

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. (September 2019)*

TC1



Plastic waste



Trash gill net

TC3



Boat wreckage

ST



Trash gill net and hand trolley



A tangled horseshoe crab on a trash net (record in June 2017)

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

TC3 *Carcinoscorpius rotundicauda*



TC3 *Tachypleus tridentatus*



Figure 3.1 *Examples of photographic records of horseshoe crab (September 2019)*

ST *Carcinoscorpius rotundicauda*



TC2 *Carcinoscorpius rotundicauda*



Figure 3.1 (CON'T) *Examples of photographic records of horseshoe crab (September 2019)*

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

	TC1	TC2	TC3	ST
Search duration (hr)	2	2	3	3
<i>Carcinoscorpius rotundicauda</i>				
No. of individuals	0	1	32	9
Mean prosomal width (mm)	\	20.32	37.02	26.8
Max..prosomal width (mm)	\	\	70.71	35.41
Min. prosomal width (mm)	\	\	10.13	18.25
Search record (ind. hr ⁻¹ person ⁻¹)	0.00	0.25	5.33	1.50
<i>Tachypleus tridentatus</i>				
No. of individuals	0	0	8	0
Mean prosomal width (mm)	\	\	47.62	\
Max..prosomal width (mm)	\	\	98.14	\
Min. prosomal width (mm)	\	\	20.52	\
Search record (ind. hr ⁻¹ person ⁻¹)	0.00	0.00	1.33	0.00

March 2015 - ST



June 2017 - TC2



(Female)



(Male)

June 2017 - TC3



Figure 3.2 Photographic records of mating pairs of horseshoe crab

December 2017 – TC3



June 2018 – TC3



(Female)



(Male)

Figure 3.2(Cont'd) *Photographic records of mating pair of horseshoe crab*

March 2019 – TC2



June 2019 – TC3



Figure 3.2 (Cont'd). *Photographic records of mating pair of horseshoe crab*

TC1



TC2



Figure 3.3 *Photographic records of newly hatched individuals of horseshoe crab (September 2018)*

Carcinoscorpius rotundicauda

June 2017



December 2017

December 2018



March 2019



Figure 3.4 *Photographic records of large individuals (>100 mm) of horseshoe crabs records were excluded from data analysis*

Tachypleus tridentatus

September 2017



June 2019



Figure 3.4 (Cont'd) *Photographic records of large individuals (>100 mm) of horseshoe crabs records were excluded from data analysis*

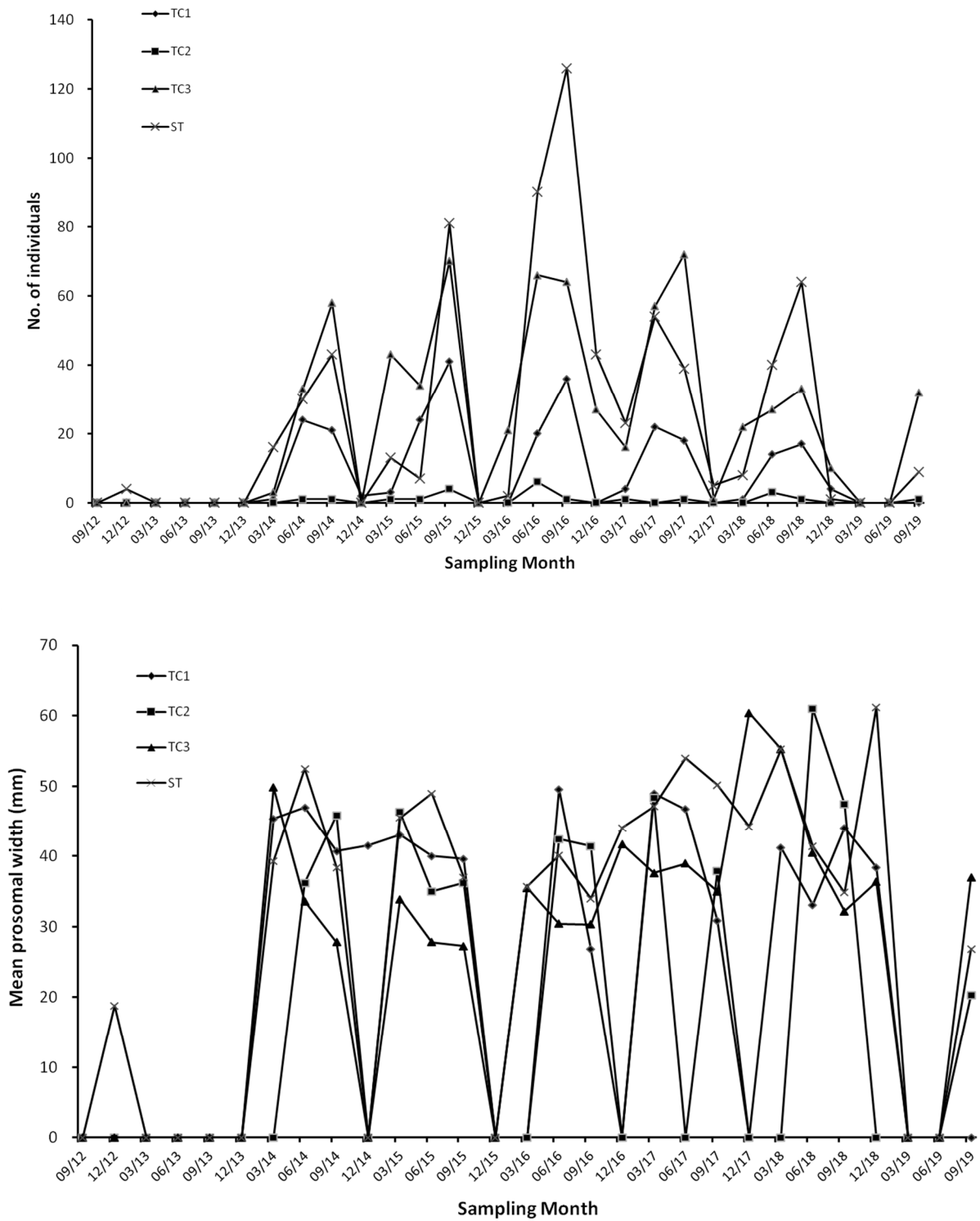


Figure 3.5 Changes of number of individuals mean prosomal width and search record of horseshoe crab *Carcinoscorpius rotundicauda* in every sampling zone along the sampling months

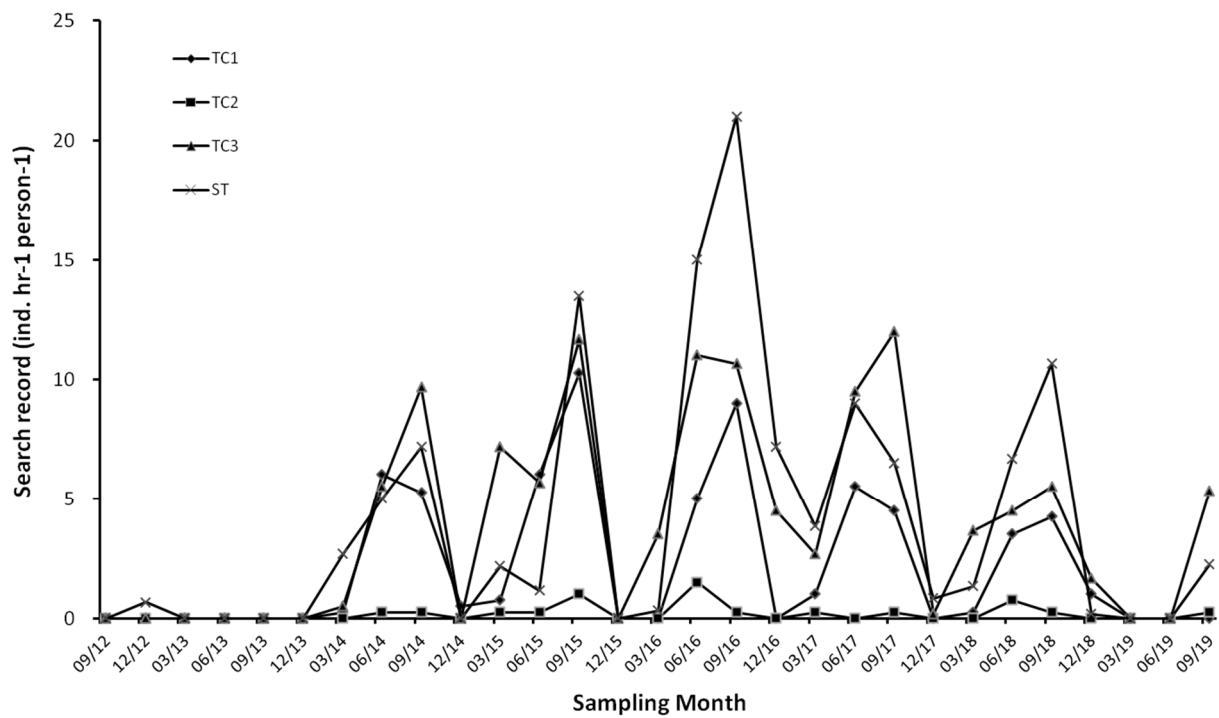


Figure 3.5 (Cont'd) Changes of number of individuals mean prosomal width and search record of horseshoe crab *Carcinoscorpius rotundicauda* in every sampling zone along the sampling months

