

**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**



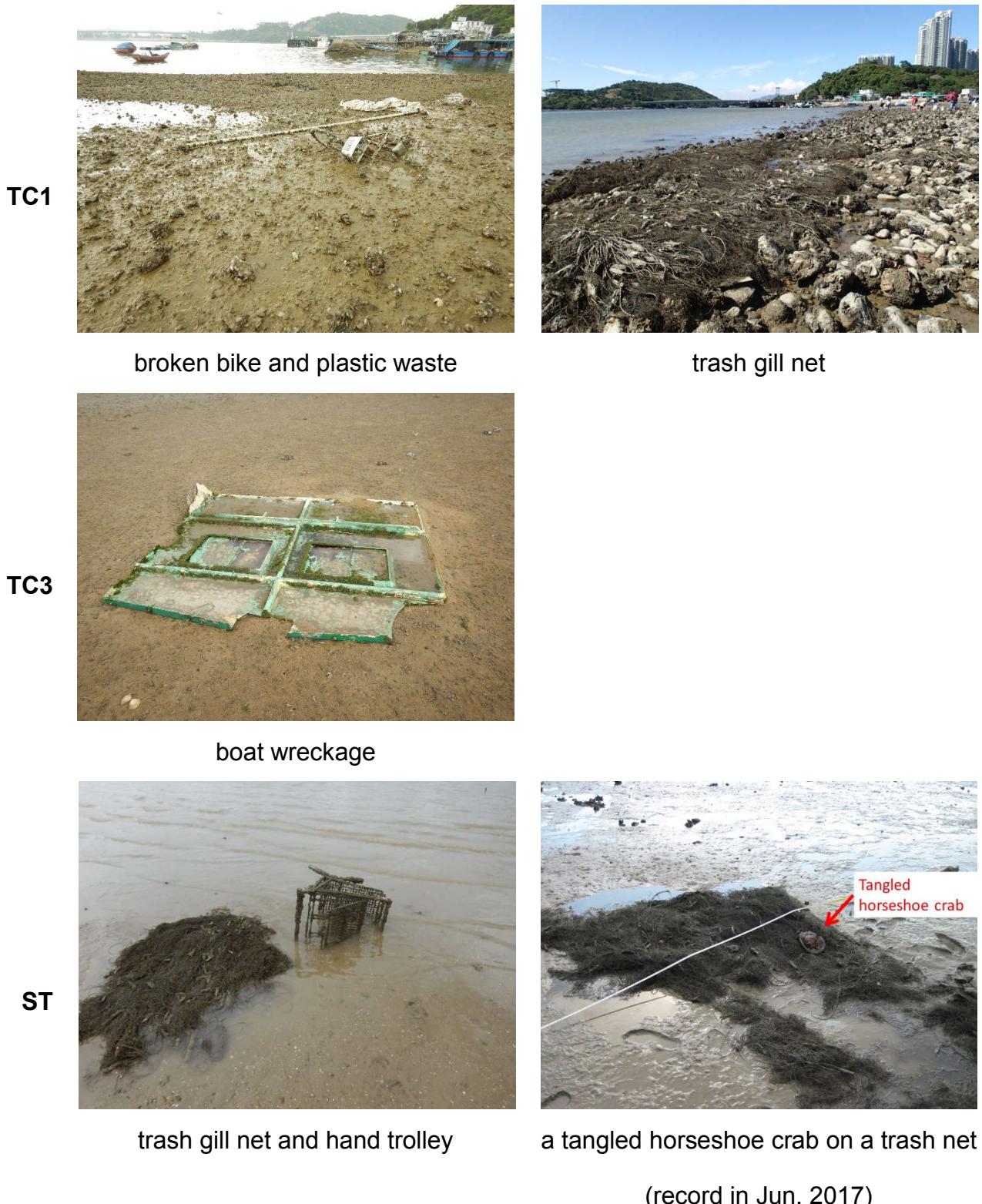
**TC3**



**ST**

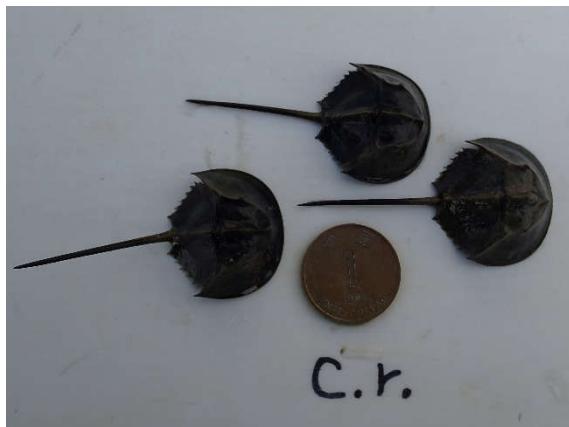


**Figure 2.2. Photographic record of the environment in every sampling zone.**



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

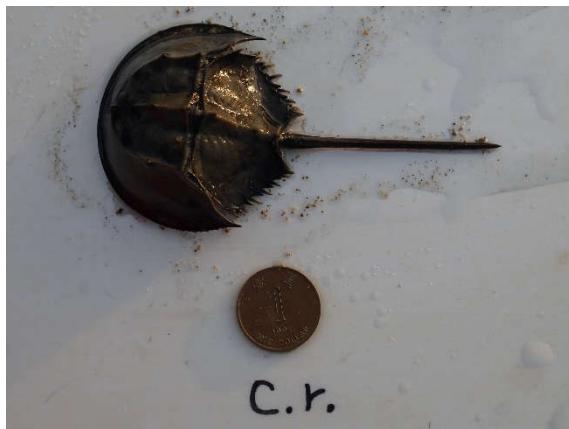
**TC1** *Carcinoscorpius rotundicauda*



**TC1** *Tachypleus tridentatus*



**TC2** *Carcinoscorpius rotundicauda*



**Figure 3.1.** Examples of photographic records of horseshoe crab (Jun. 2018)

**TC3** *Carcinoscorpius rotundicauda*



**TC3** *Tachypleus tridentatus*



**Figure 3.1 (Cont'd).** Examples of photographic records of horseshoe crab (Jun. 2018)

**ST** *Carcinoscorpius rotundicauda*



**ST** *Tachypleus tridentatus*



**Figure 3.1 (Cont'd).** Examples of photographic records of horseshoe crab (Jun. 2018)

**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	14	3	27	40
mean prosomal width (mm)	33.10	60.99	40.54	41.43
max. prosomal width (mm)	55.55	74.44	67.33	70.68
min. prosomal width (mm)	11.00	47.04	14.95	15.09
Search record (ind. hr <sup>-1</sup> person <sup>-1</sup> )	3.5	0.8	4.5	6.7
<b><i>Tachypleus tridentatus</i></b>				
no. of individuals	2	0	18	19
mean prosomal width (mm)	48.20	\	60.24	57.55
max. prosomal width (mm)	49.11	\	82.99	78.41
min. prosomal width (mm)	47.29	\	36.52	36.04
Search record (ind. hr <sup>-1</sup> person <sup>-1</sup> )	0.5	0.0	3.0	3.2

