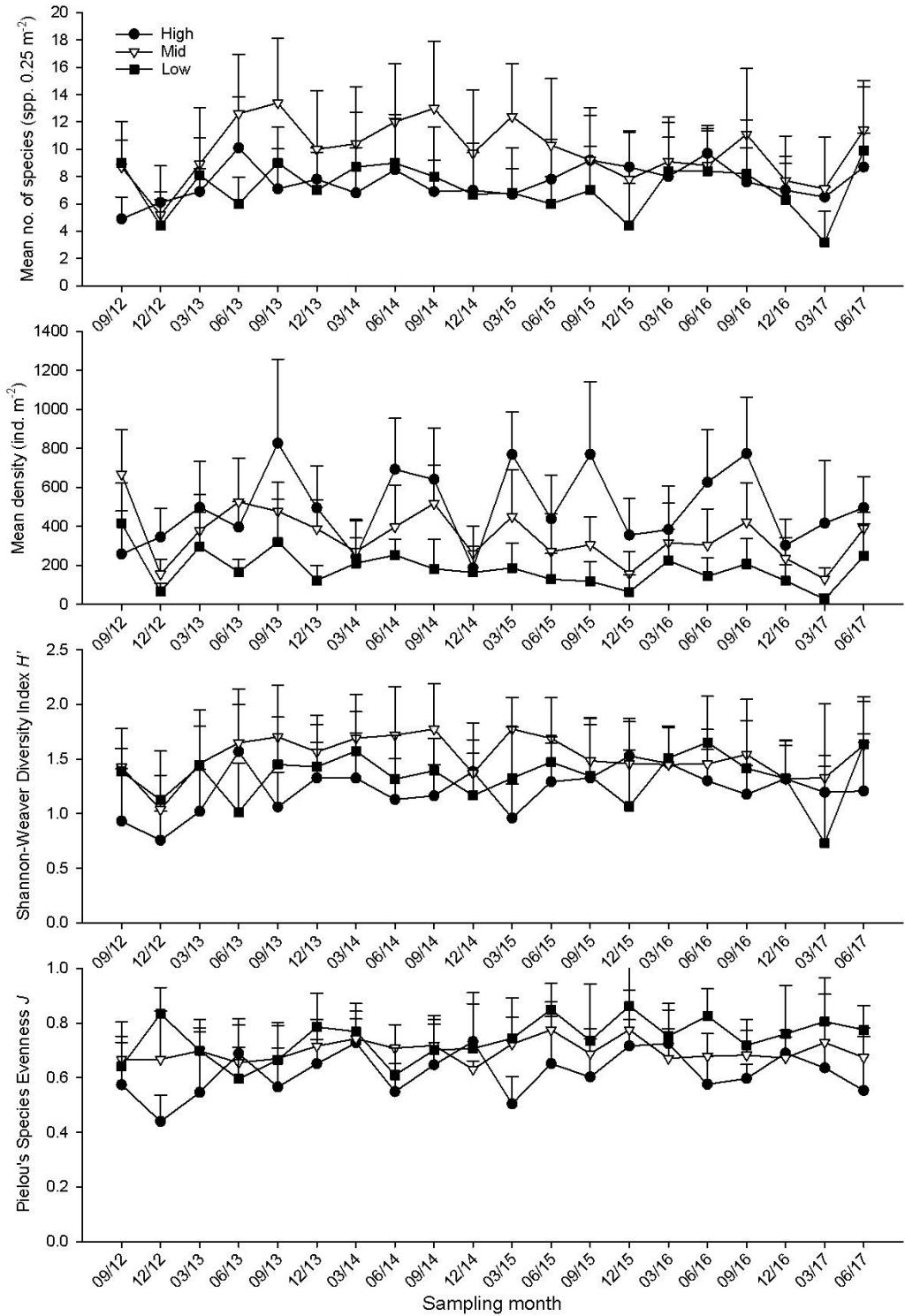
Bi = Bivalve, G = Gastropod

**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

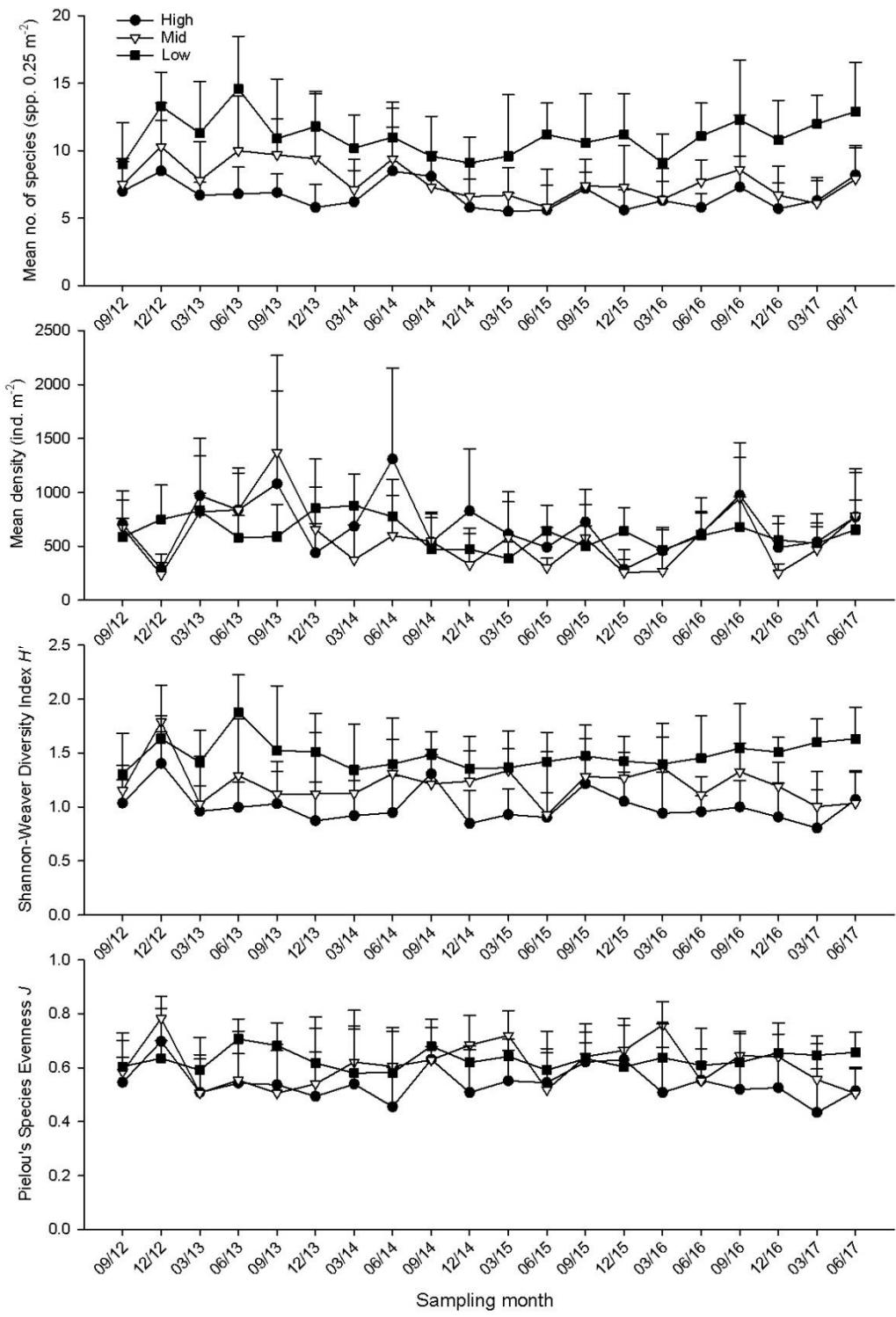
Sampling zone	Tidal level	Mean species number (spp. 0.25 m <sup>-2</sup> )	Mean species number across tidal levels	Mean density (ind. m <sup>-2</sup> )	Mean density across tidal levels	Mean $H'$	Mean $H'$ across tidal levels	Mean $J$	Mean $J$ across tidal levels
TC1	H	9		585		1.0		0.5	
	M	12	12	716	625	1.5	1.5	0.6	0.6
	L	14		575		1.9		0.7	