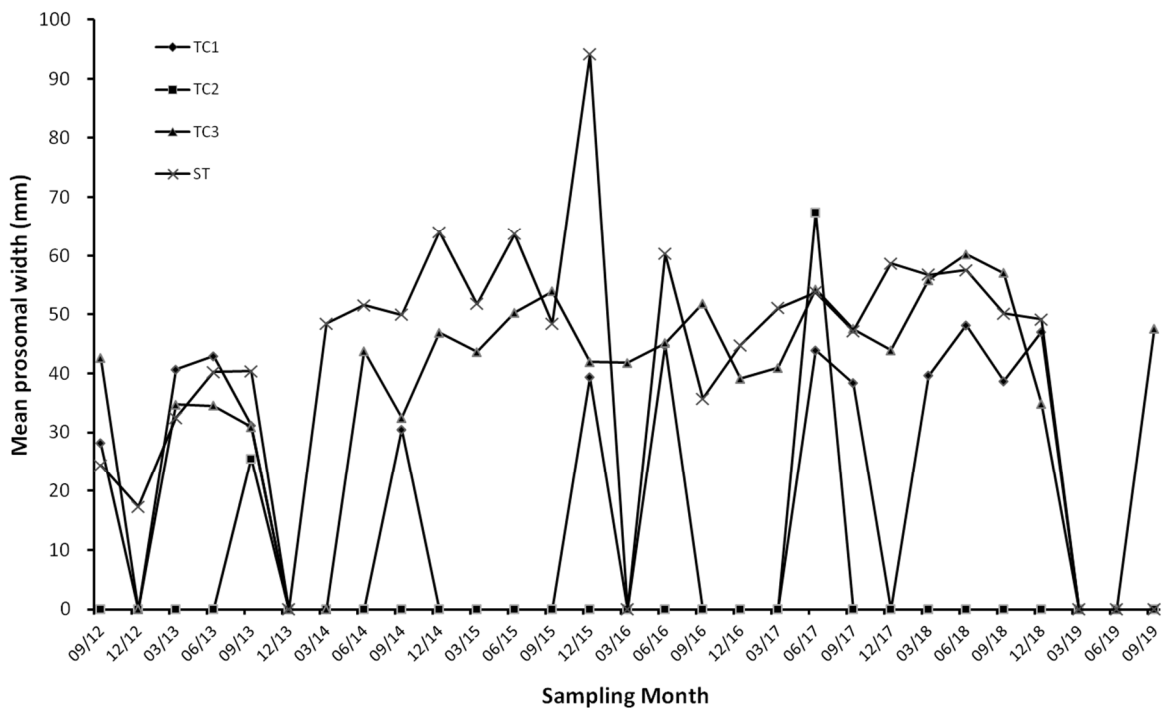
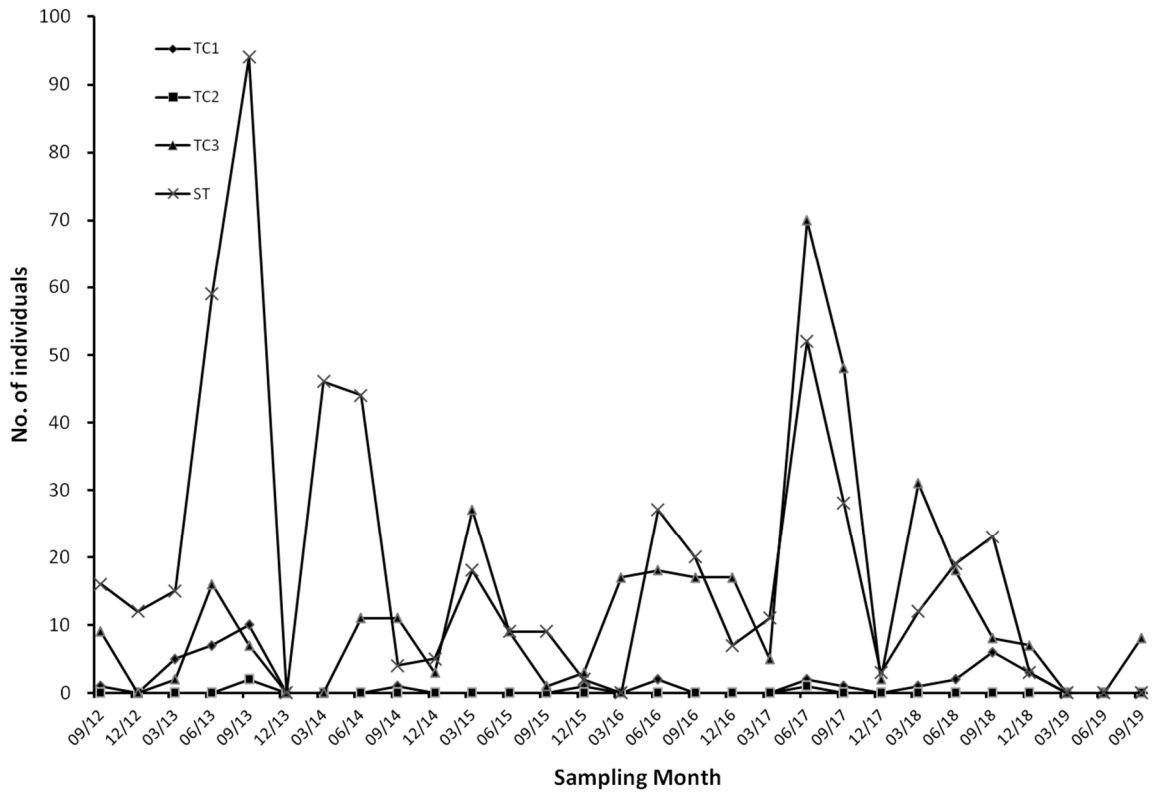


Figure 3.6 Changes of number of individuals mean prosomal width and search record of horseshoe crab *Tachypleus tridentatus* in every sampling zone along the sampling months