**Mar. 2015 - ST**



**Jun. 2017 – TC2**



**Female**



**Male**

**Jun. 2017 - TC3**



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

**Dec. 2017 - TC3**



**Jun. 2018 - TC3 (present survey)**



**Female**



**Male**

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

***Carcinoscorpius rotundicauda***

**Jun. 2017**



**Sep. 2017**

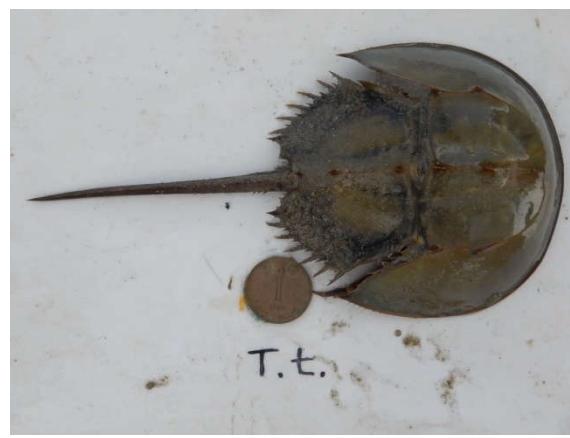


**Dec. 2017**

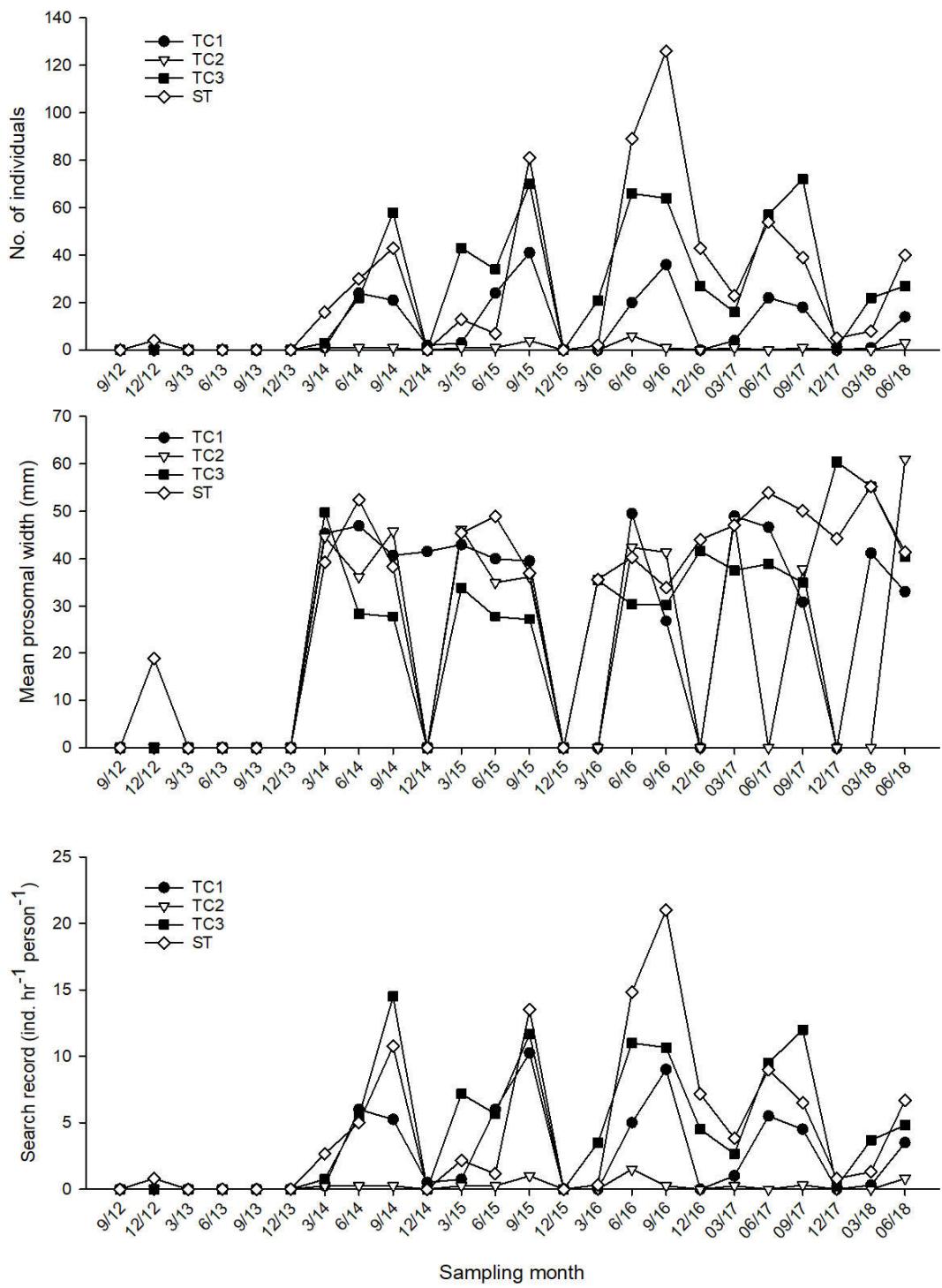


***Tachypleus tridentatus***

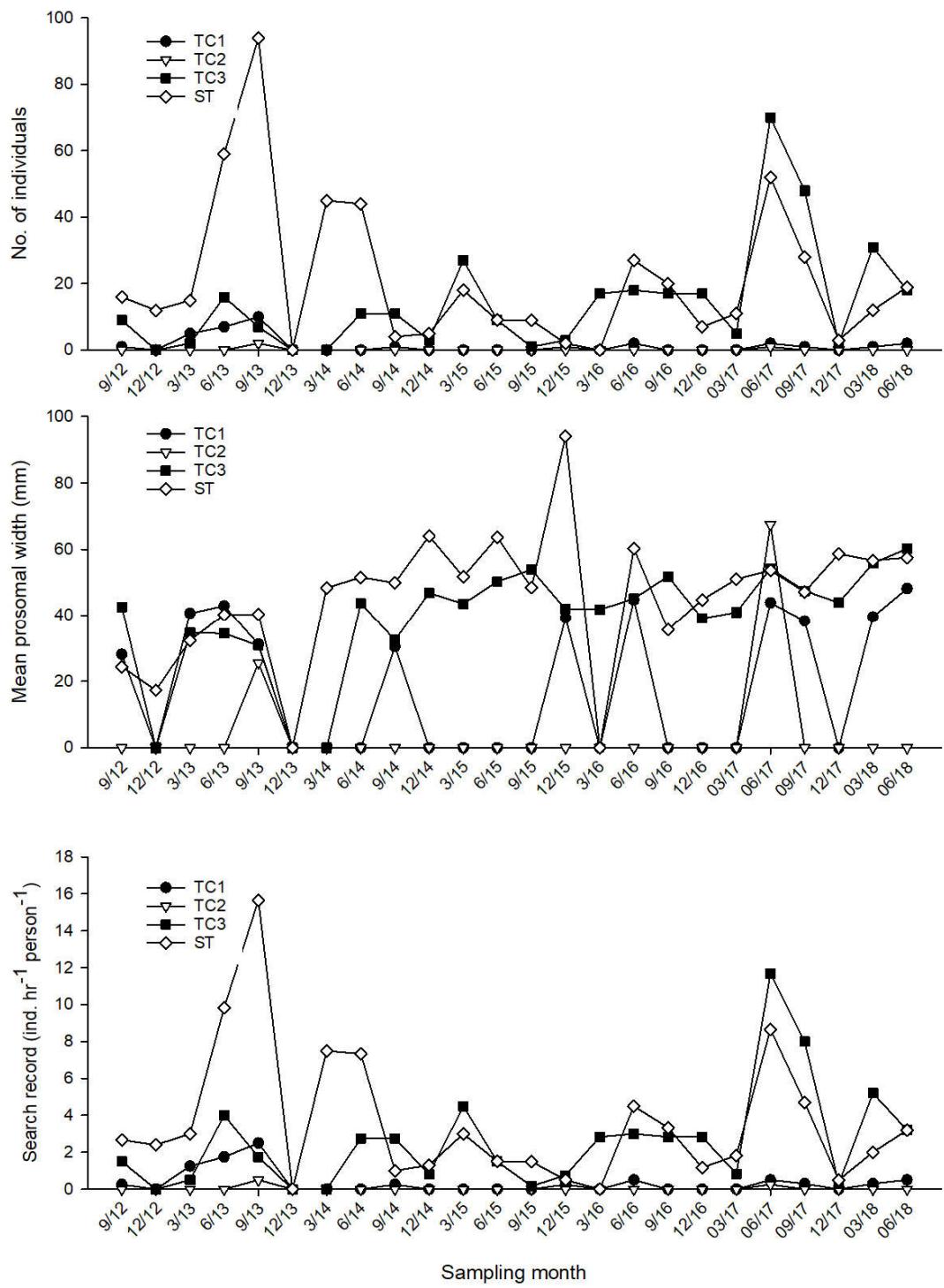
**Sep. 2017**



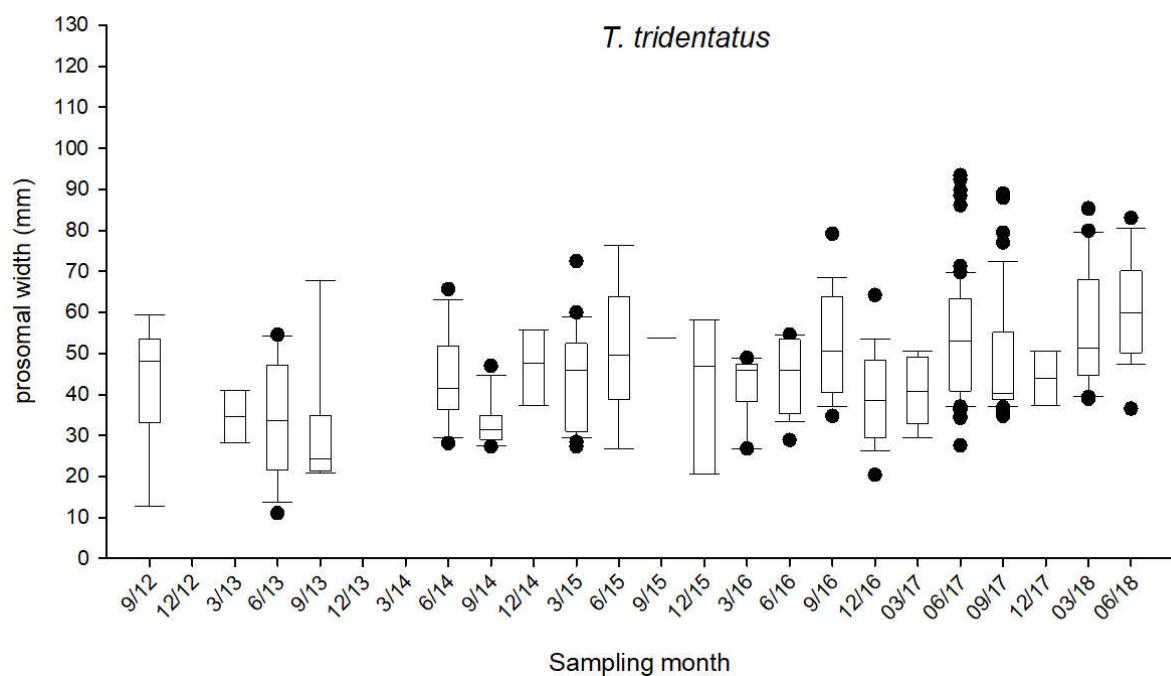
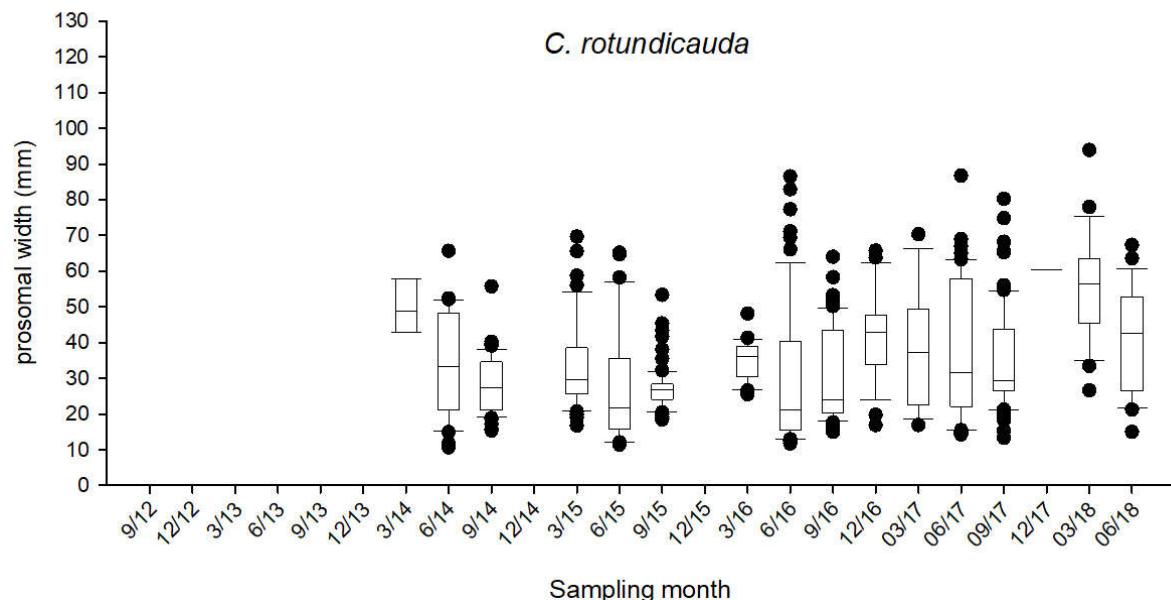
**Figure 3.3. Photographic records of large individuals (>100 mm) of horseshoe crabs whose records were excluded from data analysis.**