TC2	H	9		496		1.2		0.6	
	M	11	10	388	377	1.6	1.5	0.7	0.7
	L	10		247		1.6		0.8	
TC3	H	8		773		1.1		0.5	
	M	8	10	780	736	1.0	1.2	0.5	0.6
	L	13		654		1.6		0.7	
ST	H	11		588		1.7		0.7	
	M	14	11	502	451	2.0	1.7	0.8	0.7
	L	9		263		1.5		0.8	



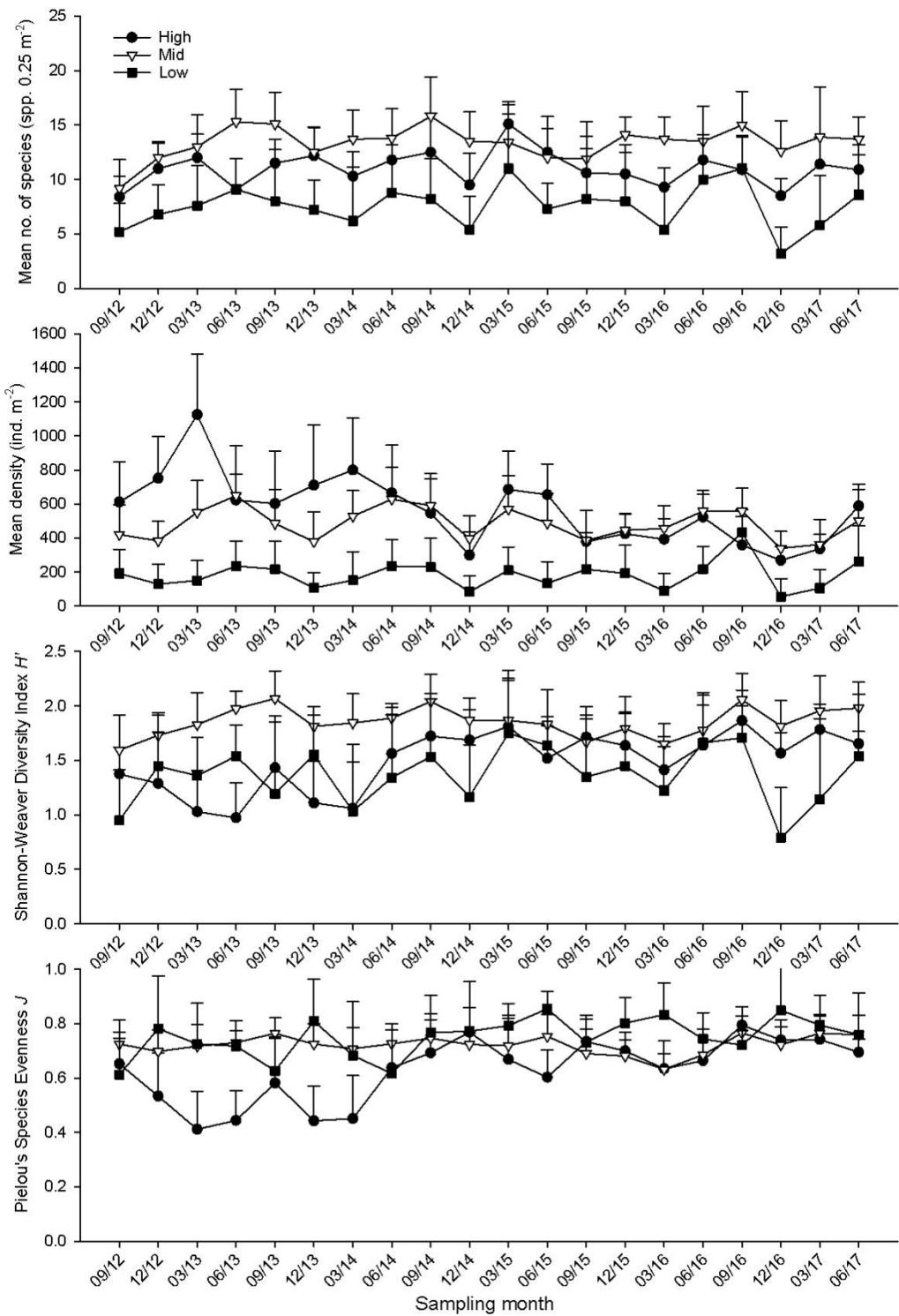
**Figure 3.12.** Temporal changes of mean number of species, mean density, Shannon-Weaver Diversity Index ( $H'$ ) and Pielou's Species Evenness ( $J$ ) (mean + SD) at every tidal level in sampling zone TC1