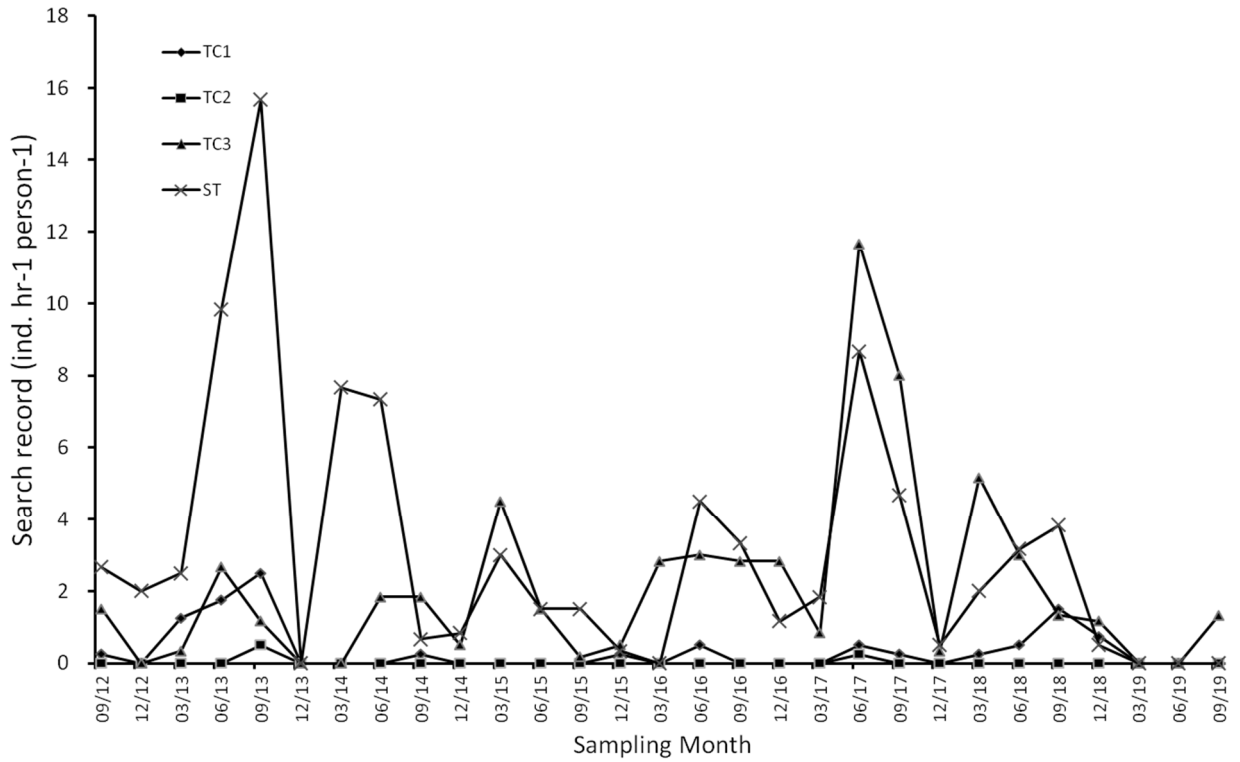


Figure 3.6 (Cont'd) Changes of number of individuals mean prosomal width and search record of horseshoe crab *Tachypleus tridentatus* in every sampling zone along the sampling months

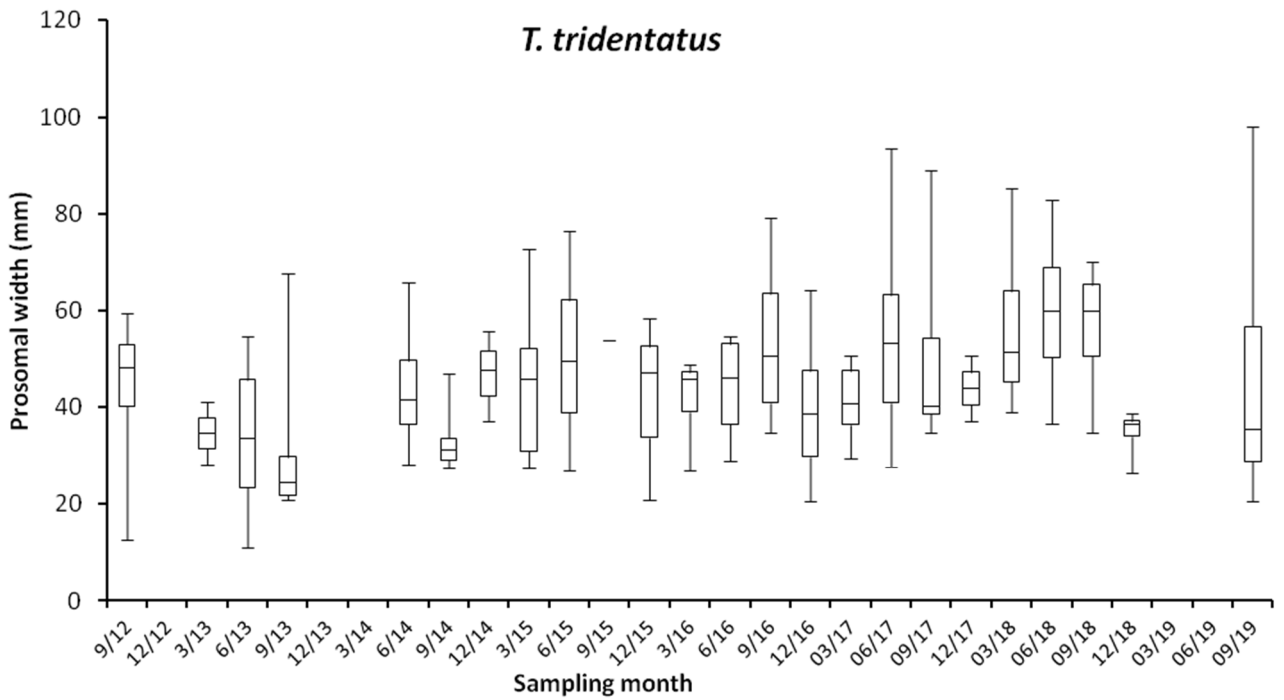
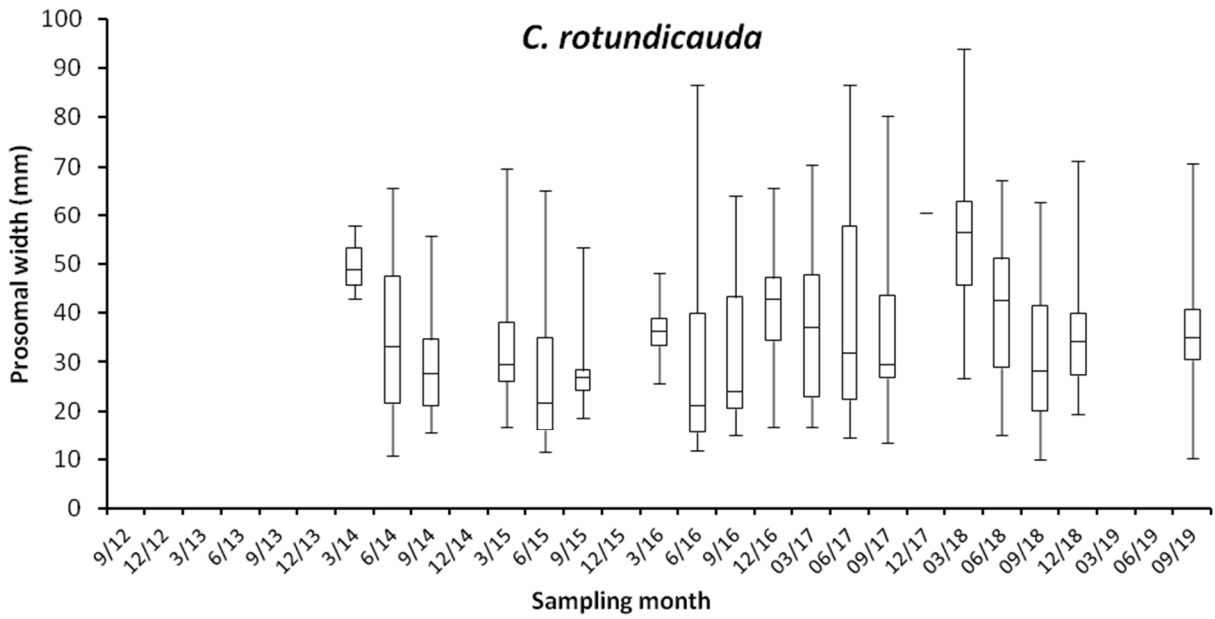


Figure 3.7 Box plot of prosomal width of horseshoe crab in the sampling zone TC3 along the sampling months. (The box represents 50% of the sample (upper to lower quartile) with a middle line showing the median value. The upper whisker and lower whisker showed the 25% of sample above upper quartile and below the lower quartile respectively)