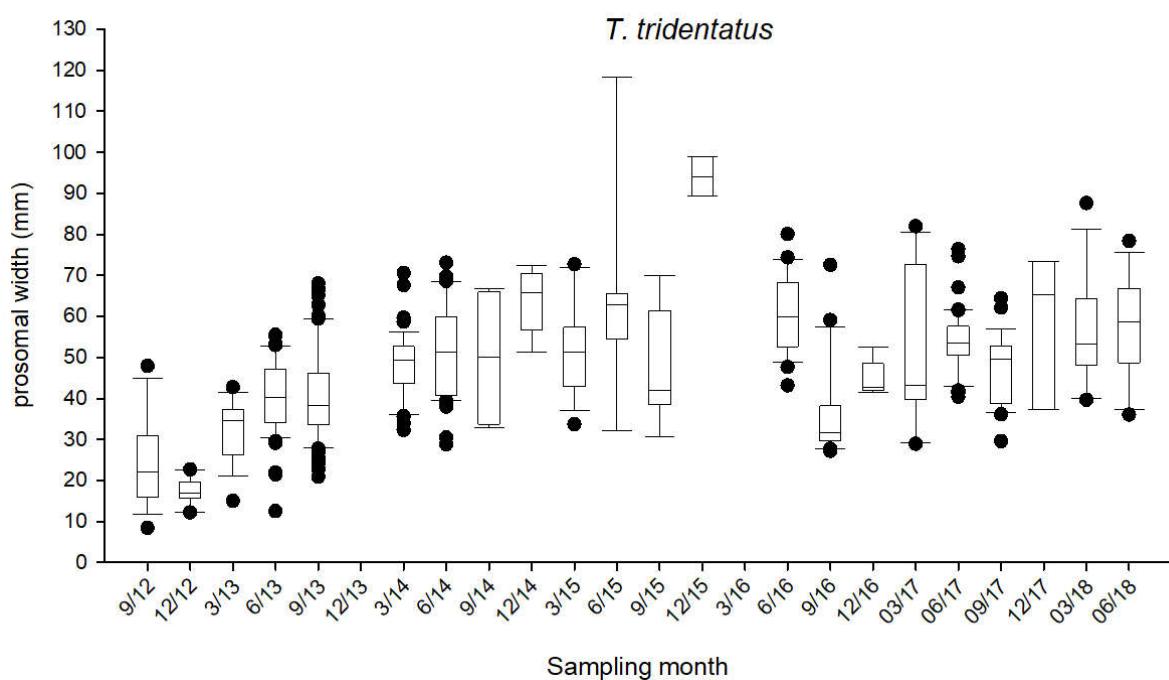
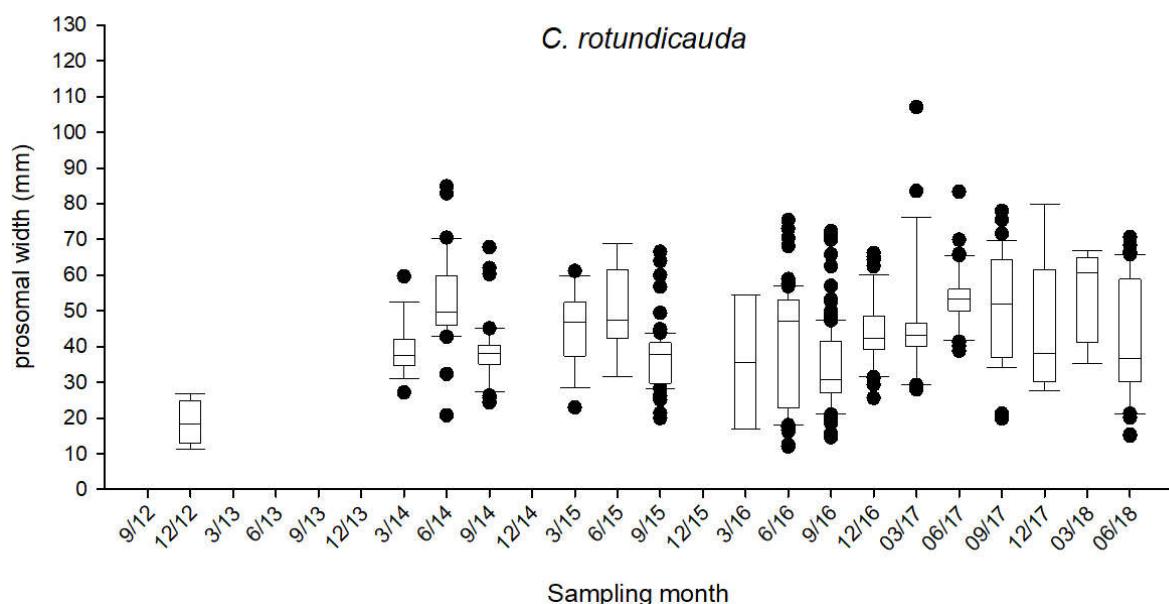
**Figure 3.4. Changes of number of individuals, mean prosomal width and search record of horseshoe crab *Carcinoscorpius rotundicauda* in every sampling zone along the sampling months**



**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)



**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.)

**TC3 single patch of *Halophila ovalis***



**TC3 - ST extensive patch of *Halophila ovalis***



**ST medium, horizontal patch of *Zostera japonica***



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

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

Sampling zone	TC3	ST
	<i>Halophila ovalis</i>	<i>Halophila ovalis</i>
<b>Number of patches</b>	1	3
<b>Total area (m<sup>2</sup>)</b>	0.3	1072.0
<b>Average area (m<sup>2</sup>)</b>	\	357.3

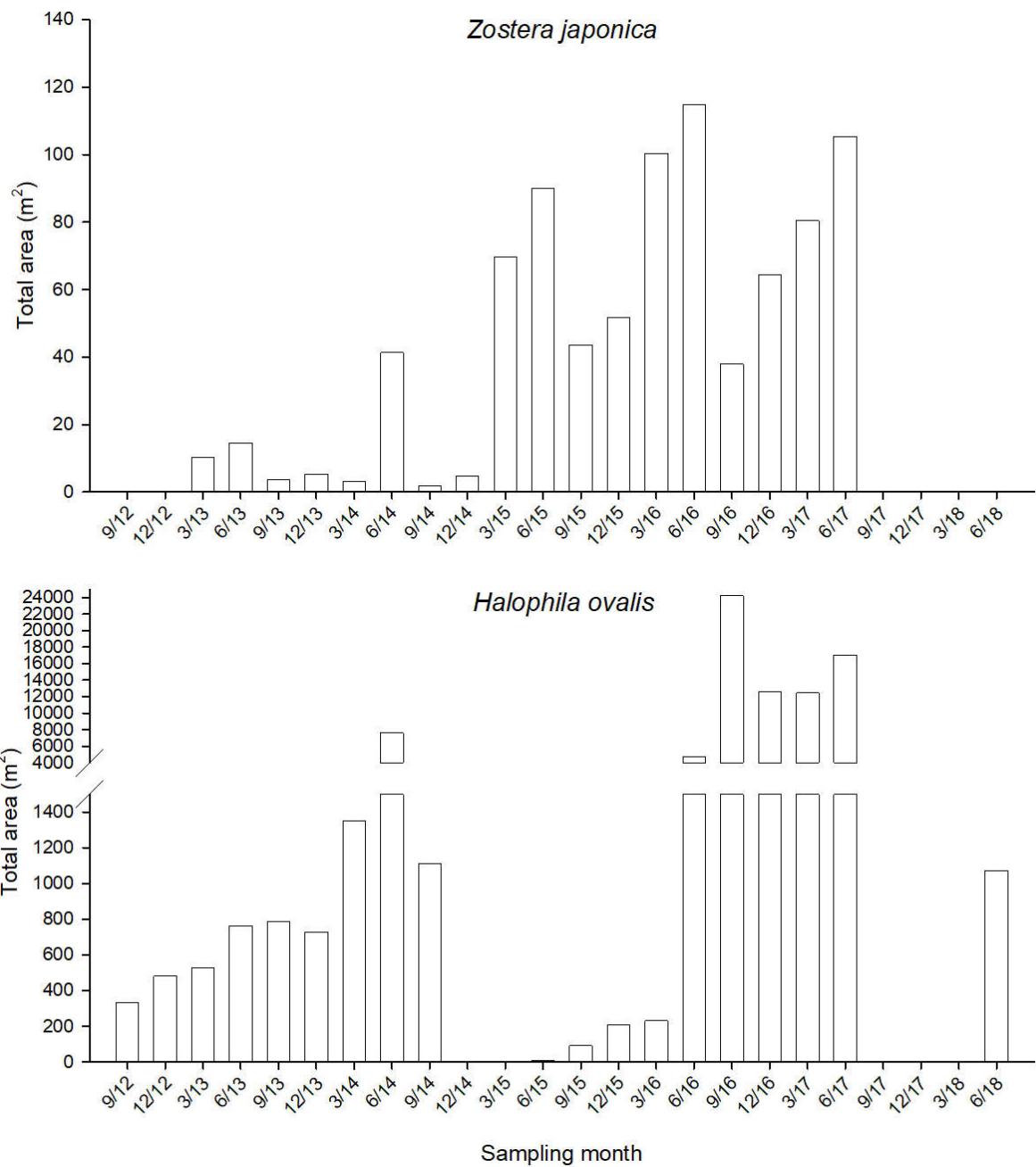
**TC3** small, single patch of *Halophila ovalis*



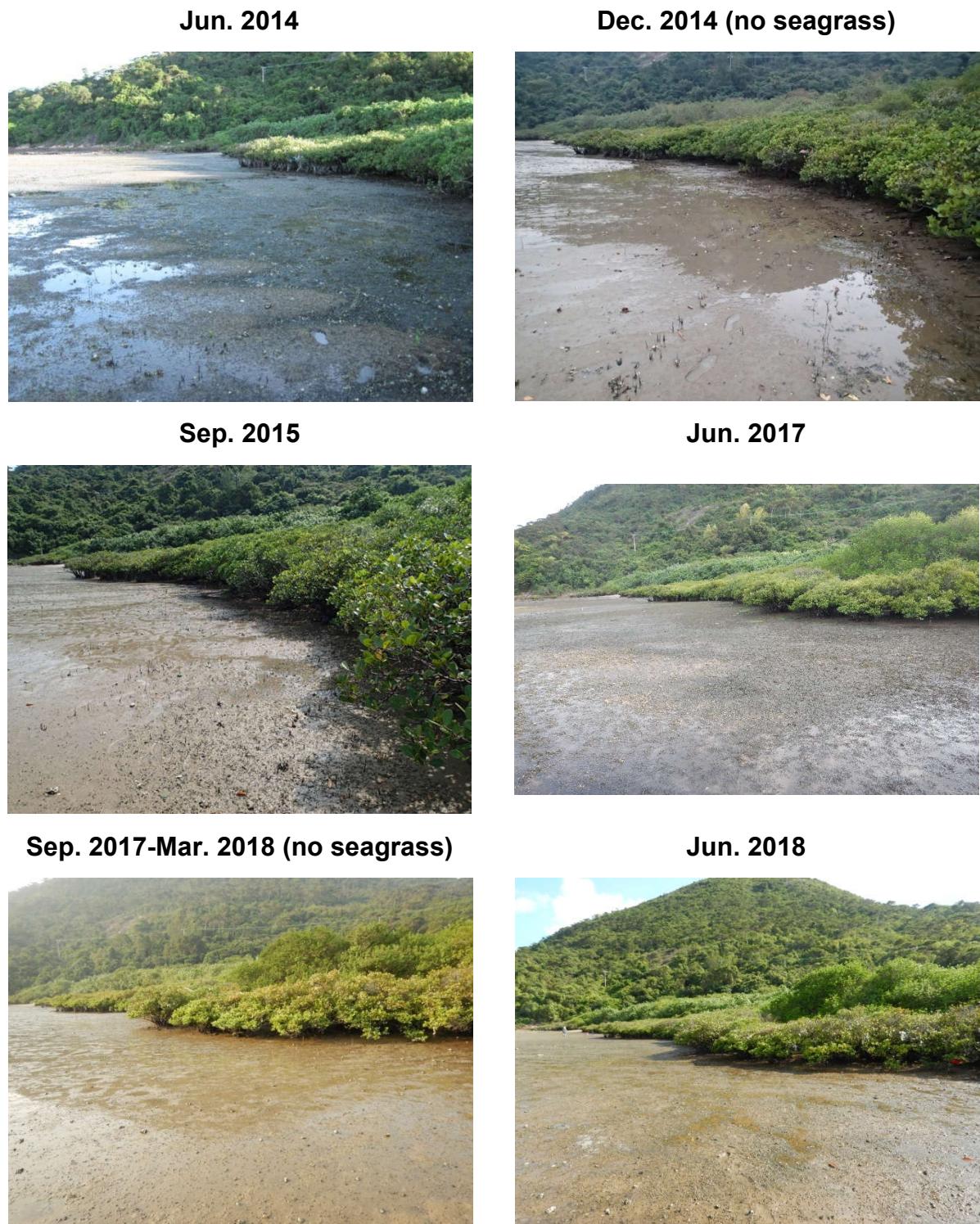
**ST** medium, horizontal patch of *Halophila ovalis*