**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 TC2

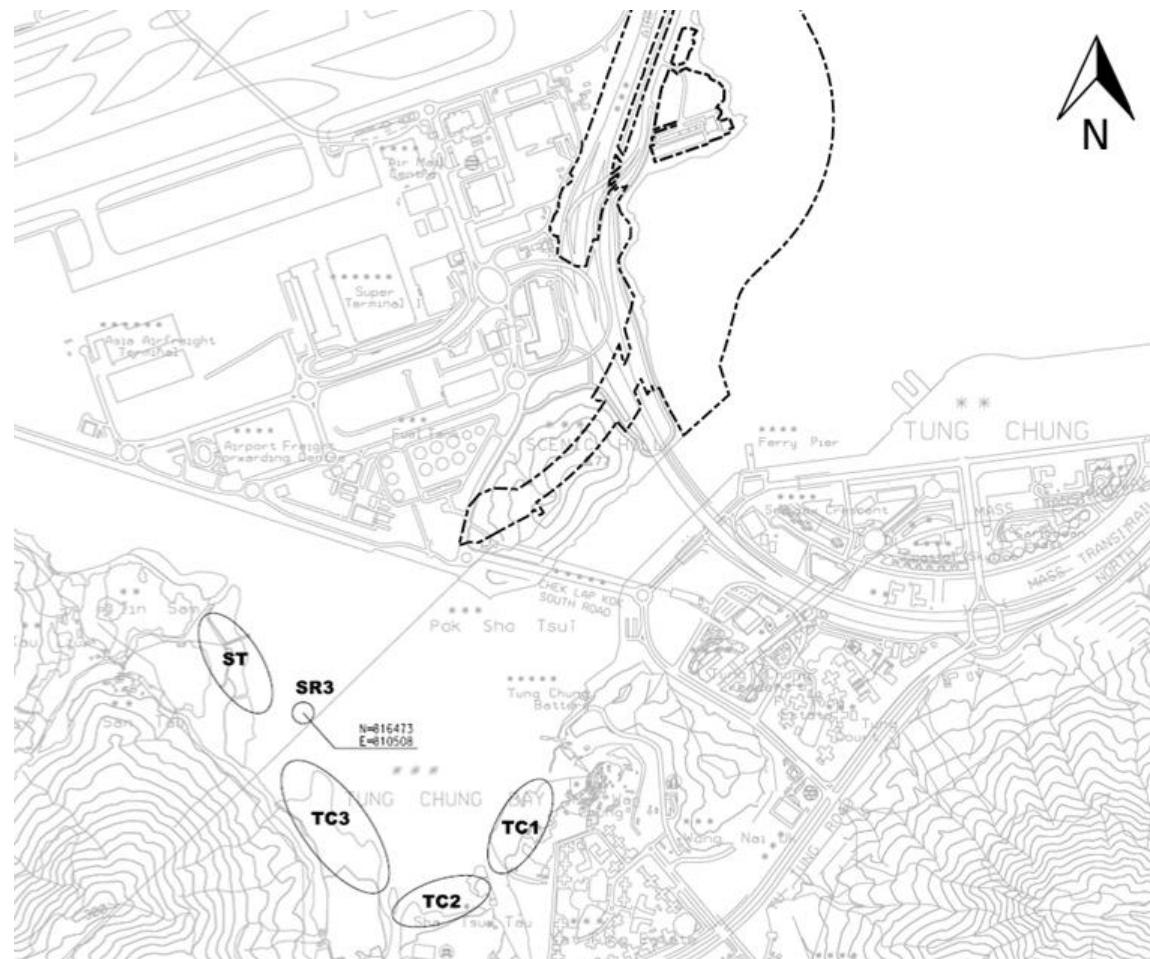


**Figure 3.14.** Temporal changes of mean number of species, mean density, Shannon-Weaver Diversity Index ( $H'$ ) and Pielou's Species Evenness ( $J$ ) (mean + SD) at every tidal level in sampling zone TC3



**Figure 3.15.** 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° 16.998' N	113° 55.984' E	23.38	40.85					36.33		
2	S	22° 17.008' N	113° 55.986' E	15.72	49.55	54.24	55.46					
3	M	22° 17.026' N	113° 55.970' E	52.74	55.30	57.43						
4	S	22° 17.034' N	113° 55.972' E	49.94	51.70	51.92	72.49					
5	M	22° 17.019' N	113° 55.986' E	36.03								
6	M	22° 17.088' N	113° 56.044' E	32.70	36.08	37.50	44.08	61.82	62.01	64.99		
7	S	22° 17.079' N	113° 56.051' E	21.19						51.47		
No. of ind.				<b>22</b>								
<u>Sampling site TC2 (Search hour = 2 hrs)</u>		<i>Carcinoscorpius rotundicauda</i>							<i>Tachypleus tridentatus</i>			
1	M	22° 16.898' N	113° 55.855' E	<u>175.27</u>	<u>143.51</u>							
2	M	22° 16.915' N	113° 55.857' E							67.42		
No. of ind.				<b>2</b>								

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

Underlined: size of mating pair (excluded from data analysis)