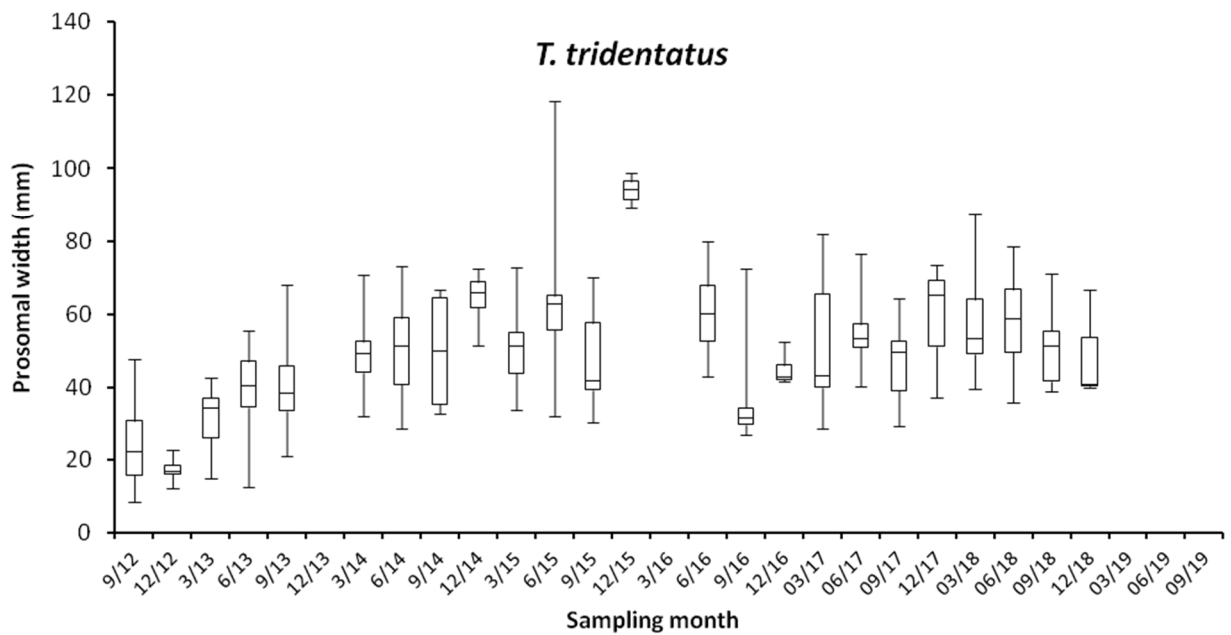
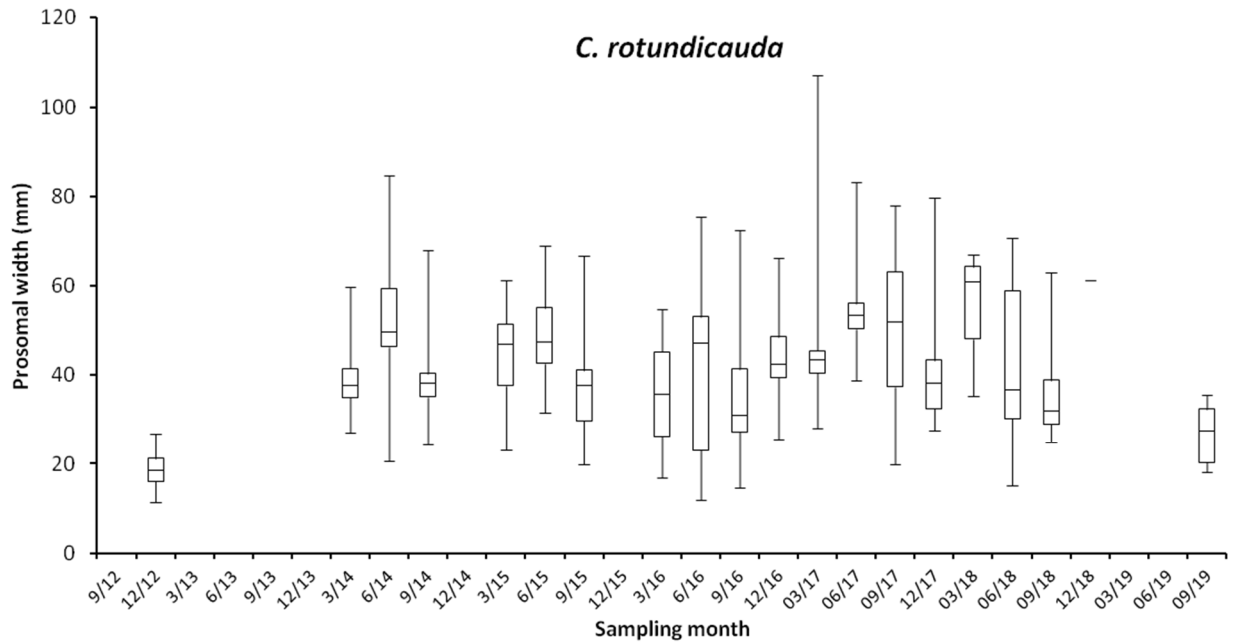


Figure 3.8 Box plot of prosomal width of horseshoe crab in the sampling zone ST along the sampling months. (The box represents 50% of the sample (upper to lower quartile) with a middle line showing the median value. The upper whisker and lower whisker showed the 25% of sample above upper quartile and below the lower quartile respectively.)

***Halophila ovalis* in TC3**



***Halophila ovalis* in ST**



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

TC3



Single patch of *Halophila ovalis*

TC3 - ST



Extensive patch of *Halophila ovalis*



ST



Medium, horizontal patch of *Zostera japonica*



Figure 3.10 Examples of photographic records of seagrass beds (record in June 2017)

Table 3.2. *Summary of seagrassbeds survey*

Sampling zone	TC3 <i>Halophila ovalis</i>	ST <i>Halophila ovalis</i>
Number of patches	4	2
Total area (m²)	17.3	1200
Average area (m²)	4.3	600

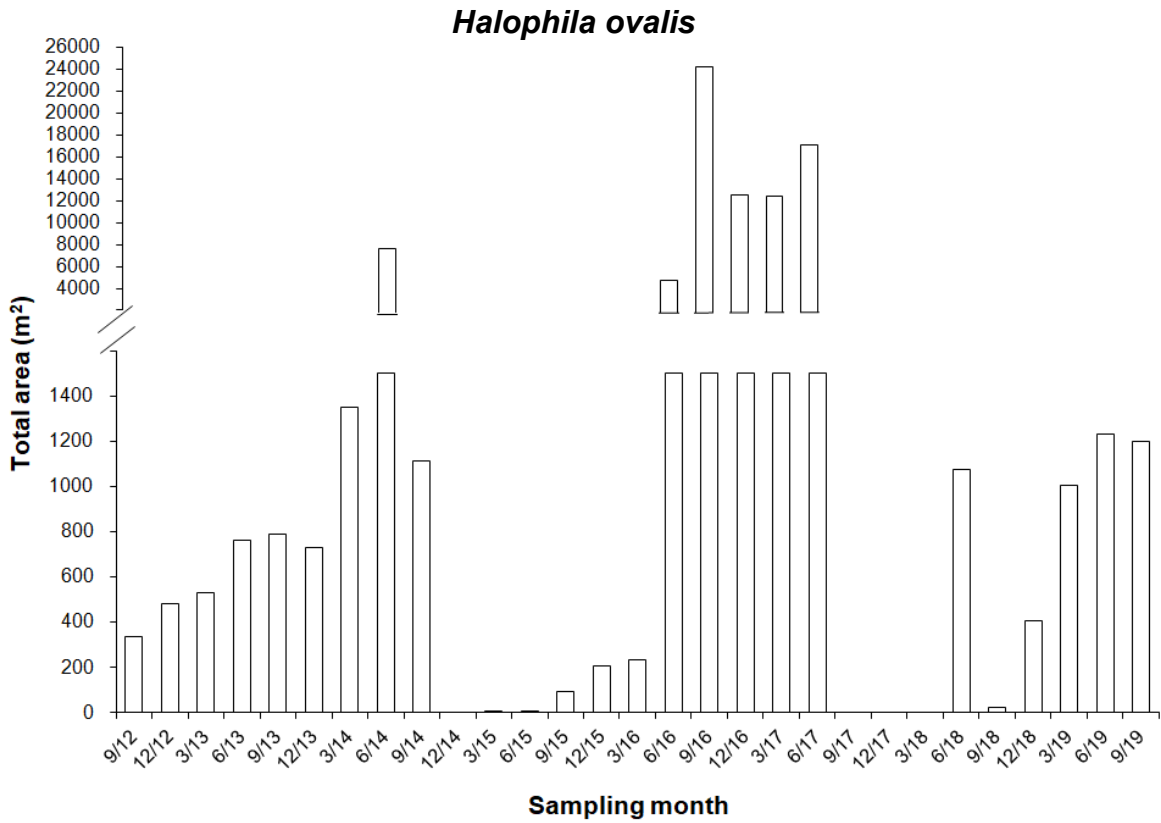
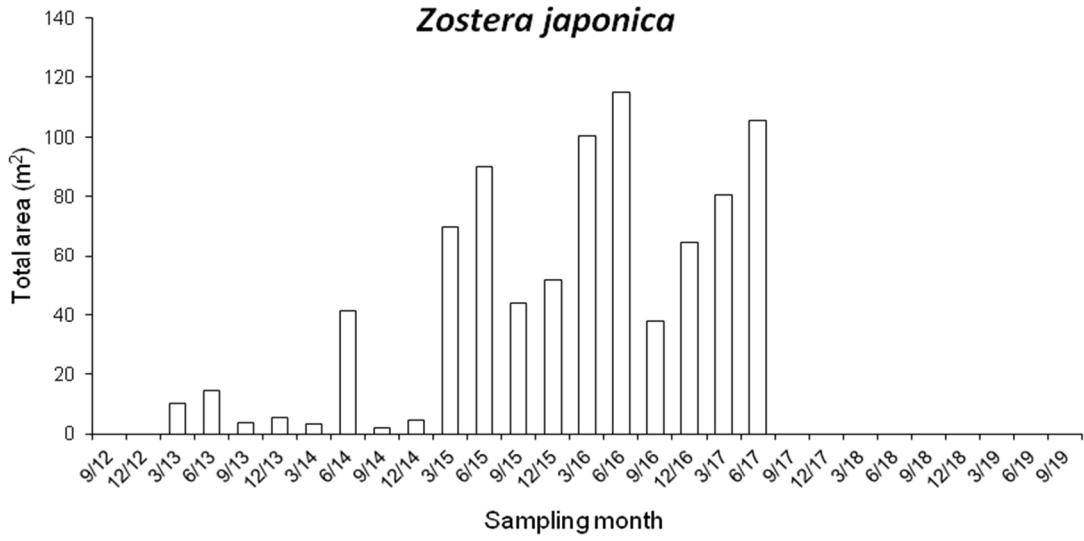