**Figure 3.9.** Photographic record of seagrass beds in present survey.



**Figure 3.10.** Temporal changes of estimated total area of seagrass beds in ST

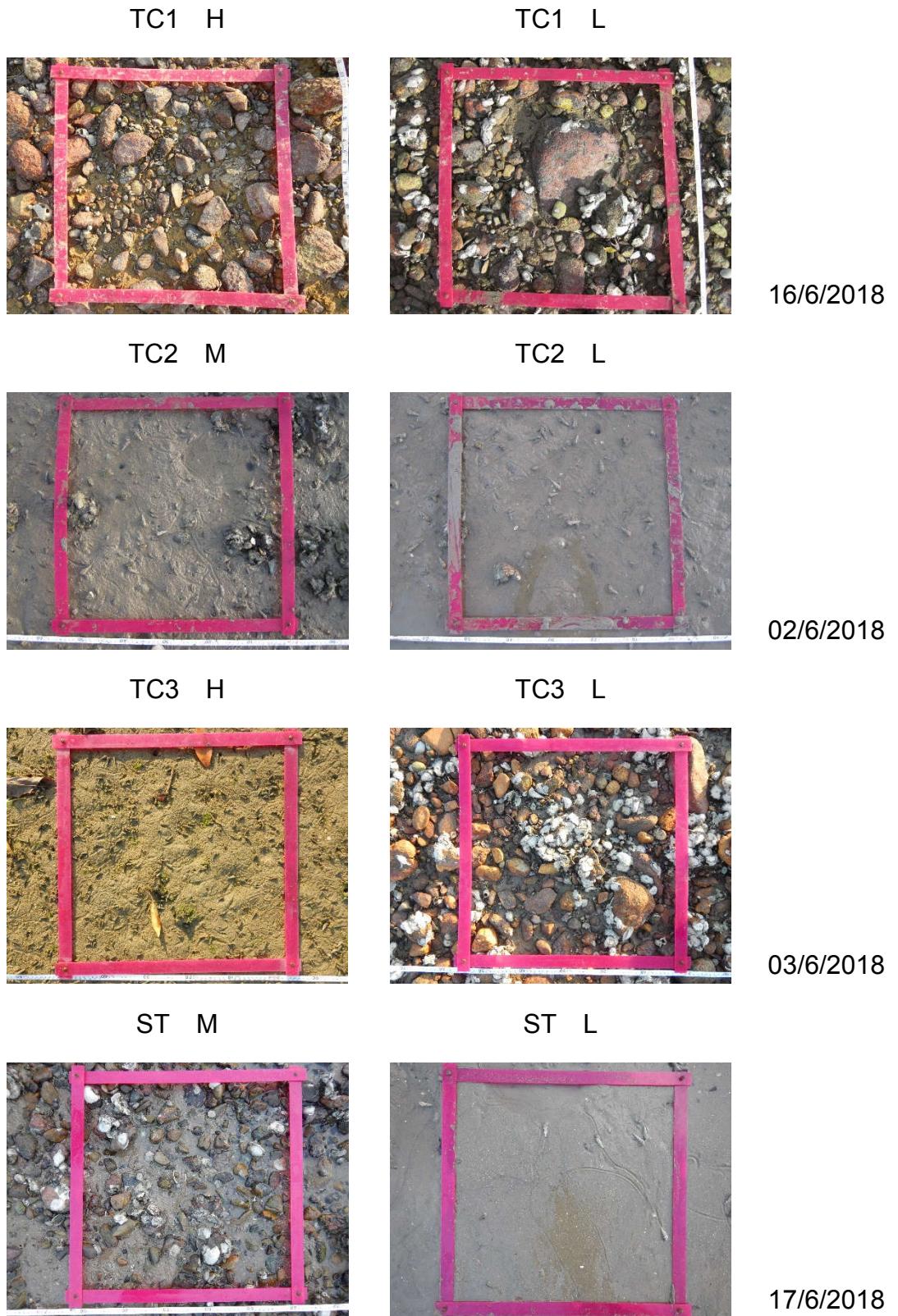


**Figure 3.11.** Comparison of pictures taken in different sampling months shows the successive disappearance and recolonization of seagrass beds

**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	100		
	L	80	20	
TC2	H	20	70	10
	M	10	50	40
	L		30	70
TC3	H		70	30
	M		100	
	L	80		20
ST	H	100		
	M	80	20	
	L		100	

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



**Figure 3.12.** 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. 2018</i>				
Mollusca	15275	96.6	509	37
Arthropoda	388	2.5	13	14
Annelida	78	0.5	3	8
Sipuncula	31	0.2	1	1
Nemertea	17	0.1	1	1
Cnidaria	16	0.1	1	1
Echiura	4	0.0	0	1
Platyhelminthes	4	0.0	0	1
Echinodermata	1	0.0	0	1
<b>Total</b>	<b>15814</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	0.2	1	32	1.0	4	30	0.5	4	10	0.3	1
Arthropoda	57	1.5	8	197	6.0	26	86	1.5	11	48	1.6	6
Cnidaria							5	0.1	1	11	0.4	1
Echinodermata				1	0.0	0						
Echiura				3	0.1	0	1	0.0	0			
Mollusca	3799	98.0	507	3025	92.6	403	5613	97.5	748	2838	97.4	378
Nemertea	4	0.1	1	3	0.1	0	5	0.1	1	5	0.2	1
Platyhelminthes	1	0.0	0				3	0.1	0			
Sipuncula	10	0.3	1	7	0.2	1	13	0.2	2	1	0.0	0
<b>Sub-total</b>	<b>3877</b>			<b>3268</b>			<b>5756</b>			<b>2913</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>	264	55	55
	G	<i>Pirenella incisa</i>	115	24	79
Mid	G	<i>Batillaria multiformis</i>	180	33	33
	Bi	<i>Saccostrea cucullata</i>	119	22	54
	G	<i>Monodonta labio</i>	106	19	73
	G	<i>Pirenella incisa</i>	70	13	86
Low	Bi	<i>Saccostrea cucullata</i>	158	30	30
	G	<i>Monodonta labio</i>	111	21	52
	G	<i>Pirenella incisa</i>	57	11	63

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>Pirenella incisa</i>	301	54	54
Mid	G	<i>Pirenella incisa</i>	124	25	25
	Bi	<i>Saccostrea cucullata</i>	122	24	49
	G	<i>Batillaria zonalis</i>	89	18	67
Low	Bi	<i>Saccostrea cucullata</i>	72	29	29
	G	<i>Pirenella incisa</i>	41	16	45
	G	<i>Batillaria zonalis</i>	41	16	61
	Ba	<i>Balanus amphitrite</i>	31	12	74

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>Pirenella incisa</i>	383	56	56
	G	<i>Batillaria multiformis</i>	136	20	76
	G	<i>Pirenella asiatica</i>	120	18	94
Mid	G	<i>Pirenella incisa</i>	369	42	42
	G	<i>Pirenella asiatica</i>	223	26	68
	G	<i>Batillaria multiformis</i>	158	18	86
Low	Bi	<i>Saccostrea cucullata</i>	301	40	40
	G	<i>Monodonta labio</i>	180	24	64

Bi = Bivalve, G = Gastropod

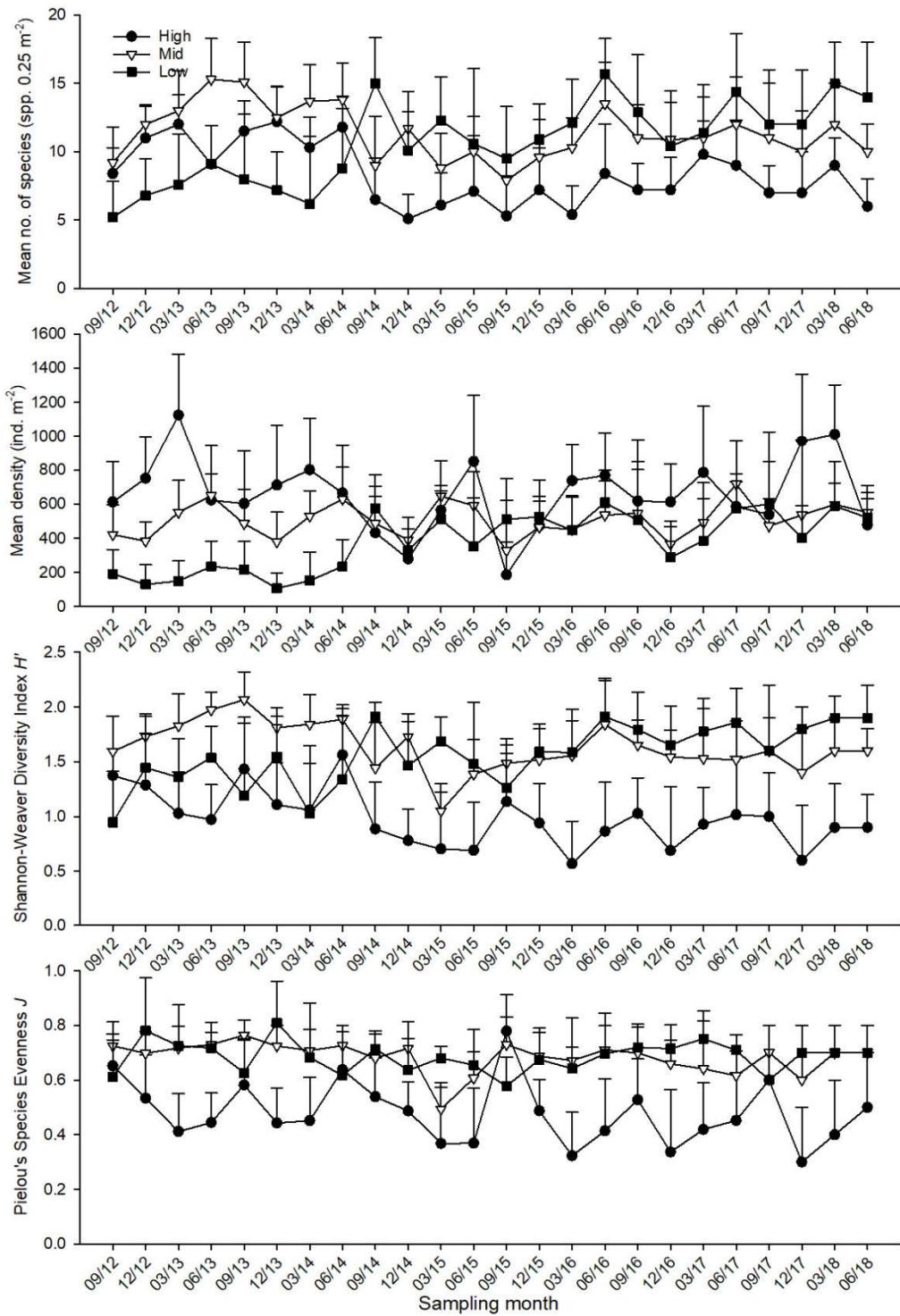
**Table 3.6 (Cont'd). The abundant species (relative abundance >10%) in every sampling zone**

Sampling zone ST	Group	Species	Mean density (ind. m <sup>-2</sup> )	Relative abundance (%)	Cumulative relative abundance (%)
High	G	<i>Monodonta labio</i>	163	31	31
	G	<i>Batillaria multiformis</i>	102	20	51
	Bi	<i>Saccostrea cucullata</i>	73	14	65
	G	<i>Cellana toreuma</i>	62	12	77
Mid	Bi	<i>Saccostrea cucullata</i>	174	33	33
	G	<i>Monodonta labio</i>	88	17	50
	G	<i>Pirenella incisa</i>	50	10	60
Low	G	<i>Pirenella incisa</i>	31	25	25
	Bi	<i>Saccostrea cucullata</i>	26	21	46
	G	<i>Batillaria zonalis</i>	16	13	60