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</u> (Search hour = 3 hrs)						<i>Carcinoscorpius rotundicauda</i>						<i>Tachypleus tridentatus</i>						
1	S	22° 16.974' N	113° 55.653' E	22.27	35.66	36.90	39.16					40.11						
2	S	22° 16.983' N	113° 55.662' E	28.38	31.19							40.32						
3	S	22° 17.000' N	113° 55.653' E	29.54								49.83	52.89	41.25	40.68	56.82	40.82	52.40
												36.39	53.07	38.74	40.40	41.46	51.29	
4	S	22° 17.008' N	113° 55.657' E	21.37	31.69	41.14						54.39	53.12	36.20	38.50	54.20	65.55	49.26
5	S	22° 17.013' N	113° 55.643' E	27.45	29.74	30.59						54.23	40.22	41.39	42.06	38.54	41.71	34.28
												41.64	40.78	51.02	60.68	92.32		
6	S	22° 17.031' N	113° 55.642' E	32.65	38.43	29.48	27.82	19.85	54.49			36.93	41.44	53.81	68.74			
7	M	22° 17.050' N	113° 55.642' E	<u>182.08</u>	<u>145.63</u>													
8	M	22° 17.070' N	113° 55.643' E	86.73	28.39	64.98	53.02	59.83	55.38	59.58	37.61	49.63	52.97	60.38	93.44	71.26	63.16	
				62.72	53.38							67.03	68.78	61.69	64.19	66.95	88.51	61.08
												69.05	66.33	58.89	59.75	86.08	89.82	
9	S	22° 17.066' N	113° 55.616' E	67.06	57.47	68.94	26.33	29.31	62.55	62.26	68.06	53.28	60.55	66.12	62.34	27.57	59.74	
				57.79	51.14	58.02	62.74	63.16	63.34	28.41	63.14	69.77						
						59.75												

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

Underlined: size of mating pair (excluded from data analysis)

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

For record #1, a very tiny, unidentified horseshoe crab (prosomal width ~8mm) was also found and was excluded from data analysis

**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>								
10	S	22° 16.969' N    113° 55.684' E	26.88							34.62	
11	S	22° 16.960' N    113° 55.700' E	15.46	21.37	21.86					37.04	
12	S	22° 16.956' N    113° 55.713' E	14.29	16.35	18.59	14.31	19.97	19.47	15.62		
13	S	22° 16.936' N    113° 55.734' E								50.38	
14	S	22° 16.950' N    113° 55.719' E	14.83	15.22	35.90						
<b>No. of ind.</b>			<b>57</b>	<b>70</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)				<i>Carcinoscorpius rotundicauda</i>															
1	S	22° 17.110' N	113° 55.578' E														67.01				
2	S	22° 17.129' N	113° 55.557' E	46.78	65.61																
3	S	22° 17.148' N	113° 55.535' E	52.72													76.37				
4	S	22° 17.150' N	113° 55.508' E	66.01	59.76	65.29															
5	S	22° 17.166' N	113° 55.546' E	69.90	83.33												43.62				
6	S	22° 17.169' N	113° 55.497' E	62.88	65.68	64.17	49.61									41.91	51.31	52.50	53.80	54.38	74.62
7	S	22° 17.152' N	113° 55.496' E													53.41	57.11				
8	S	22° 17.182' N	113° 55.497' E	54.36	42.18	45.60	54.64	50.13								54.14					
9	S	22° 17.193' N	113° 55.505' E	40.17	55.15	51.68	38.83	53.67	52.18	52.65	57.77	58.38	54.68	59.78	43.07	49.95	59.10				
				53.30	54.73	54.41	52.91	54.41	53.95	51.81											
				54.72	41.37	52.68	40.18														
10	S	22° 17.209' N	113° 55.497' E	55.06	56.93	56.00	49.36	53.93	51.69	61.72	61.53	53.01	59.24	56.39	54.49	40.41	55.37				
				50.90	53.10	52.52	56.28	56.04	58.31	49.29	61.45	51.47	49.67	59.46	43.07	52.52					
				49.44	41.35	51.18	49.45	52.56													
11	S	22° 17.238' N	113° 55.495' E								43.33										

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)										
12	S	22° 17.387' N    113° 55.460' E	<i>Carcinoscorpius rotundicauda</i>							<i>Tachypleus tridentatus</i>
				41.59	47.72	41.26	53.92	51.68	59.11	52.67
				53.28	53.45	53.38	53.14	52.33		
13	S	22° 17.375' N    113° 55.490' E								48.23 53.42 50.26 54.44 52.15 56.33 61.61

No. of ind. 54

52

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)</b>			
No record			
<b>TC3 (search hour = 3 hrs) <i>Halophila ovalis</i></b>			
58.7	100	a single patch 22° 17.081' N 113° 55.603' E	A small patch of seagrass bed at tidal zone 0.5-1.0 m above C.D.
81.7	100	a single patch 22° 17.094' N 113° 55.591' E	A small patch of seagrass bed at tidal zone 0.5-1.0 m 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>				
12334.4	80-100	horizontal line	22° 17.099' N 113° 55.579' E	--
			22° 17.173' N 113° 55.520' E	An extensive patch of seagrass bed at tidal zone 0.5-2.0 m above C.D.
		vertical line	22° 17.115' N 113° 55.531' E	--
			22° 17.141' N 113° 55.562' E	
4712.1	80-100	horizontal line	22° 17.156' N 113° 55.493' E	--
			22° 17.217' N 113° 55.473' E	
		vertical line	22° 17.182' N 113° 55.476' E	An extensive patch of seagrass bed at tidal zone 1.0-2.0 m above C.D.
			22° 17.189' N 113° 55.498' E	
<b>ST (search hour = 3 hrs) <i>Zostera japonica</i></b>				
105.4	100	horizontal line	22° 17.199' N 113° 55.471' E	-- A small horizontal strand of seagrass bed nearby the seaward side of
			22° 17.217' N 113° 55.473' E	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	Onuphidae	Onuphidae spp.
Animalia	Annelida	Polychaeta	Phyllodocida	Glyceridae	Glyceridae spp.
Animalia	Annelida	Polychaeta	Phyllodocida	Nereididae	Nereididae spp.
Animalia	Annelida	Polychaeta	Sabellida		Serpulidae spp.
Animalia	Annelida	Polychaeta	Spionida	Spionidae	Spionidae spp.
Animalia	Annelida	Polychaeta	Terebellida	Ampharetidae	Ampharetidae spp.
Animalia	Annelida	Polychaeta	Terebellida	Pectinariidae	Pectinariidae spp.
Animalia	Annelida	Polychaeta	Terebellida	Terebellidae	Terebellidae spp.
Animalia	Annelida	Polychaeta		Capitellidae	Capitellidae spp.
Animalia	Annelida	Polychaeta		Maldanidae	Maldanidae spp.
Animalia	Arthropoda	Malacostraca	Decapoda	Grapsidae	<i>Metopograpsus latifrons</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Ocypodidae	<i>Uca borealis</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Ocypodidae	<i>Uca lactea</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Ocypodidae	<i>Uca sp.</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Ocypodidae	<i>Uca vocans</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Oziidae	<i>Epixanthus sp.</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Paguridae	<i>Pagurus dubius</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Penaeidae	<i>Penaeus sp.</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Portunidae	<i>Scylla serrata</i>
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	Chordata	Actinopterygii	Perciformes	Gobiidae	Unidentified goby spp.
Animalia	Cnidaria	Anthozoa	Actiniaria	Diadumenidae	<i>Diadumene lineata</i>
Animalia	Echiura				Echiura 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>