Figure 3.11 Temporal changes of estimated total area of seagrass beds in ST

June 2014



December 2014 (no seagrass)



September 2015



June 2017



September 2017-March 2018 (no seagrass)



September 2018



Figure 3.12 Comparison of pictures taken in different sampling months shows the successive disappearance and recolonization of seagrass beds. The picture of December 2018 was lacking due to night-dawn survey time.

March 2019



June 2019



September 2019



Figure 3.12 (Cont'd) Comparison of pictures taken in different sampling months shows the successive disappearance and recolonization of seagrass beds. The picture of December 2018 was lacking due to night-dawn survey time.

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	90	10	
	M	70	30	
	L	50	10	40
TC2	H	80	20	
	M	60	10	30
	L	40	20	40
TC3	H	50	30	20
	M	40	40	20
	L	70	10	20
ST	H	90	10	
	M	70	30	
	L	40	30	30

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

TC1 H



TC1 L



23/9/2019

TC2 H



TC2 L



10/9/2019

TC3 H



TC3 L



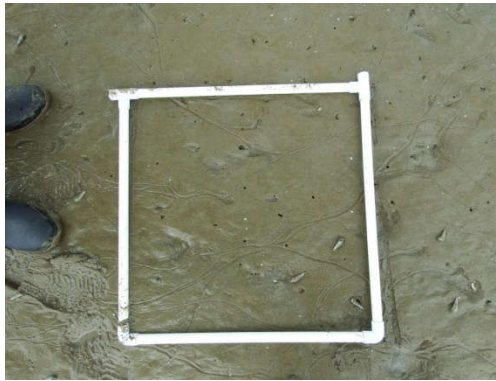
25/9/2019

Figure 3.13 *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.)*

ST H



ST L



9/9/2019

Figure 3.13.(Cont'd) *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⁻²)	Number of Taxon
<i>September 2019</i>				
Mollusca	10594	94.2	353.1	40
Arthropoda	506	4.5	16.9	9
Annelida	45	0.4	1.5	7
Chordata	2	0.0	0.1	1
Sipuncula	49	0.4	1.6	3
Nemertea	5	0.0	0.2	1
Cnidaria	39	0.3	1.3	1
Platyhelminthes	3	0.0	0.1	1
Total	12243			

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

0 ind. m⁻²: Density of the phylum is less than 1 ind. m⁻².

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

Phylum	TC1	%	Density (ind. m ⁻²)	TC2	%	Density (ind. m ⁻²)	TC3	%	Density (ind. m ⁻²)	ST	%	Density (ind. m ⁻²)
Mollusca	3360	98	448	2649	92	353	1761	87	235	2824	97	377
Arthropoda	28	1	4	181	6	24	216	11	29	81	3	11
Annelida	10	0	1	5	0	1	28	1	4	2	0	0
Chordata	0	0	0	0	0	0	0	0	0	2	0	0
Sipuncula	9	0	1	29	1	4	2	0	0	9	0	1
Nemertea	1	0	0	1	0	0	3	0	0	0	0	0
Cnidaria	2	0	0	16	1	2	20	1	3	1	0	0
Platyhelminthes	2	0	0	0	0	0	0	0	0	1	0	0
Sub-total	3412			2881			2030			2920		

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

0 ind. m⁻²: Density of the phylum is less than 1 ind. m⁻² 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 ⁻²)	Relative abundance (%)	Cumulative relative abundance (%)
High	Bi	<i>Saccostrea cucullata</i>	66	23	4
	G	<i>Batillaria zonalis</i>	44	15	1
	G	<i>Monodonta labio</i>	43	15	5
	G	<i>Batillaria multiformis</i>	42	14	64
Mid	Bi	<i>Saccostrea cucullata</i>	144	33	17
	G	<i>Monodonta labio</i>	62	14	31
	G	<i>Batillaria multiformis</i>	59	13	63
Low	Bi	<i>Saccostrea cucullata</i>	186	29	33
	G	<i>Nodilittorina radiata</i>	108	17	7
	G	<i>Monodonta labio</i>	99	16	61

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 ⁻²)	Relative abundance (%)	Cumulative relative abundance (%)
High	G	<i>Batillaria multiformis</i>	72	20	82
	Bi	<i>Saccostrea cucullata</i>	60	17	45
	G	<i>Batillaria zonalis</i>	47	13	71
Mid	Bi	<i>Saccostrea cucullata</i>	94	23	34
	G	<i>Batillaria multiformis</i>	89	22	6
	G	<i>Monodonta labio</i>	66	16	7
Low	Bi	<i>Saccostrea cucullata</i>	108	27	51
	G	<i>Monodonta labio</i>	60	15	4

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 ⁻²)	Relative abundance (%)	Cumulative relative abundance (%)
High	Bi	<i>Saccostrea cucullata</i>	86	28	2
	G	<i>Batillaria multiformis</i>	38	12	73
Mid	Bi	<i>Saccostrea cucullata</i>	43	18	4
	G	<i>Monodonta labio</i>	24	10	3
	G	<i>Batillaria multiformis</i>	24	10	82
Low	Bi	<i>Saccostrea cucullata</i>	74	28	37
	Ba	<i>Balanus amphitrite</i>	31	12	9
	G	<i>Lunella granulata</i>	28	11	1

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 ⁻²)	Relative abundance (%)	Cumulative relative abundance (%)
High	Bi	<i>Saccostrea cucullata</i>	61	28	12
	G	<i>Monodonta labio</i>	47	21	44
Mid	Bi	<i>Saccostrea cucullata</i>	80	18	27
	G	<i>Batillaria zonalis</i>	73	16	2
	G	<i>Monodonta labio</i>	62	13	52
Low	Bi	<i>Saccostrea cucullata</i>	146	30	23
	G	<i>Monodonta labio</i>	65	13	46

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

Samling zone	Tidal	Mean species number (spp. 0.25m ⁻²)	Mean species number across tidal levels	Mean density (ind. m ⁻²)	Mean density across tidal levels	Mean H'	Mean H' across tidal levels	Mean J	Mean J across tidal levels
TC1	H	9		291		1.7		0.8	
	M	11	11	435	455	1.8	1.83	0.8	0.80
	L	13		639		2.0		0.8	
TC2	H	10		352		1.8		0.8	
	M	9	10	406	384	1.7	1.70	0.8	0.80
	L	11		394		1.6		0.8	
TC3	H	10		310		1.8		0.8	
	M	10	10	235	271	2.0	1.90	0.8	0.80
	L	11		268		1.9		0.8	
ST	H	6		221		1.3		0.7	
	M	11	8	459	389	2.0	1.57	0.8	0.77
	L	7		488		1.4		0.8	