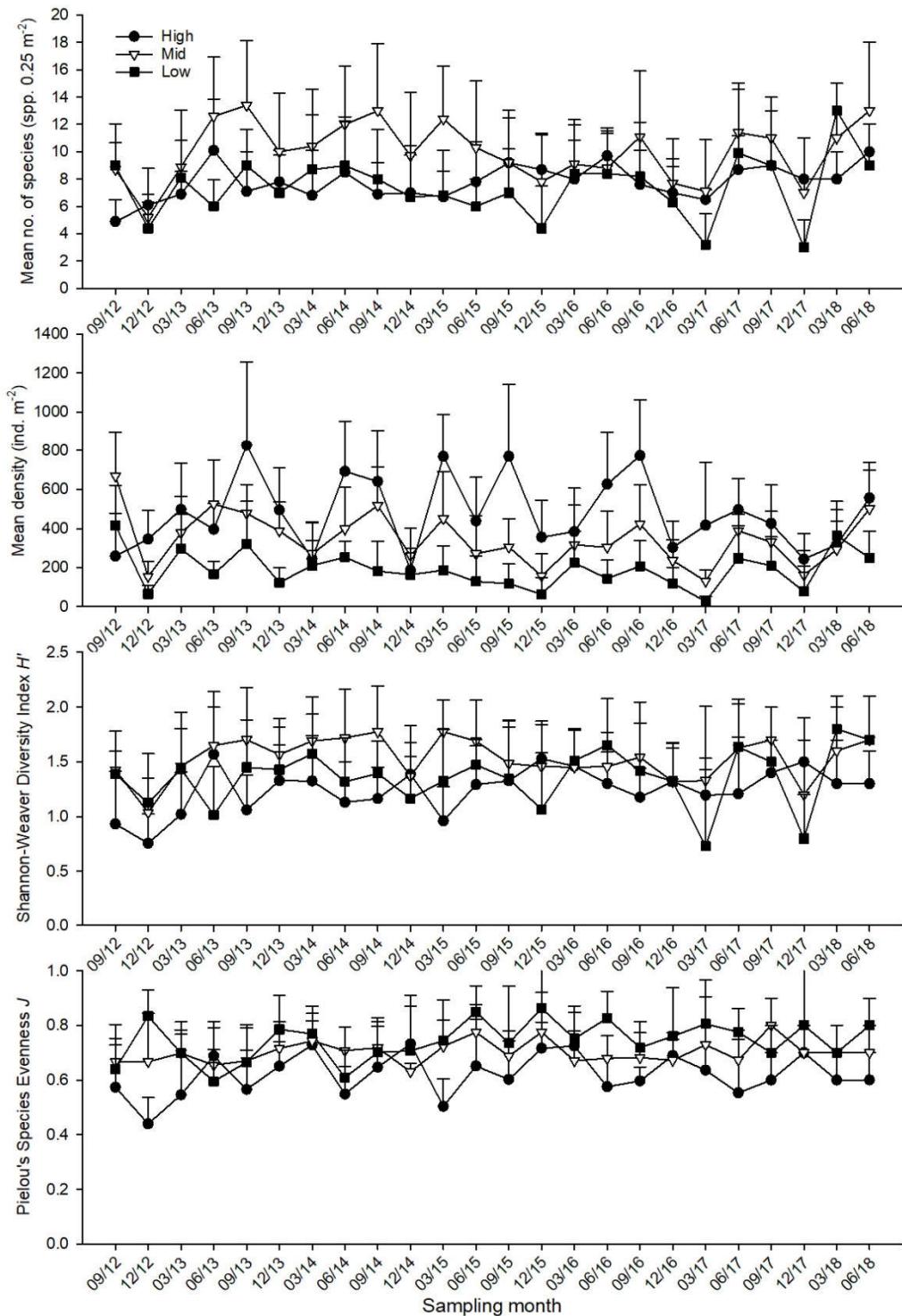
Bi = Bivalve, G = Gastropod

**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

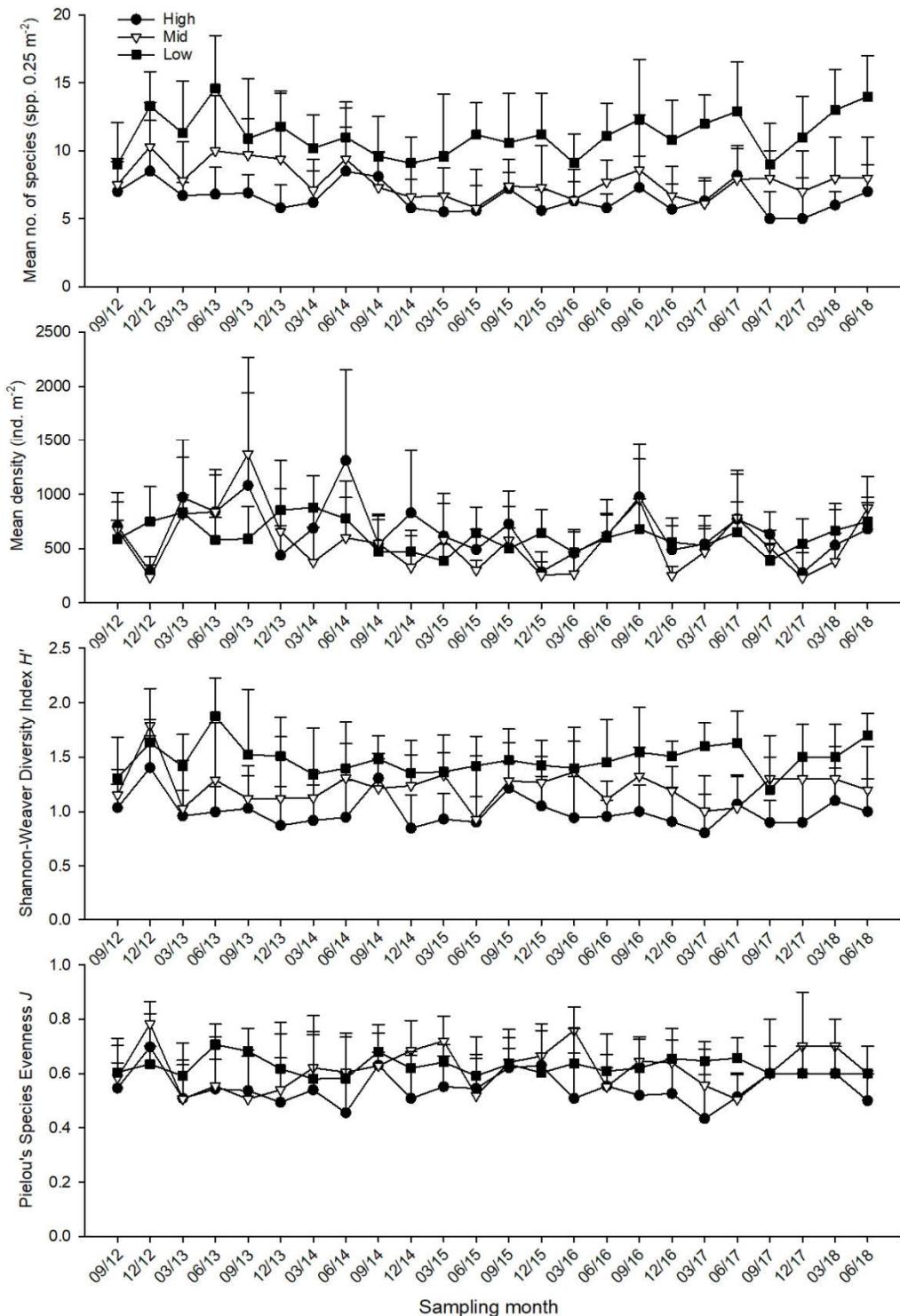
Sampling zone	Tidal level	Mean species number (spp. 0.25 m <sup>-2</sup> )	Mean species number across tidal levels	Mean density (ind. m <sup>-2</sup> )	Mean density across tidal levels	Mean $H'$	Mean $H'$ across tidal levels	Mean $J$	Mean $J$ across tidal levels
TC1	H	6		478		0.9		0.5	
	M	10	10	552	517	1.6	1.5	0.7	0.6
	L	14		520		1.9		0.7	
TC2	H	10		556		1.3		0.6	
	M	13	11	501	436	1.7	1.5	0.7	0.7
	L	9		250		1.7		0.8	
TC3	H	7		680		1.0		0.5	
	M	8	10	873	767	1.2	1.3	0.6	0.6
	L	14		750		1.7		0.6	
ST	H	12		519		1.8		0.7	
	M	13	10	523	388	1.8	1.6	0.7	0.7
	L	6		123		1.2		0.7	



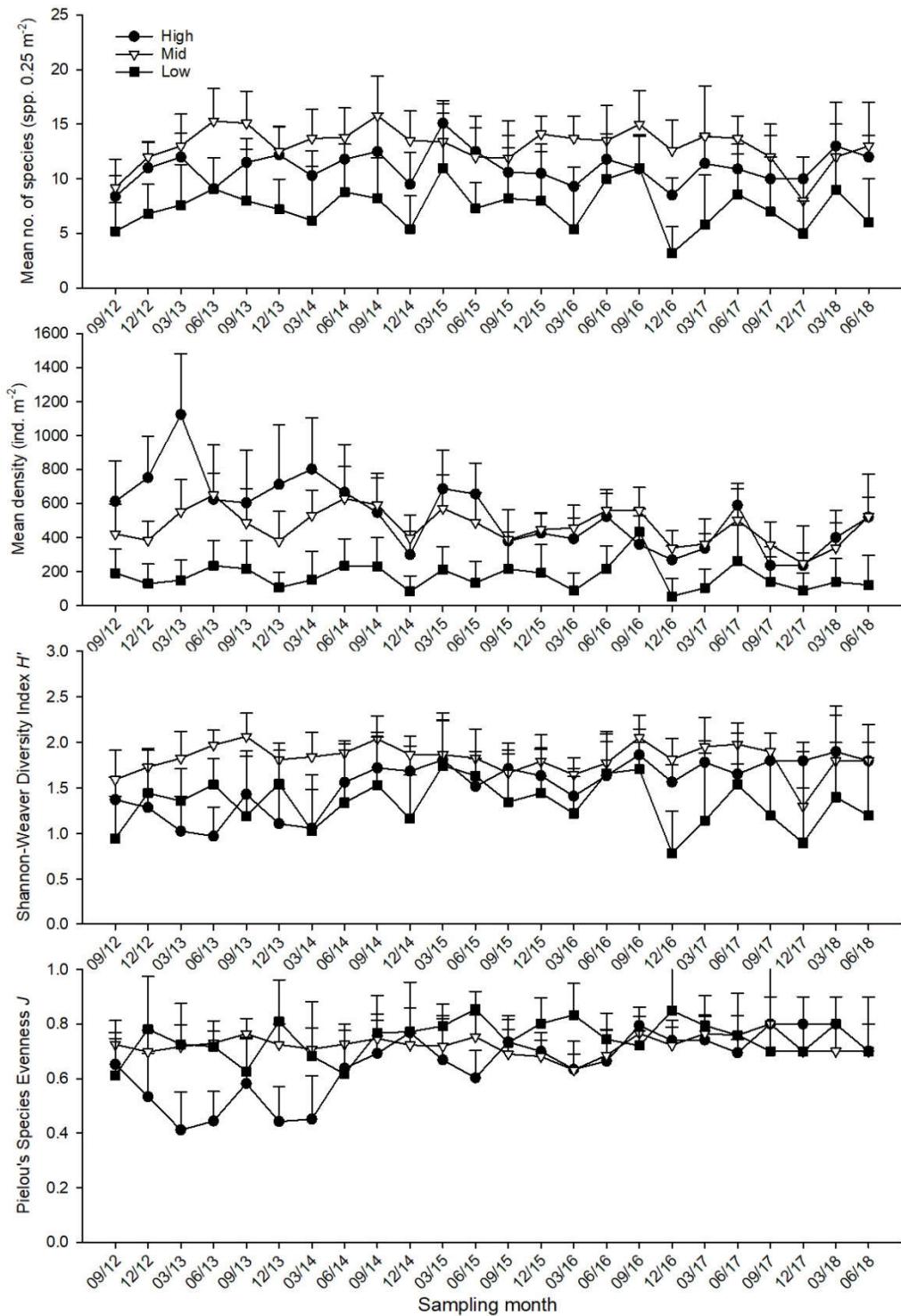
**Figure 3.13.** Temporal changes of mean number of species, mean density, Shannon-Weaver Diversity Index ( $H'$ ) and Pielou's Species Evenness ( $J$ ) (mean + SD) at every tidal level in sampling zone TC1