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

Kingdom	Phylum	Class	Order	Family	Species
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	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>Dosinia japonica</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	Caenogastropoda	Potamididae	<i>Terebralia sulcata</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 articulata</i>
Animalia	Mollusca	Gastropoda	Littorinimorpha	Rissoinidae	<i>Rissoina plicatula</i>
Animalia	Mollusca	Gastropoda	Neogastropoda	Muricidae	<i>Thais luteostoma</i>
Animalia	Mollusca	Gastropoda	Neogastropoda	Nassariidae	<i>Nassarius festivus</i>
Animalia	Mollusca	Gastropoda	Neogastropoda	Nassariidae	<i>Nassarius hepaticus</i>
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 grata</i>
Animalia	Mollusca	Gastropoda		Nacellidae	<i>Cellana toreuma</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		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	Platyhelminthes				<i>Platyhelminthes</i> 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**

Jun 2017 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	Q	C	Q	C	sub-total			
		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>	1		5		15		1								22			
Bi	<i>Xenostrobus atratus</i>							1								1			
C	<i>Hemigrapsus penicillatus</i>													1	1	4			
C	<i>Metopograpsus latifrons</i>					4		4								8			
C	<i>Nanosesarma minutum</i>	2		1		2		4		2		1				13			
C	<i>Perisesarma bidens</i>							1		2						4			
C	<i>Uca vocans</i>					20										20			
G	<i>Batillaria bornii</i>	1														1			
G	<i>Batillaria multiformis</i>	11		13		6		6		78		82		106		131	142	152	727
G	<i>Batillaria zonalis</i>	9																	9
G	<i>Cellana grata</i>			4															4
G	<i>Cerithidea cingulata</i>	45		7		17			2							15			86
G	<i>Cerithidea djadjariensis</i>	43		104		138		58		5						29	10		387
G	<i>Cerithidea rhizophorarum</i>	4		4		10		1		2		6		8		5	2		42
G	<i>Clithon faba</i>	14					2								1		1		18
G	<i>Clithon oualaniensis</i>	1							3				1		2		5		12
G	<i>Littoraria articulata</i>								1		1		2		2				6
G	<i>Lunella coronata</i>	1		1		2													4

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

Jun 2017 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		
G	<i>Monodonta labio</i>	5		11		9		5	27		2		8		6	1	74
G	<i>Nerita polita</i>													1		1	
G	<i>Nipponacmea concinna</i>	3		3				7								13	
G	<i>Philine vitrea</i>					1										1	
G	<i>Rissoina plicatula</i>												1			1	
G	<i>Terebralia sulcata</i>					2										2	
Ne	Nemertea spp.					1										1	
Sp	<i>Sipunculus nudus</i>					1										1	
														Total	1463		

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

Jun 2017 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			
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	sub-total
Ba	<i>Balanus amphitrite</i>	1										3		4
Bi	<i>Barbatia virescens</i>											2		2
Bi	<i>Geloina erosa</i>					1								1
Bi	<i>Hiatella arctica</i>		1											1
Bi	<i>Saccostrea cucullata</i>			9	10	43	32	18	23	16	14	29		194
Bi	<i>Xenostrobus atratus</i>					1	2	1					1	5
C	<i>Hemigrapsus penicillatus</i>									1			1	2
C	<i>Metopograpsus latifrons</i>							1						1
C	<i>Nanosesarma minutum</i>					3	1		2	3	1	3		13
G	<i>Batillaria bornii</i>	4	1											5
G	<i>Batillaria multiformis</i>	9	100			33	44	155	95	69	36	79		620
G	<i>Batillaria zonalis</i>	3	1						5		7	8	8	4
G	<i>Cellana grata</i>					1	1			1				3
G	<i>Cellana toreuma</i>							5		1				28
G	<i>Cerithidea cingulata</i>	15	3	3		1			1	1	1	1	2	27
G	<i>Cerithidea djadjariensis</i>	32	40	61	6	17				13	5	36		210
G	<i>Cerithidea rhizophorarum</i>	2	1	3	2	8				1		4		21
G	<i>Clithon faba</i>					2		2			6	2		12
G	<i>Clithon ovalaniensis</i>	2		1						3		1		7

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

Jun 2017 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			
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	sub-total
G	<i>Lepidozona</i> sp.	4				1								5
G	<i>Littoraria articulata</i>						4	14	4		1	2		25
G	<i>Lunella coronata</i>	2	2			3	6			3	6	11		33
G	<i>Monodonta labio</i>	7	17			57	85	28	56	115	56	101		522
G	<i>Nassarius hepaticus</i>			1	1									2
G	<i>Nerita polita</i>					1	1							2
G	<i>Nipponacmea concinna</i>	7	7			9	1					2		26
G	<i>Patelloidea pygmaea</i>	1	2							1	2			6
G	<i>Thais luteostoma</i>			1										1
Ne	Nemertea spp.								2	1				3
P	Maldanidae spp.				2									2
P	Nereididae spp.							2						2
Sp	<i>Sipunculus nudus</i>					1	1							2
													Total	1791