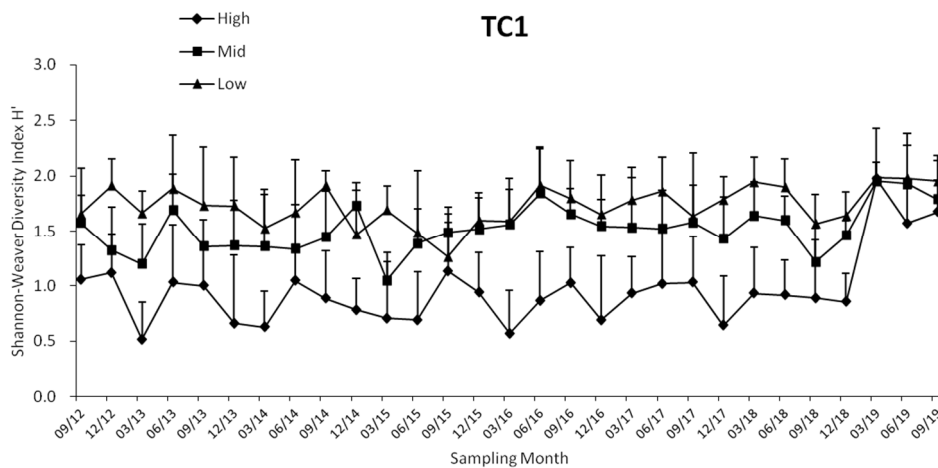
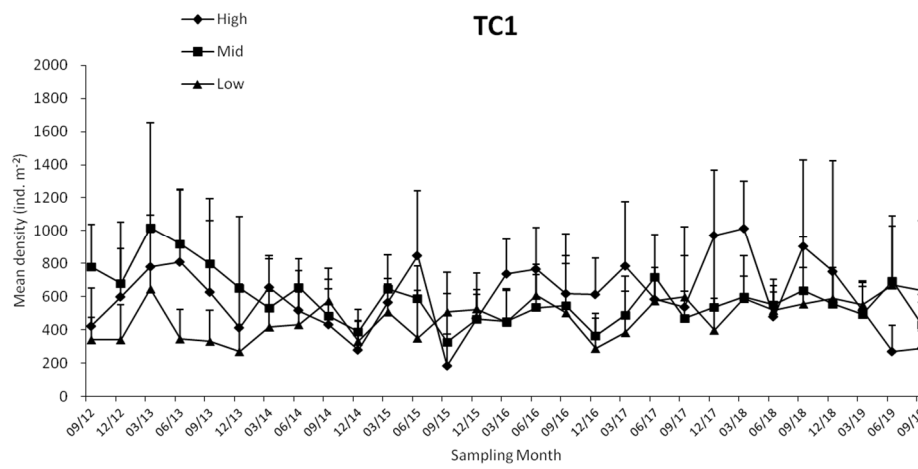
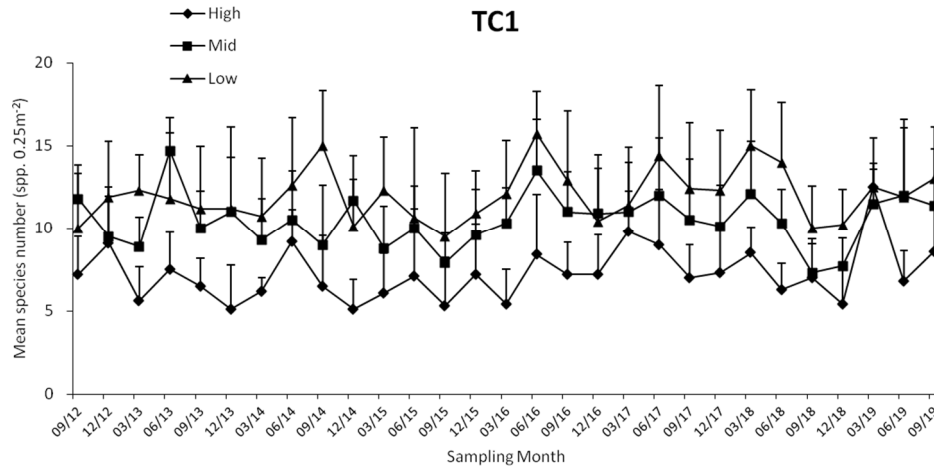


Figure 3.14 Temporal changes of mean number of species, mean density, Shannon-Weaver Diversity Index (H') and Pielou's Species Evenness (J) (mean + SD) at every tidal level in sampling zone TC1

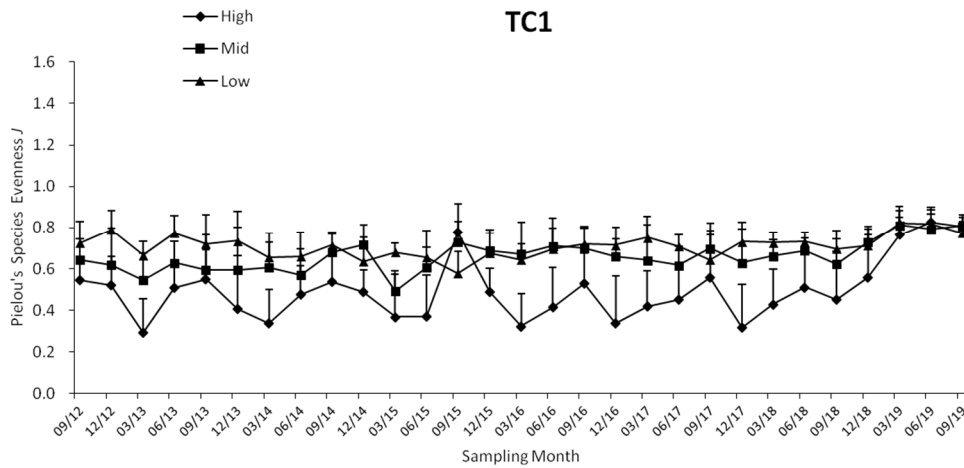


Figure 3.14(Cont'd) Temporal changes of mean number of species, mean density, Shannon-Weaver Diversity Index (H') and Pielou's Species Evenness (J) (mean + SD) at every tidal level in sampling zone TC1

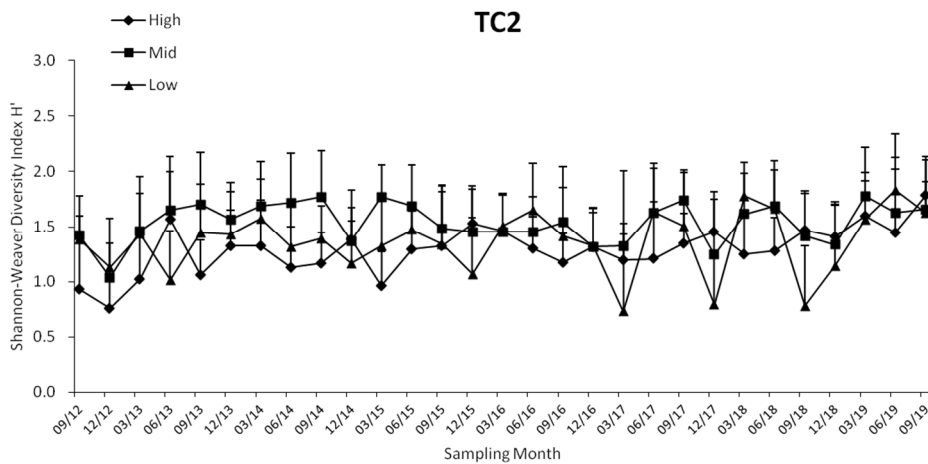
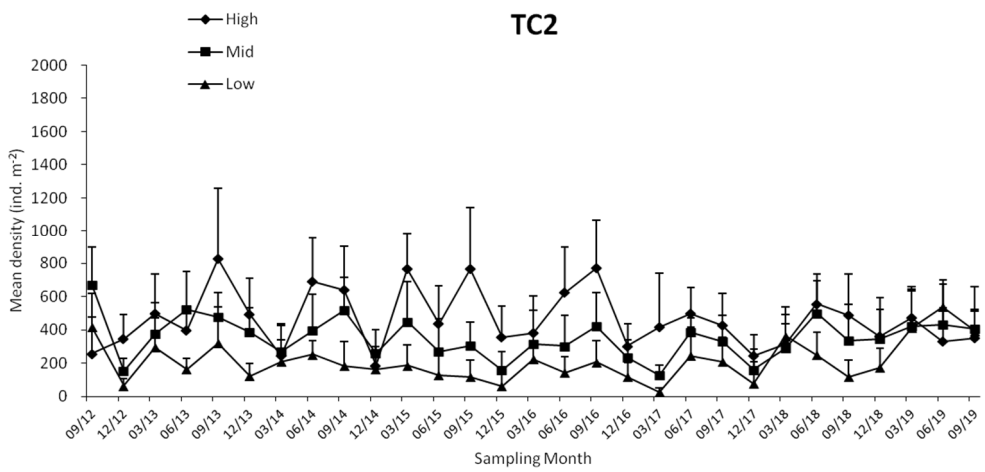
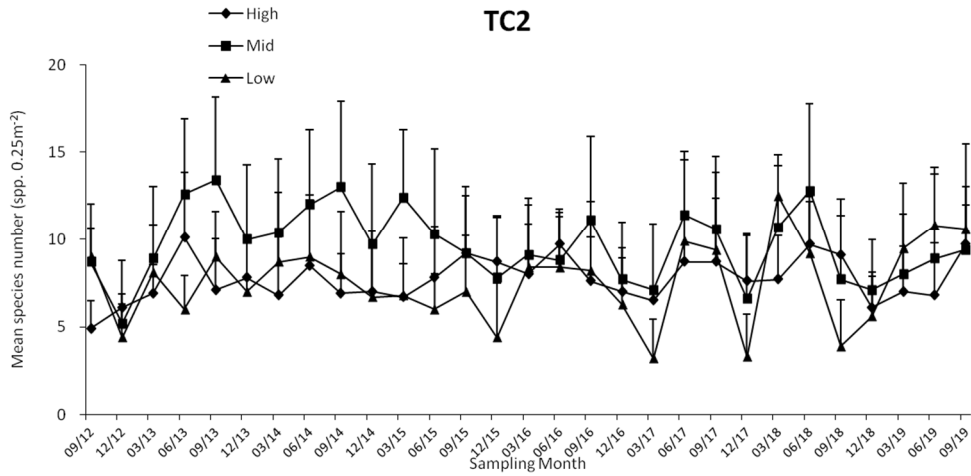