**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 TC2



**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 TC3



**Figure 3.16.** 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</u> (Search hour = 2 hrs)										
1	S	22° 16.998' N	113° 55.984' E	30.49	32.24	32.77	<i>Carcinoscorpius rotundicauda</i>			
2	S	22° 17.004' N	113° 55.994' E	27.92	47.09		<i>Tachypleus tridentatus</i>			
3	S	22° 17.005' N	113° 55.985' E	36.51	46.91					
4	S	22° 17.016' N	113° 55.990' E	14.48						
5	M	22° 17.014' N	113° 55.972' E	43.64						
6	M	22° 17.022' N	113° 55.970' E	11.00						
7	M	22° 17.030' N	113° 55.969' E	23.43						
8	M	22° 17.024' N	113° 55.962' E				47.29			
9	M	22° 17.033' N	113° 55.969' E	26.52	34.80	55.55				
10	M	22° 17.035' N	113° 55.970' E				49.11			
No. of ind.				14						
				2						

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

Underlined: size of mating pair or large individual (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 TC2 (Search hour = 2 hrs)</u>	
1	M	22° 16.921' N    113° 55.852' E	<i>Carcinoscorpius rotundicauda</i> 61.48
2	M	22° 16.920' N    113° 55.860' E	<i>Tachypleus tridentatus</i> 47.04   74.44
<b>No. of ind.</b>		<b>3</b>	<b>0</b>

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

Underlined: size of mating pair or large individual (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	M	22° 16.966' N	113° 55.670' E	31.34	33.06													
2	S	22° 16.963' N	113° 55.698' E	22.08														
3	S	22° 16.952' N	113° 55.717' E	33.91														
4	S	22° 16.954' N	113° 55.719' E	14.95	21.21	21.93												
5	M	22° 17.022' N	113° 55.658' E									50.95						
6	M	22° 17.061' N	113° 55.648' E	44.62	52.81	59.94						71.65						
7	M	22° 17.089' N	113° 55.640' E	53.78								53.72	69.72	80.13	<u>103</u>			
8	M	22° 17.077' N	113° 55.642' E	42.55	49.44							49.49	50.21	65.56	82.99			
9	M	22° 17.047' N	113° 55.634' E	22.17	26.51	36.10	23.06	<u>149</u>	<u>139</u>			48.48	54.26					
10	M	22° 17.060' N	113° 55.620' E	40.50	43.57	35.37	55.36	46.31	47.69	67.33		36.52	50.96	71.60	66.32	66.39	50.05	65.29
				47.25	63.61	58.24												
No. of ind. <b>29</b>				<b>19</b>														

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

Underlined: size of mating pair or large individual (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)									
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<u>Sampling site ST</u> (Search hour = 3 hrs)				<i>Carcinoscorpius rotundicauda</i>						<i>Tachypleus tridentatus</i>			
1	S	22° 17.370' N	113° 55.463' E	34.08									
2	S	22° 17.385' N	113° 55.459' E	30.37	34.19					37.27	40.83	53.93	58.58
3	S	22° 17.392' N	113° 55.482' E	22.60	45.77								
4	M	22° 17.076' N	113° 55.607' E	35.05						51.53	66.59		
5	M	22° 17.085' N	113° 55.617' E	65.14						48.70	51.77	70.57	
6	M	22° 17.104' N	113° 55.605' E	36.75	36.98	68.38	70.68			60.16	65.64	66.85	
7	M	22° 17.116' N	113° 55.560' E	62.35	15.09					36.04			
8	M	22° 17.146' N	113° 55.554' E	61.27									
9	M	22° 17.149' N	113° 55.490' E							50.61			
10	S	22° 17.162' N	113° 55.478' E	30.53									
11	S	22° 17.182' N	113° 55.493' E	28.09	30.12					64.56			
12	S	22° 17.175' N	113° 55.482' E	20.12	31.33	36.41	49.03	58.94	60.95				

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

Underlined: size of mating pair or large individual (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)

Sampling site ST (Search hour = 3 hrs)

*Carcinoscorpius rotundicauda*

*Tachypleus tridentatus*

13	S	22° 17.161' N	113° 55.514' E	21.15	35.77	65.82		41.37
14	S	22° 17.193' N	113° 55.503' E	27.77	43.88	48.56	66.50	37.72
15	S	22° 17.208' N	113° 55.498' E	15.30	27.62	32.46	48.45	36.44
16	S	22° 17.208' N	113° 55.512' E	45.60	58.76	59.27		21.88
<hr/>							<b>40</b>	<b>19</b>

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

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

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 &amp; TC2 (search hour = 2 hrs)</b>				
No record				
<b>TC3 <i>Halophila ovalis</i> (search hour = 3 hrs)</b>				
0.3	20	a single patch	22° 17.021' N 113° 55.637' E	A small patch of seagrass bed at tidal zone 1.5-2.0 m above C.D.
<b>ST <i>Halophila ovalis</i> (search hour = 3 hrs)</b>				
2.0	40	a single patch	22° 17.163' N 113° 55.478' E	A small patch of seagrass bed at tidal zone 1.5-2.0 m above C.D.
80.0	20-100	horizontal line	22° 17.170' N 113° 55.476' E	--
			22° 17.176' N 113° 55.474' E	A medium, horizontal strand of seagrass bed nearby the seaward side of
		vertical line	22° 17.173' N 113° 55.474' E	-- mangrove area at tidal level 2.0 m above C.D.
			22° 17.173' N 113° 55.478' E	
990.0	20-100	horizontal line	22° 17.182' N 113° 55.474' E	--
			22° 17.217' N 113° 55.475' E	A horizontal strand of seagrass bed nearby the seaward side of mangrove
		vertical line	22° 17.197' N 113° 55.473' E	-- area at tidal level 2.0 m above C.D.
			22° 17.197' N 113° 55.481' 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	Eunicidae	Eunicidae spp.
Animalia	Annelida	Polychaeta	Eunicida	Onuphidae	Onuphidae 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		Maldanidae	Maldanidae spp.
Animalia	Annelida	Polychaeta		Orbiniidae	Orbiniidae spp.
Animalia	Arthropoda	Malacostraca	Decapoda	Penaeidae	<i>Penaeus</i> sp.
Animalia	Arthropoda	Malacostraca	Decapoda	Diogenidae	<i>Clibanarius</i> sp.
Animalia	Arthropoda	Malacostraca	Decapoda	Paguridae	<i>Pagurus dubius</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Leucosiidae	<i>Philyra carinata</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Ocypodidae	<i>Macrophthalmus erato</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Ocypodidae	<i>Uca borealis</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Ocypodidae	<i>Uca lactea</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Ocypodidae	<i>Uca</i> sp.
Animalia	Arthropoda	Malacostraca	Decapoda	Ocypodidae	<i>Uca vocans</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Sesarmidae	<i>Nanosesarma minutum</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	Arthropoda	Maxillopoda	Sessilia	Balanidae	<i>Balanus trigonus</i>
Animalia	Cnidaria	Anthozoa	Actiniaria	Diadumenidae	<i>Diadumene lineata</i>
Animalia	Echinodermata	Ophiuroidea	Ophiurida	Amphiuridae	<i>Amphioplus</i> sp.
Animalia	Echiura				<i>Echiura</i> spp.
Animalia	Mollusca	Bivalvia	Anomalodesmata	Laternulidae	<i>Laternula anatina</i>
Animalia	Mollusca	Bivalvia	Euheterodonta	Hiatellidae	<i>Hiatella arctica</i>
Animalia	Mollusca	Bivalvia	Veneroida	Corbiculidae	<i>Geloina erosa</i>
Animalia	Mollusca	Bivalvia	Veneroida	Tellinidae	<i>Macoma murrayana</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>

**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	Veneroida	Veneridae	<i>Ruditapes philippinarum</i>
Animalia	Mollusca	Bivalvia	Arcoida	Arcidae	<i>Barbatia virescens</i>
Animalia	Mollusca	Bivalvia	Mytiloida	Mytilidae	<i>Xenostrobus atratus</i>
Animalia	Mollusca	Bivalvia	Ostreoida	Ostreidae	<i>Saccostrea cucullata</i>
Animalia	Mollusca	Bivalvia			<i>Unidentified small bivalve</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 moerchii</i>
Animalia	Mollusca	Gastropoda	Caenogastropoda	Potamididae	<i>Pirenella asiatica</i>
Animalia	Mollusca	Gastropoda	Caenogastropoda	Potamididae	<i>Pirenella incisa</i>
Animalia	Mollusca	Gastropoda	Littorinimorpha	Littorinidae	<i>Littoraria articulata</i>
Animalia	Mollusca	Gastropoda	Littorinimorpha	Littorinidae	<i>Peasiella spp.</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		Lottiidae	<i>Nipponacmea concinna</i>
Animalia	Mollusca	Gastropoda		Lottiidae	<i>Patelloidea pygmaea</i>
Animalia	Mollusca	Gastropoda		Nacellidae	<i>Cellana grata</i>
Animalia	Mollusca	Gastropoda		Nacellidae	<i>Cellana toreuma</i>
Animalia	Mollusca	Gastropoda	Neogastropoda	Nassariidae	<i>Nassarius festivus</i>
Animalia	Mollusca	Gastropoda	Neogastropoda	Nassariidae	<i>Nassarius hepaticus</i>
Animalia	Mollusca	Gastropoda		Trochidae	<i>Euchelus scaber</i>
Animalia	Mollusca	Gastropoda		Trochidae	<i>Monodonta labio</i>
Animalia	Mollusca	Gastropoda		Turbinidae	<i>Chlorostoma argyrostoma</i>
Animalia	Mollusca	Gastropoda		Turbinidae	<i>Lunella coronata</i>
Animalia	Mollusca	Polyplacophora	Chitonida	Ischnochitonidae	<i>Lepidozona sp.</i>
Animalia	Mollusca	Scaphopoda	Dentaliida	Dentaliidae	<i>Dentalium sinuosum</i>
Animalia	Nemertea				<i>Nemertea spp.</i>
Animalia	Platyhelminthes				<i>Platyhelminthes spp.</i>
Animalia	Sipuncula	Sipunculidea	Golfingiida	Sipunculidae	<i>Sipunculus nudus</i>