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

Jun 2017 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>	2		18		12		2										1		1		36
Bi	<i>Barbatia virescens</i>	3						10									1		35	2		51
Bi	<i>Hiatella arctica</i>	4		1				4									1		1			11
Bi	<i>Ruditapes philippinarum</i>															8		9				17
Bi	<i>Saccostrea cucullata</i>	40		17		14		92				25		15		12		36		9		260
Bi	<i>Xenostrobus atratus</i>	9						10														19
C	<i>Hemigrapsus penicillatus</i>											1										1
C	<i>Metopograpsus latifrons</i>											1										1
C	<i>Nanosesarma minutum</i>	4		1				4			3		1		1		1		1		1	16
Cn	<i>Diadumene lineata</i>																2			1		3
F	Unidentified goby spp.																1					1
G	<i>Batillaria bornii</i>			5				10							7		2					24
G	<i>Batillaria multiformis</i>	5		4		9		5				32		10		27		3		2		97
G	<i>Batillaria zonalis</i>	4		4		19		3		16												46
G	<i>Cellana grata</i>										2				2		2		1			7
G	<i>Cellana toreuma</i>										9		5		7		5		17			43
G	<i>Cerithidea cingulata</i>	15		1				5		16	1					2						40
G	<i>Cerithidea djadjariensis</i>	31		103		29		5		44		1				5		9		8		235
G	<i>Cerithidea rhizophorarum</i>	1		3					1													5

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

Jun 2017 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>					1						1		4		11				5		22
G	<i>Clithon oualaniensis</i>	1								3		2		2				1		1		10
G	<i>Euchelus scaber</i>							1											1			2
G	<i>Lepidozona</i> sp.	1		1																		2
G	<i>Littoraria articulata</i>	1				2		2										2		1		8
G	<i>Lunella coronata</i>	8		5		2		26				8		4		11		9		5		78
G	<i>Monodonta labio</i>	51		6				33			78		52		46		49		29		344	
G	<i>Nassarius festivus</i>					1										1						2
G	<i>Nerita polita</i>	1						1										1		1		4
G	<i>Nipponacmea concinna</i>	14		4		1		9														28
G	<i>Patelloidea pygmaea</i>	1		4		1		5			4							4				19
Ne	<i>Nemertea</i> spp.							1														1
P	<i>Nereididae</i> spp.																		1			1
P	<i>Onuphidae</i> spp.									1												1
Sp	<i>Sipunculus nudus</i>					1												1				2
																				Total	1437	

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

Jun 2017 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>	5													1					2		8	
Bi	<i>Geloina erosa</i>																1					1	
Bi	<i>Hiatella arctica</i>			1																		1	
Bi	<i>Laternula anatina</i>																	1		1		2	
Bi	<i>Saccostrea cucullata</i>							2				2			7			3		3	13		30
Bi	<i>Xenostrobus atratus</i>			1																		1	
C	<i>Nanosesarma minutum</i>	1		4						1					1							7	
C	<i>Uca lactea</i>					1						1					1		3			6	
G	<i>Batillaria bornii</i>																		1		4	5	
G	<i>Batillaria multiformis</i>	8		2				1		58		31		6		5	1	5		9		126	
G	<i>Batillaria zonalis</i>							1		7	1	8	1	9		14		11		11		63	
G	<i>Cellana toreuma</i>	1						4	4	9		7		25		17		9		2		3	
G	<i>Cerithidea cingulata</i>																			42		117	
G	<i>Cerithidea djadjariensis</i>	19		12		104		90		53		80		154	1	109	2	80		38		742	
G	<i>Cerithidea rhizophorarum</i>	6		6		2				1		1				2		2		1		21	
G	<i>Littoraria articulata</i>	3		1																		4	
G	<i>Lunella coronata</i>																			6		6	
G	<i>Monodonta labio</i>	36		20										2		1				3		62	
G	<i>Nassarius festivus</i>							1					1									2	

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

Jun 2017 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			
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	sub-total
G	<i>Nipponacmea concinna</i>	2		5										7
G	<i>Onchidium</i> sp.		8											8
G	<i>Patelloidea pygmaea</i>											1		1
Ne	Nemertea spp.			7	6									13
P	Ampharetidae spp.									3	1			4
S	<i>Penaeus</i> sp.								1					1
												Total	1241	

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

Jun 2017 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>			3				2		1		4											10
Bi	<i>Barbatia virescens</i>											4											4
Bi	<i>Hiatella arctica</i>											1											1
Bi	<i>Laternula anatina</i>																			1			1
Bi	<i>Saccostrea cucullata</i>	39		1		2		19		15		21							3		10		110
C	<i>Hemigrapsus penicillatus</i>																				1		1
C	<i>Nanosesarma minutum</i>							4		3		1									2		10
C	<i>Uca borealis</i>																4		3		2		9
C	<i>Uca lactea</i>					2																	2
Cn	<i>Diadumene lineata</i>	2								1		2											5
G	<i>Batillaria bornii</i>							4		3		1											8
G	<i>Batillaria multiformis</i>	2		2		7		3			2		2		2			3		2			25
G	<i>Batillaria zonalis</i>	2		5		14		9		9		18	1	20	1	20		24		34	3		160
G	<i>Cellana toreuma</i>	8						1															9
G	<i>Cerithidea cingulata</i>	4		7		3		1			1		15	2	5	1	9	2	1	1			52
G	<i>Cerithidea djadjariensis</i>	13		52	1	30	1	21		17		29	1	77	1	66		69		30	1		409
G	<i>Cerithidea rhizophorarum</i>	1		1							1		1		2		5	1	1				13
G	<i>Dentalium sinuosum</i>											1									1		1
G	<i>Lepidozona sp.</i>											1											1

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

Jun 2017 Sampling zone TC 2 Mid tidal level (1.5 m above C.D.)

		1	2	3	4	5	6	7	8	9	10							
Gp	Taxon	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	sub-total
G	<i>Littoraria articulata</i>	2															2	
G	<i>Lunella coronata</i>	1		1		14		7		3							26	
G	<i>Monodonta labio</i>	35	1			12		14	1					1			64	
G	<i>Nassarius festivus</i>			1					1		1						3	
G	<i>Nerita polita</i>	1															1	
G	<i>Nipponacmea concinna</i>	6				1		5									12	
G	<i>Patelloidea pygmaea</i>	1				1			1								3	
Ne	<i>Nemertea</i> spp.	3															3	
P	<i>Ampharetidae</i> spp.			1										1			2	
P	<i>Maldanidae</i> spp.		3	2	1			1		2		4	2				15	
P	<i>Nereididae</i> spp.			1													1	
Sp	<i>Sipunculus nudus</i>		1					3	4								8	
															Total	971		