Figure 3.15 Temporal changes of mean number of species, mean density, Shannon-Weaver Diversity Index (H') and Pielou's Species Evenness (J) (mean + SD) at every tidal level in sampling zone TC2

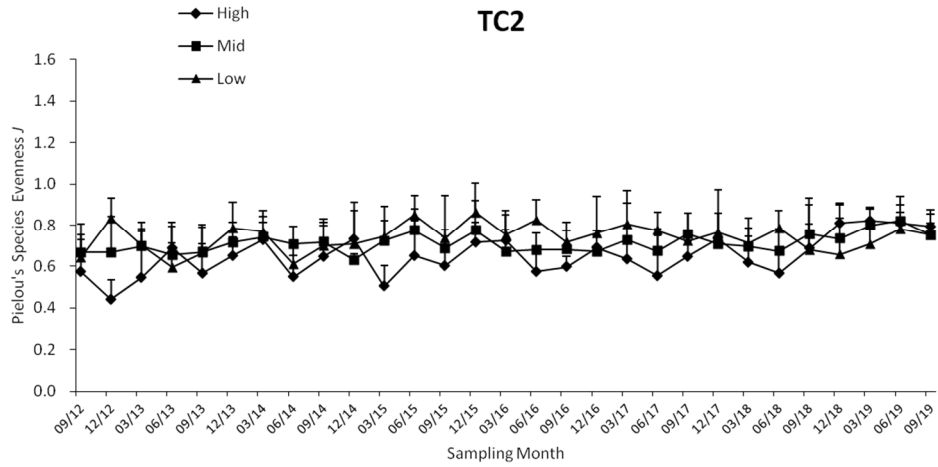


Figure3.15(Cont'd) Temporal changes of mean number of species, mean density, Shannon-Weaver Diversity Index (H') and Pielou's Species Evenness (J) (mean + SD) at every tidal level in sampling zone TC2

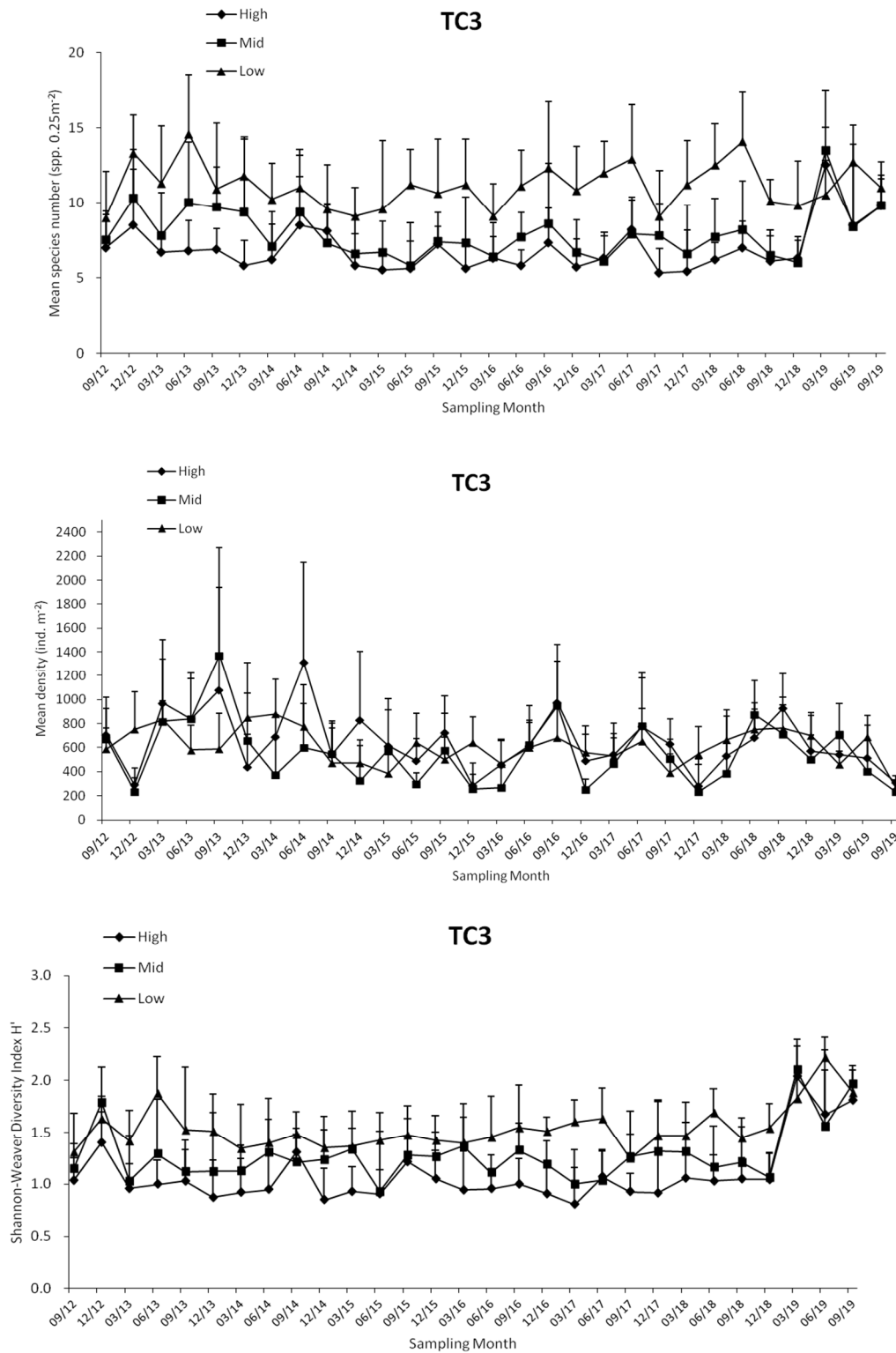


Figure 3.16 Temporal changes of mean number of species, mean density, Shannon-Weaver Diversity Index (H') and Pielou's Species Evenness (J) (mean + SD) at every tidal level in sampling zone TC3

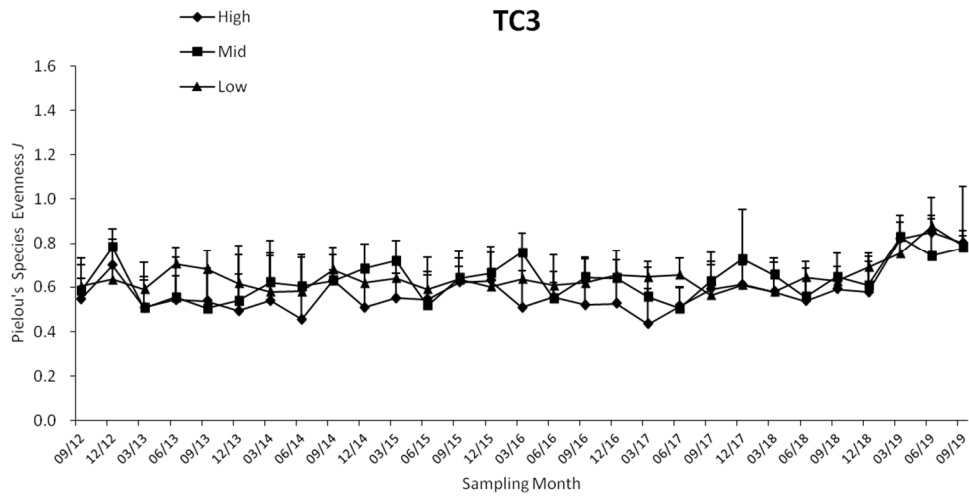


Figure 3.16(Cont'd) Temporal changes of mean number of species, mean density, Shannon-Weaver Diversity Index (H') and Pielou's Species Evenness (J) (mean + SD) at every tidal level in sampling zone TC3