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

Jun 2018 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		
Bi	<i>Hiatella arctica</i>											1				1		
Bi	<i>Saccostrea cucullata</i>		2			1		2		5		2		2	6		20	
C	<i>Nanosesarma minutum</i>			1													1	
C	<i>Uca borealis</i>													1			1	
G	<i>Batillaria multiformis</i>	8		3		15		27		36		150		101		144		659
G	<i>Batillaria zonalis</i>	13		13													26	
G	<i>Cerithidea moerchii</i>								2				1		1	2	6	
G	<i>Clithon faba</i>	2										1		2	4		9	
G	<i>Clithon oualaniensis</i>	1				2									2		5	
G	<i>Littoraria articulata</i>										6						6	
G	<i>Lunella coronata</i>	3		1		1											5	
G	<i>Monodonta labio</i>			8		24		20		12		2		9	3	2	6	86
G	<i>Pirenella asiatica</i>	65		9			1		1					4		2		82
G	<i>Pirenella incisa</i>	99		83		9		33		10		3		2	20	4	24	287
P	<i>Maldanidae spp.</i>	1															1	
															Total	1195		

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

Jun 2018 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	sub-total
Ba	<i>Balanus amphitrite</i>	1											1
Bi	<i>Barbatia virescens</i>			1				5					6
Bi	<i>Cyclina sinesis</i>								7				7
Bi	<i>Geloina erosa</i>										1		1
Bi	<i>Hiatella arctica</i>									1	1		2
Bi	<i>Saccostrea cucullata</i>	29	31	34	27	13	61	15	74	8	5		297
Bi	<i>Xenostrobus atratus</i>						14						14
C	<i>Nanosesarma minutum</i>	2	2	4	3		1		1				13
G	<i>Batillaria multiformis</i>	1	10	11	76	95	65	61	38	16	78		451
G	<i>Batillaria zonalis</i>	9	3	1									13
G	<i>Cellana toreuma</i>	3	1	3	2	3	2	1	1	1			17
G	<i>Cerithidea moerchii</i>										3		3
G	<i>Clithon faba</i>								4	5			9
G	<i>Clithon ovalaniensis</i>	2				2			4		3		11
G	<i>Littoraria articulata</i>	1	2		1		2				1		7
G	<i>Lunella coronata</i>	3	1	1	3					1	1		10
G	<i>Monodonta labio</i>	14	41	25	25	24	20	31	51	27	7		265
G	<i>Nerita polita</i>		1	1	1								3
G	<i>Nipponacmea concinna</i>			9	4			3					16

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

Jun 2018 Sampling zone TC 1 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>Patelloidea pygmaea</i>									1		5		5				11	
G	<i>Pirenella asiatica</i>	12		7		8		11				1		1		3		42	
G	<i>Pirenella incisa</i>	34		16		35		21		20			15		4		29		174
Ne	<i>Nemertea</i> spp.					1		1										2	
Sp	<i>Sipunculus nudus</i>	1			1	2		2										6	
																Total	1381		

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

Jun 2018 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 trigonus</i>																	24	6		30	
Bi	<i>Barbatia virescens</i>							1				5		2		2		4		7		21
Bi	<i>Hiatella arctica</i>									6		1		7		17		27		2		68
Bi	<i>Saccostrea cucullata</i>	47		15		7		43		32		65		45		48		35		59		396
Bi	<i>Xenostrobus atratus</i>							4				6		7		7			5			29
C	<i>Hemigrapsus penicillatus</i>			1		1											1					3
C	<i>Nanosesarma minutum</i>			2				2		1									1			6
C	<i>Uca lactea</i>			1																		1
G	<i>Batillaria bornii</i>			1				1												4		6
G	<i>Batillaria multiformis</i>	17		6		15		10		8		6		2		16		3		2		85
G	<i>Batillaria zonalis</i>			22	1	2																25
G	<i>Cellana grata</i>							1														1
G	<i>Cellana toreuma</i>			3		4		1		4		9		10		12		8		7		58
G	<i>Cerithidea moerchii</i>													1								1
G	<i>Clithon faba</i>					1		1						2		3		2		1		10
G	<i>Clithon ovalaniensis</i>			2		2		2								2						8
G	<i>Euchelus scaber</i>							1										1				2
G	<i>Lepidozona sp.</i>									1						1		1				3
G	<i>Littoraria articulata</i>							1		1									1			3

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

Jun 2018 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							
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	sub-total
G	<i>Lunella coronata</i>	3		2	2	3	3	4	4	3	1							25
G	<i>Monodonta labio</i>	49	1	1	23	38	21	14	23	26	18	63						277
G	<i>Nipponacmea concinna</i>	4	2	1	3	1		8	4	6	8							37
G	<i>Patelloidea pygmaea</i>		1			2	5	2	7	7	7							31
G	<i>Pirenella asiatica</i>	2	5	1		7				4								19
G	<i>Pirenella incisa</i>	11	40	33	1	29	1	3	4	21								143
Hc	<i>Pagurus dubius</i>									1								1
Ne	<i>Nemertea</i> spp.								1	1								2
P	<i>Ampharetidae</i> spp.									1								1
P	<i>Maldanidae</i> spp.			3							1							4
Pl	<i>Platyhelminthes</i> spp.											1						1
Sp	<i>Sipunculus nudus</i>					2			2									4
																Total	1301	

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

Jun 2018 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		1				5
Bi	<i>Anomalocardia squamosa</i>																1					1
Bi	<i>Laternula anatina</i>																	1				1
Bi	<i>Saccostrea cucullata</i>	4		28		12				34		2		1		6		13		19		119
Bi	<i>Xenostrobus atratus</i>			5						1						1		6		2		15
C	<i>Hemigrapsus penicillatus</i>	2																				2
C	<i>Macrophthalmus erato</i>									1												1
C	<i>Nanosesarma minutum</i>	1		1																		2
C	<i>Uca lactea</i>	2				1						2		7		1		6		4		23
Eh	<i>Echiura spp.</i>	2				1																3
G	<i>Batillaria multiformis</i>	6		33		2		1		7		24		4		2	1	5		2		87
G	<i>Batillaria zonalis</i>					2				3		8		25		35		11	1	9		94
G	<i>Cellana toreuma</i>			1																		1
G	<i>Cerithidea moerchii</i>	8				1		2				2		2				1				16
G	<i>Clithon oualaniensis</i>					2																2
G	<i>Littoraria articulata</i>	1		22						2												25
G	<i>Lunella coronata</i>																	1		2		3
G	<i>Monodonta labio</i>	17		61		8			3								3		1			93
G	<i>Nerita polita</i>			3		1			1													5

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

Jun 2018 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	Q	C	Q	C	Q	C	sub-total
G	<i>Nipponacmea concinna</i>		2		1							1		3						7
G	<i>Pirenella asiatica</i>	3		75		10	2	10		13		5		5		1				124
G	<i>Pirenella incisa</i>	46		12		40		43		99		168		100		100		72		753
P	<i>Ampharetidae spp.</i>										4		3		1					8
P	<i>Maldanidae spp.</i>													1						1
																		<b>Total</b>	<b>1391</b>	

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

Jun 2018 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>							1				2		9		9		2		12		35
Bi	<i>Barbatia virescens</i>				1									6		7		2				16
Bi	<i>Hiatella arctica</i>											2		2		1		2		3		10
Bi	<i>Saccostrea cucullata</i>	27		59		1				11		18		62		89		31		8		306
Bi	<i>Unidentified small bivalve</i>																				1	1
Bi	<i>Xenostrobus atratus</i>		5											7		7		3				22
C	<i>Hemigrapsus penicillatus</i>													1		2		2				5
C	<i>Nanosesarma minutum</i>				1									6		7		3		1		18
C	<i>Uca lactea</i>						6															6
C	<i>Uca sp.</i>								1													1
G	<i>Batillaria bornii</i>				1								3		5		1		2			12
G	<i>Batillaria multiformis</i>	22		3	1	2				1		4		2		15		2		6		58
G	<i>Batillaria zonalis</i>	9		7		18		16		12		31		25		28		37	1	38		222
G	<i>Cellana toreuma</i>	29		3									1									33
G	<i>Cerithidea moerchii</i>							1		2												3
G	<i>Clithon ovalaniensis</i>																			1		1
G	<i>Euchelus scaber</i>																			1		1
G	<i>Lunella coronata</i>	5		1		1				2		3		3		2		4		1		22
G	<i>Monodonta labio</i>	39		5									3		8		4					59

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

Jun 2018 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>Nerita polita</i>	2		2												1						5
G	<i>Nipponacmea concinna</i>	5		1											3				2			11
G	<i>Patelloidea pygmaea</i>													1		21		1		1		24
G	<i>Pirenella asiatica</i>	31		1		3		1			1		8		3		1		2			51
G	<i>Pirenella incisa</i>	1		30		50		48		34		35		33		13		36		30		310
Hc	<i>Pagurus dubius</i>			2															1			3
P	<i>Ampharetidae spp.</i>				1			1		1						1						4
P	<i>Maldanidae spp.</i>							1		1										1		3
P	<i>Onuphidae spp.</i>						1												1			2
P	<i>Oweniidae spp.</i>														1							1
Sp	<i>Sipunculus nudus</i>													1	2	2		2				7
																					Total	1252

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

Jun 2018 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		
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	sub-total
Ba	<i>Balanus amphitrite</i>			14	8			7	13	8	13	14	77
Bi	<i>Hiatella arctica</i>											10	10
Bi	<i>Saccostrea cucullata</i>		48			14			11	14	24	68	179
Bi	<i>Xenostrobus atratus</i>											4	4
C	<i>Hemigrapsus penicillatus</i>											1	1
C	<i>Nanosesarma minutum</i>	1	2	1				1	2		1	6	14
Ec	<i>Amphioplus sp.</i>				1								1
G	<i>Batillaria bornii</i>					2					2		4
G	<i>Batillaria multiformis</i>	3	4	1	3			1		1	2		15
G	<i>Batillaria zonalis</i>	6	6	5	5	17	15	6	22	1	5	14	102
G	<i>Cellana grata</i>											2	2
G	<i>Chlorostoma argyrostoma</i>		3										3
G	<i>Euchelus scaber</i>		3					1					4
G	<i>Lepidozona sp.</i>							1		2	1		4
G	<i>Lunella coronata</i>		1			9		3	1	3	2		19
G	<i>Nassarius festivus</i>										2		2
G	<i>Nipponacmea concinna</i>	3	3			3				1			10
G	<i>Patelloidea pygmaea</i>							3	2	2	4		11

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

Jun 2018 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									
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	sub-total		
G	<i>Pirenella asiatica</i>	24						2		3		12						41		
G	<i>Pirenella incisa</i>	2		3		5		8		15		18		12		22		8	9	102
Hc	<i>Pagurus dubius</i>	1																	1	
Ne	Nemertea spp.							1				1			1				3	
P	<i>Eunicidae</i> spp.					1													1	
P	<i>Maldanidae</i> spp.		1			1						4		3					9	
P	<i>Nereididae</i> spp.			1															1	
P	<i>Onuphidae</i> spp.			1										1					2	
S	<i>Penaeus</i> sp.				3														3	
																		Total	625	

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

Jun 2018 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 sp.</i>															3				1			4	
Bi	<i>Cyclina sinesis</i>															1							1	
Bi	<i>Geloina erosa</i>																			1	1		2	
Bi	<i>Laternula anatina</i>														1	1							1	3
Bi	<i>Saccostrea cucullata</i>					3																		3
C	<i>Nanosesarma minutum</i>																	1				1		2
C	<i>Philyra carinata</i>							1																1
C	<i>Uca lactea</i>																	8	1			4		13
G	<i>Batillaria multiformis</i>	18		68	1	95		37		24		4		7	2	1		2		68	12		339	
G	<i>Batillaria zonalis</i>	4		1		5	1	3		2														16
G	<i>Cerithidea moerchii</i>	3				1		3		1		5		3		4				3				23
G	<i>Clithon oualaniensis</i>					2		3		1											5			11
G	<i>Philine vitrea</i>																				2			2
G	<i>Pirenella asiatica</i>	31		8		69		30		92		20		4	1	28		7		10				300
G	<i>Pirenella incisa</i>	141		102		121		111		34		55		203		63		37		91				958
Ne	<i>Nemertea spp.</i>													1	1									2
P	<i>Ampharetidae spp.</i>							2				1					1							4
P	<i>Maldanidae spp.</i>									2		3	1	8										14

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

Jun 2018 Sampling zone TC 3 High tidal level (2.0 m above C.D.)