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

Jun 2017 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>			20		5								12		9		48				94
Bi	<i>Anomalocardia squamosa</i>										1											1
Bi	<i>Barbatia virescens</i>													1		2		3				6
Bi	<i>Hiatella arctica</i>			1								1		1								3
Bi	<i>Saccostrea cucullata</i>			37		21				18		1		22		15		9				123
Bi	<i>Tellina</i> sp.														1							1
Bi	<i>Xenostrobus atratus</i>													3								3
C	<i>Hemigrapsus penicillatus</i>													2	2	1						5
C	<i>Nanoesarma minutum</i>			5													3					8
C	<i>Uca borealis</i>																	3				3
Cn	<i>Diadumene lineata</i>			3										1								4
G	<i>Batillaria bornii</i>					1								9			1					11
G	<i>Batillaria multiformis</i>					4		1		2						1	1					9
G	<i>Batillaria zonalis</i>			3		11		10		12		8		12	2	15	2	15		4	3	97
G	<i>Cellana toreuma</i>					1																1
G	<i>Cerithidea cingulata</i>					2		2						3		1	1	1		2		12
G	<i>Cerithidea djadjariensis</i>	1		6		18		6	2	5		11	3	31		37	3	23		9	1	156
G	<i>Cerithidea rhizophorarum</i>									1		1							1		3	
G	<i>Euchelus scaber</i>													3								3

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

Jun 2017 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>Lunella coronata</i>			16		2				2				5		3		4				32	
G	<i>Monodonta labio</i>			4		5																9	
G	<i>Nassarius festivus</i>											1		1		1		2				5	
G	<i>Nassarius hepaticus</i>									1												1	
G	<i>Nerita polita</i>									1				2								3	
G	<i>Nipponacmea concinna</i>			1									1									2	
G	<i>Patelloidea pygmaea</i>											1										1	
Ne	Nemertea spp.											1										1	
P	Ampharetidae spp.		1																			1	
P	Maldanidae spp.					3		1				1				3						8	
P	Nereididae spp.							1				1									1	3	
P	Onuphidae spp.										3		1									1	5
P	Pectinariidae spp.											1										1	
Pl	Platyhelminthes spp.			1																		1	
Sp	<i>Sipunculus nudus</i>												2									2	
																					Total	618	

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

Jun 2017 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		
Ba	<i>Balanus amphitrite</i>																					2	
Bi	<i>Circe</i> sp.							1		6		1						1		1			10
Bi	<i>Cyclina sinesis</i>																	1					1
Bi	<i>Glauconome chinensis</i>					1																	1
Bi	<i>Laternula anatina</i>																					1	1
Bi	<i>Saccostrea cucullata</i>																4				3		7
C	<i>Nanosesarma minutum</i>	1																			1		2
C	<i>Scylla serrata</i>																	1					1
C	<i>Uca borealis</i>																1				3		4
C	<i>Uca lactea</i>	4		3																			7
F	<i>Periophthalmus cantonensis</i>					1																	1
G	<i>Batillaria multiformis</i>	7		39	10	77	2	210	7	18	1	5			31				2	3	48	3	463
G	<i>Batillaria zonalis</i>	1				4		1		2		2			4								14
G	<i>Cerithidea cingulata</i>	25		11		48		49		40	1	28		17		5		7		14			245
G	<i>Cerithidea djadjariensis</i>	234		126	1	149	2	107		63	1	45		164		31		36	1	149			1109
G	<i>Cerithidea rhizophorarum</i>	8		3			1			4		2		8				2		6			34
G	<i>Clithon oualaniensis</i>	1						5		1		1	1					1		1			11
G	<i>Monodonta labio</i>														1								1
G	<i>Nassarius hepaticus</i>													1									1

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

Jun 2017 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		
G	<i>Philine vitrea</i>							1														1	
Ne	Nemertea spp.									1												1	
P	Ampharetidae spp.					2											2			1		1	6
P	Maldanidae spp.										2					1			3			6	
P	Nereididae spp.		1								2							1				4	
																					Total	1933	

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

Jun 2017 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>Caecella chinensis</i>																					1	1
Bi	<i>Dosinia japonica</i>																					1	1
Bi	<i>Laternula anatina</i>																					1	1
Bi	<i>Saccostrea cucullata</i>																					42	42
Bi	<i>Xenostrobus atratus</i>																					3	3
C	<i>Uca borealis</i>																					4	33
C	<i>Uca lactea</i>	7		5		2		2		1				7		8		14					17
C	<i>Uca</i> sp.													1									1
G	<i>Batillaria bornii</i>		2																				2
G	<i>Batillaria multiformis</i>	8		16		22		5		6		4		1		2		15		256	21	356	
G	<i>Batillaria zonalis</i>	9		6		13		5		10		2	1	6		9							61
G	<i>Cellana toreuma</i>																					4	4
G	<i>Cerithidea cingulata</i>	55		159		26		8		11		3				7		1		51	4	325	
G	<i>Cerithidea djadjariensis</i>	155		116		145		105		105		89	5	54	6	119	5	56		66	5	1031	
G	<i>Cerithidea rhizophorarum</i>	7		4		5				5		3				3		3		2		32	
G	<i>Clithon oualaniensis</i>		1																			2	
G	<i>Lunella coronata</i>						1															4	
G	<i>Monodonta labio</i>		2																			14	
G	<i>Nassarius hepaticus</i>																					1	

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

Jun 2017 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>Nipponacmea concinna</i>																	1			1	
G	<i>Patelloida pygmaea</i>																	1			1	
Ne	Nemertea spp.															1	1					2
Ol	Marine oligochaete spp.																	3				3
P	Ampharetidae spp.					3																3
P	Maldanidae spp.											1			1			1				3
P	Terebellidae spp.																			1	1	
Sp	<i>Sipunculus nudus</i>																	1			1	
																				Total	1949	

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

Jun 2017 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>									7								3			10	
Bi	<i>Barbatia virescens</i>	3		15		12		12		8				6				2		3		61
Bi	<i>Cyclina sinesis</i>					1																1
Bi	<i>Hiatella arctica</i>	3						3		1				2						3		12
Bi	<i>Saccostrea cucullata</i>	111		69		72		105		42				96		53		50		64		662
Bi	<i>Tellina</i> sp.											1										1
Bi	<i>Xenostrobus atratus</i>	12						1						1		7		2		1		24
C	<i>Etisus laevimanus</i>					1																1
C	<i>Hemigrapsus penicillatus</i>												2		1							3
C	<i>Nanosesarma minutum</i>	11		4		6		4		10				2		1						38
Cn	<i>Diadumene lineata</i>												2									2
Eh	<i>Echiura</i> spp.			2				2														4
F	<i>Omobranchus fasciolatoceps</i>					2																2
G	<i>Batillaria bornii</i>																			2		2
G	<i>Batillaria multiformis</i>	3		2		22		1						1		2		1		1		33
G	<i>Batillaria zonalis</i>									1								3		1		5
G	<i>Cellana toreuma</i>	2		5		1		12		1				2		1						24
G	<i>Cerithidea cingulata</i>					3				1								3				7
G	<i>Cerithidea djadjariensis</i>					8				12		9	2	1				6		3		41

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

Jun 2017 Sampling zone TC 3 Low tidal level (1.0 m above C.D.)

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

Jun 2017 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>	2																				2
Bi	<i>Barbatia virescens</i>			1																		1
Bi	<i>Saccostrea cucullata</i>	23		11		35		6				7		14		7		16		6		125
Bi	<i>Xenostrobus atratus</i>	1		1															1			3
C	<i>Nanosesarma minutum</i>	1		1		2				1				4				3		5		17
Cn	<i>Diadumene lineata</i>	1		2																1		4
G	<i>Batillaria bornii</i>			2				1		30		10								1		44
G	<i>Batillaria multiformis</i>	48		64		72		27		38		50		50		99		38		31		517
G	<i>Cellana grata</i>							1										3				4
G	<i>Cellana toreuma</i>	5		7		25		11		8		8		24		46		57		51		242
G	<i>Cerithidea cingulata</i>					1				5		5		5		4						20
G	<i>Cerithidea djadjariensis</i>	1		1		4				5		7		2		7		3		3		33
G	<i>Cerithidea rhizophorarum</i>					1																1
G	<i>Clithon faba</i>			3																1		4
G	<i>Clithon ovalaniensis</i>	1				1				2		1										5
G	<i>Lepidozona</i> sp.																	1				1
G	<i>Littoraria articulata</i>							7											1			8
G	<i>Lunella coronata</i>			1		6		1		2		1		5		4		4		3		27
G	<i>Monodonta labio</i>	27		36		35		60		22		27		53		39		31		27		357

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

Jun 2017 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
G	<i>Nerita polita</i>	1	2	1	3			1								8
G	<i>Nipponacmea concinna</i>	13	8			3		5		11						40
G	<i>Patelloidea pygmaea</i>							1		2		2				5
G	<i>Philine vitrea</i>						1									1
Ne	Nemertea spp.				1											1
															Total	1470

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

Jun 2017 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>					58		12		1							1					72
Bi	<i>Barbatia virescens</i>	1						2		4					1		1		2		3	14
Bi	<i>Circe</i> sp.					1	1															2
Bi	<i>Hiatella arctica</i>			4								1		2		2		2		1		12
Bi	<i>Saccostrea cucullata</i>	23	42		13			6		5		19		13		28		38		33		220
Bi	<i>Xenostrobus atratus</i>			1							1											2
C	<i>Nanosesarma minutum</i>	2	6		2			4		1		5		2		5		6		3		36
Cn	<i>Diadumene lineata</i>			1						2		1				1				4		9
F	Unidentified goby spp.									1								1				2
G	<i>Batillaria bornii</i>	4		1		1				11		3		3		9		1		19		52
G	<i>Batillaria multiformis</i>	26				4		7	1	1		1		2		1		23		30		96
G	<i>Batillaria zonalis</i>					8		12														20
G	<i>Cellana grata</i>																	1		2		3
G	<i>Cellana toreuma</i>	2		1							2		6		11		23		29		18	92
G	<i>Cerithidea cingulata</i>	1		2		15	1	1		5		14				1		1		2		43
G	<i>Cerithidea djadjariensis</i>	10	12		78		57	1	13		11		1		13		7		3		206	
G	<i>Cerithidea rhizophorarum</i>	1			1		1				2				1							4
G	<i>Clithon faba</i>																		1		3	
G	<i>Clithon ovalaniensis</i>														1							1

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

Jun 2017 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>Euchelus scaber</i>			1				4							5		3		3		16		
G	<i>Lunella coronata</i>	5		15				3		11		10		7		12		13		17		93	
G	<i>Monodonta labio</i>	4		32						21		17		20		27		70		35		226	
G	<i>Nerita polita</i>			2																	2		
G	<i>Nipponacmea concinna</i>									2		4		10								16	
G	<i>Patelloidea pygmaea</i>	2		3												1		2				8	
Hc	<i>Pagurus dubius</i>																				1		
Ne	<i>Nemertea</i> spp.		2																			2	
P	<i>Maldanidae</i> spp.					1																1	
Sp	<i>Sipunculus nudus</i>					1																1	
																				Total	1255		

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

Jun 2017 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>							8		3						5		1				17
Bi	<i>Barbatia virescens</i>														1		4		4		22	31
Bi	<i>Dosinia japonica</i>							1														1
Bi	<i>Hiatella arctica</i>														1		1		1			3
Bi	<i>Laternula anatina</i>					1																1
Bi	<i>Saccostrea cucullata</i>									7				3		7		16		59	92	
Bi	<i>Tellina</i> sp.					1																1
C	<i>Epixanthus</i> sp.																			1		1
C	<i>Nanosesarma minutum</i>	2								2				2		7		6		6		25
Cn	<i>Diadumene lineata</i>													1								1
F	<i>Omobranchus fasciolatoceps</i>													1								1
G	<i>Batillaria bornii</i>													5		2		3				10
G	<i>Batillaria multiformis</i>		1							5							1					7
G	<i>Batillaria zonalis</i>	17	2							9	12											40
G	<i>Cellana toreuma</i>													3		1		7		2		13
G	<i>Cerithidea cingulata</i>	16								11	4					10						41
G	<i>Cerithidea djadjariensis</i>	49								21	35	3		63		3		13				187
G	<i>Cerithidea rhizophorarum</i>	1									2	1		1								5
G	<i>Euchelus scaber</i>												7		7		8		11			33

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

Jun 2017 Sampling zone ST Low tidal level (1.0 m above C.D.)

## 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