Gp	Taxon	1	2	3	4	5	6	7	8	9	10			
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	sub-total
P	<i>Nereididae spp.</i>							1						1
P	<i>Orbiniidae spp.</i>								1					1
												Total	1700	

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

Jun 2018 Sampling zone TC 3 Mid tidal level (1.5 m above C.D.)

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

Jun 2018 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>Monodonta labio</i>															1		24		5		30
G	<i>Nassarius festivus</i>															1						1
G	<i>Patelloidea pygmaea</i>																	2		3		5
G	<i>Pirenella asiatica</i>	67		93	3	161	6	103	6	43	1	37		6		7	4	4		17		558
G	<i>Pirenella incisa</i>	51		88	1	21	1	93		58		138		169		148		49		106		923
P	<i>Ampharetidae spp.</i>				3									3		2		1		1		3
P	<i>Maldanidae spp.</i>																					7
PI	<i>Platyhelminthes spp.</i>									2												2
Sp	<i>Sipunculus nudus</i>																	5				5
																				Total	2182	

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

Jun 2018 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>											3		3					3		9	
Bi	<i>Barbatia virescens</i>	5		1		2		26		16		7		12		4		4		3		80
Bi	<i>Hiatella arctica</i>	1						2				7		5		1						16
Bi	<i>Saccostrea cucullata</i>	75		73		29		55		42		130		136		45		67		101		753
Bi	<i>Xenostrobus atratus</i>					1						4				2		6		19		32
C	<i>Etisus laevimanus</i>			1				1														2
C	<i>Hemigrapsus penicillatus</i>											2										2
C	<i>Nanosesarma minutum</i>	5		1				6		6		3		1					1		23	
C	<i>Uca lactea</i>																		1		1	
Cn	<i>Diadumene lineata</i>	1								1									1		3	
Eh	<i>Echiura spp.</i>																		1		1	
G	<i>Batillaria bornii</i>	1									3		7					1			12	
G	<i>Batillaria multiformis</i>			47		23		4		41			2				23		4		144	
G	<i>Batillaria zonalis</i>									2			2				1				5	
G	<i>Cellana grata</i>														9			2		11		
G	<i>Cellana toreuma</i>	1				2				2			1		17		15		25		63	
G	<i>Cerithidea moerchii</i>										1						1				2	
G	<i>Euchelus scaber</i>							1		1		3		3							8	
G	<i>Lepidozona sp.</i>												1		1						2	

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

Jun 2018 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>Littoraria articulata</i>	2		11		4		5		1		1										24
G	<i>Lunella coronata</i>		5					4		7		16		6				9		8		55
G	<i>Monodonta labio</i>	36		43		83		42		27		14		10		50		69		75		449
G	<i>Nerita polita</i>					1					1		5		3		2					12
G	<i>Nipponacmea concinna</i>	8		3		4				4		1		3		1		1				25
G	<i>Patelloidea pygmaea</i>										11		8		7		12		11			49
G	<i>Pirenella asiatica</i>							2		2								2				6
G	<i>Pirenella incisa</i>	3		1				10		14		14		8			13		10			73
Ne	<i>Nemertea spp.</i>	1		1									1									3
Pl	<i>Platyhelminthes spp.</i>												1									1
Sp	<i>Sipunculus nudus</i>					1		1		2				1			2		1			8
																				Total	1874	

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

Jun 2018 Sampling zone ST High tidal level (2.0 m above C.D.)

Gp	Taxon	1		2		3		4		5		6		7		8		9		10		sub-total
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	
Bi	<i>Hiatella arctica</i>																				1	1
Bi	<i>Saccostrea cucullata</i>	26		9		30		13		20		6		18		8		17		35		182
Bi	<i>Xenostrobus atratus</i>	3				2		1		2				2								10
C	<i>Hemigrapsus penicillatus</i>							2														2
C	<i>Nanosesarma minutum</i>	1		1		1				2							2		3		1	11
Cn	<i>Diadumene lineata</i>			9		1																10
G	<i>Batillaria bornii</i>	2		1		6				22		5				3		1		7		47
G	<i>Batillaria multiformis</i>	6		7		37		20		23		35		30		33		30		35		256
G	<i>Cellana grata</i>					1		1		4		1								2		9
G	<i>Cellana toreuma</i>	3				16		19		35		29		11		17		23		1		154
G	<i>Clithon faba</i>					2		2				1										5
G	<i>Clithon ovalaniensis</i>	1		2		2		1		2		3								3		14
G	<i>Lepidozona sp.</i>													3								3
G	<i>Littoraria articulata</i>	3		20		3		2														28
G	<i>Lunella coronata</i>			1		4		5		12		5		4		8		4		2		45
G	<i>Monodonta labio</i>	42		29		50		76		36		28		28		46		44		29		408
G	<i>Nerita polita</i>	1						1						1								3
G	<i>Nipponacmea concinna</i>			1				1		4		1		7								14
G	<i>Patelloidea pygmaea</i>				1					6					4		1		4		16	

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

Jun 2018 Sampling zone ST High tidal level (2.0 m above C.D.)

Gp	Taxon	1										2										3										4										5											
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	sub-total									
G	<i>Pirenella asiatica</i>					1				4		30		7		2		1		5																								50									
G	<i>Pirenella incisa</i>		1		2				2		2		9		6		1		4																								27										
Hc	<i>Clibanarius sp.</i>									2																																		2									
Ne	<i>Nemertea spp.</i>																					1																					1										
G	<i>Pirenella asiatica</i>					1				4		30		7		2		1		5																						50											
G	<i>Pirenella incisa</i>		1		2				2		2		9		6		1		4																							27											
Hc	<i>Clibanarius sp.</i>								2																																			2									
Ne	<i>Nemertea spp.</i>																					1																						1									
																																									<b>Total</b>		<b>1298</b>										

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

Jun 2018 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
Bi	<i>Barbatia virescens</i>	1																				12
Bi	<i>Circe sp.</i>					1				2												3
Bi	<i>Hiatella arctica</i>			4										4		2				1		11
Bi	<i>Saccostrea cucullata</i>	139		35						21		34		45		26		75		60		435
Bi	<i>Tellina sp.</i>					1																1
Bi	<i>Xenostrobus atratus</i>	7		5					2										4		3	21
C	<i>Hemigrapsus penicillatus</i>	1										1		1								3
C	<i>Nanosesarma minutum</i>	7		1										1				2		3		14
Cn	<i>Diadumene lineata</i>																			1		1
G	<i>Batillaria bornii</i>			2						17		13		2		15		10		19		78
G	<i>Batillaria multiformis</i>			4		2		1	2	1	2		1					2		3		18
G	<i>Batillaria zonalis</i>			1		22			14													37
G	<i>Cellana grata</i>	2											2				1			1		6
G	<i>Cellana toreuma</i>	5		7								1		4		4		7		11		18
G	<i>Cerithidea moerchii</i>																				1	1
G	<i>Clithon faba</i>									1				1		1						3
G	<i>Clithon ovalaniensis</i>																3		1		4	
G	<i>Euchelus scaber</i>		1											1		2						4

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

Jun 2018 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>Lepidozona</i> sp.	1		2						3		1						2				9
G	<i>Littoraria articulata</i>		4																	1		5
G	<i>Lunella coronata</i>	7		11							1		6		12		12		15		19	83
G	<i>Monodonta labio</i>	41		25		1				5		7		21		19		45		55	219	
G	<i>Nassarius hepaticus</i>					4																4
G	<i>Nerita polita</i>											2										2
G	<i>Nipponacmea concinna</i>									8		23		35								66
G	<i>Patelloidea pygmaea</i>	4		16							1		5		2		5		7			40
G	<i>Peasiella</i> spp.			1																		1
G	<i>Pirenella asiatica</i>			1						2		17		3		4		2		9		38
G	<i>Pirenella incisa</i>	1		20		15		30		18		3		9		14		11		4		125
Hc	<i>Clibanarius</i> sp.									1												1
Ne	<i>Nemertea</i> spp.		2																	1		3
P	<i>Maldanidae</i> spp.					1																1
																					Total	1307

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

Jun 2018 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>	7																				7
Bi	<i>Barbatia virescens</i>	1																1				2
Bi	<i>Circe sp.</i>													2								2
Bi	<i>Hiatella arctica</i>	1																				1
Bi	<i>Laternula anatina</i>					1																1
Bi	<i>Macoma murrayana</i>							1														1
Bi	<i>Ruditapes philippinarum</i>	1																				1
Bi	<i>Saccostrea cucullata</i>	47														2		9		7		65
Bi	<i>Xenostrobus atratus</i>	6																				6
C	<i>Hemigrapsus penicillatus</i>																		1			1
C	<i>Nanosesarma minutum</i>	6																				6
G	<i>Batillaria multiformis</i>			3													2	4				9
G	<i>Batillaria zonalis</i>	5		14											7			10			5	41
G	<i>Cellana toreuma</i>	8																				8
G	<i>Dentalium sinuosum</i>					1														1		2
G	<i>Euchelus scaber</i>	3																				3
G	<i>Lepidozona sp.</i>	1																				1
G	<i>Lunella coronata</i>	19				2		5		1					1		1					27
G	<i>Monodonta labio</i>																					2

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

Jun 2018 Sampling zone ST Low tidal level (1.0 m above C.D.)

Gp	Taxon	1	2	3	4	5	6	7	8	9	10		
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	sub-total
G	<i>Nassarius festivus</i>							1	1				2
G	<i>Patelloida pygmaea</i>	7								2			9
G	<i>Pirenella asiatica</i>	17	1			2		1	1				22
G	<i>Pirenella incisa</i>	17	19			19		6		17			78
Ne	<i>Nemertea spp.</i>			1									1
P	<i>Ampharetidae spp.</i>							1					1
P	<i>Maldanidae spp.</i>				1			1	1				3
P	<i>Nereididae spp.</i>				1						1		2
P	<i>Oweniidae spp.</i>			1				1					2
P	<i>Sabellidae spp.</i>							1					1
Sp	<i>Sipunculus nudus</i>	1											1
												Total	308

### Key for faunal groups (Gp):

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