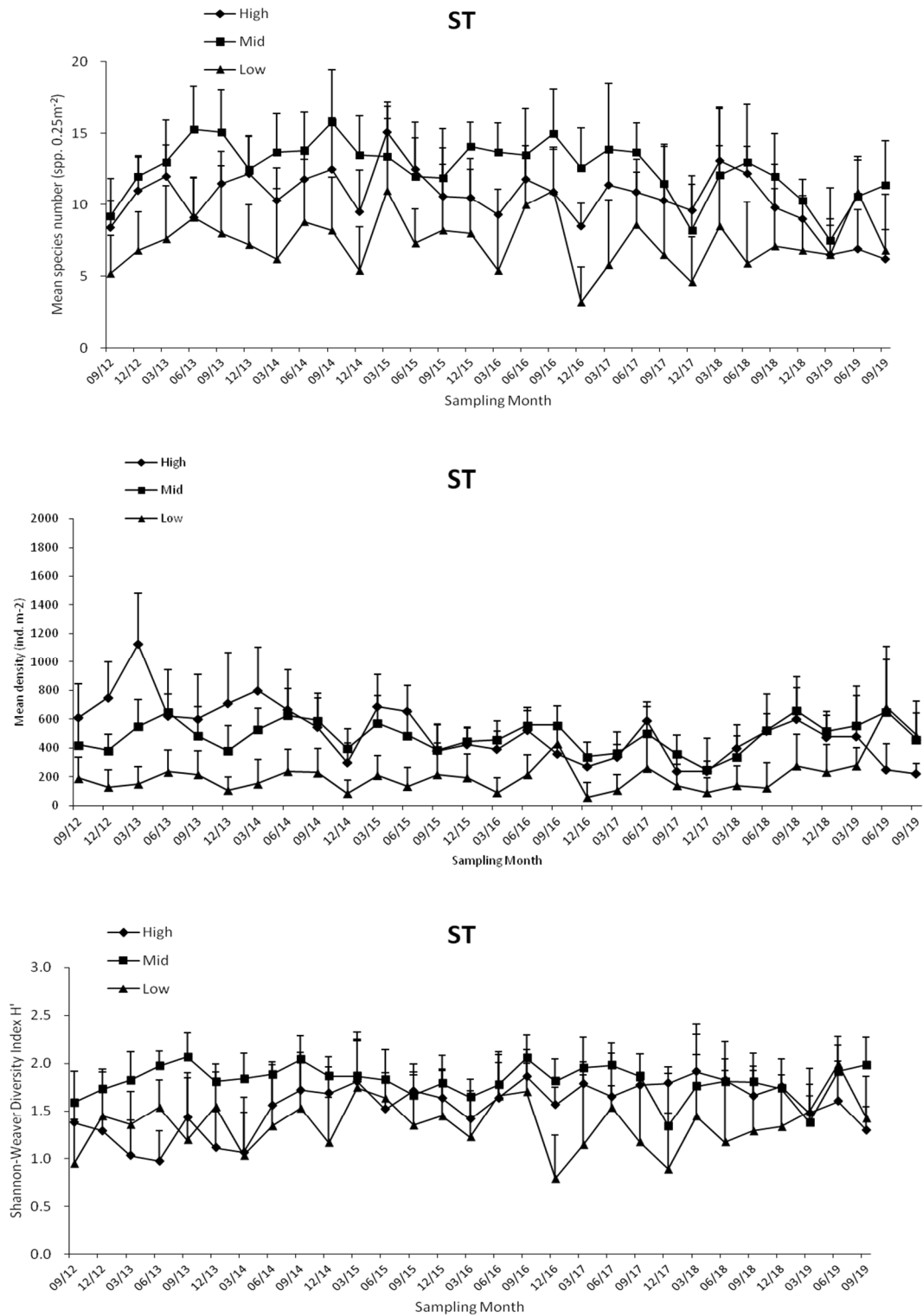


Figure 3.17 Temporal changes of mean number of species, mean density, Shannon-Weaver Diversity Index (H') and Pielou's Species Evenness (J) (mean + SD) at every tidal level in sampling zone S

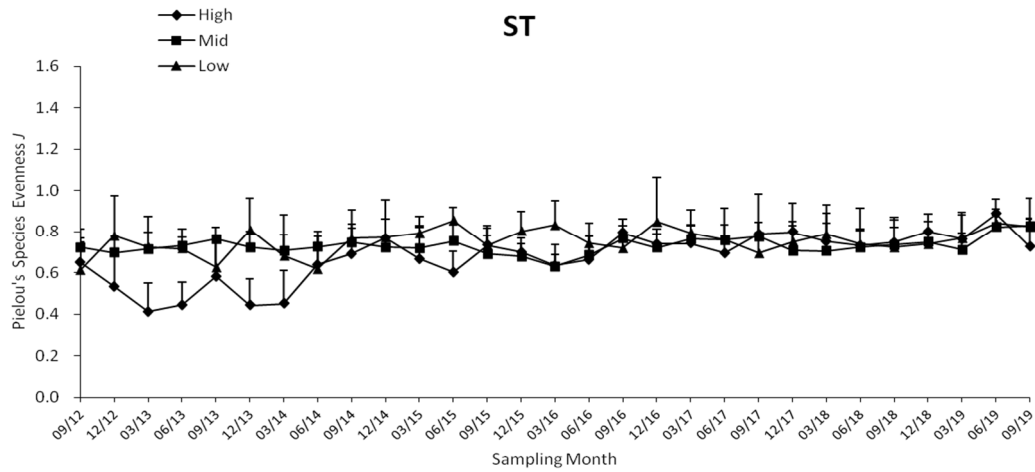


Figure 3.17(Cont'd) Temporal changes of mean number of species, mean density, Shannon-Weaver Diversity Index (H') and Pielou's Species Evenness (J) (mean + SD) at every tidal level in sampling zone ST

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



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

No.	Sub.	GPS coordinate	Record of prosomal width (mm)	
Sampling site TC1		<u>(Search hour = 2 hrs)</u>		
		No Record		
		No. of ind.	0	0
Sampling site TC2		<u>(Search hour = 2 hrs)</u>		
1	M	22°16'055"N	113°55'052"E	20.32
		No. of ind.	1	0

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 (Search hour = 3 hrs)</u>				<i>Carcinoscorpius rotundicauda</i>				<i>Tachypleus tridentatus</i>				
1	M	22°17'005"N	113°55'034"E	30.5							25.23	
2	M	22°17'006"N	113°55'033"E								98.14	
3	M	22°17'005"N	113°55'033"E	40.02								
4	S	22°17'006"N	113°55'033"E	20.14	10.13						90.52	
5	M	22°17'006"N	113°55'033"E								45.44	
6	M	22°17'006"N	113°55'034"E								30.45	30.10
7	S	22°17'006"N	113°55'035"E								35.57	
8	M	22°17'006"N	113°55'035"E	25.53							20.52	
9	M	22°17'005"N	113°55'035"E	22.21								
10	M	22°17'006"N	113°55'036"E	31.35	30.11	32.14	34.98					
11	M	22°17'004"N	113°55'005"E	33.54	33.01	35.05	42.82	38.24				
12	M	22°16'043"N	113°56'005"E	37.43	43.43	45.44	33.20	31.54	29.93	48.21		
13	M	22°16'063"N	113°56'009"E	37.65	39.44	44.47						
14	M	22°16'060"N	113°56'009"E	35.14	37.47	70.71	30.55					
15	M	22°17'005"N	113°56'036"E	70.41	60.07	30.05						
No. of ind.				32				8				

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)		
				<i>Carcinoscorpius rotundicauda</i>		<i>Tachypleus tridentatus</i>
<u>Sampling site ST</u> (Search hour = 3 hrs)						
1	M	22°17'009"N	113°55'030"E	25.25	30.36	27.53
2	M	22°17'008"N	113°55'032"E	32.4		
3	M	22°17'039"N	113°55'036"E	33.33	35.41	20.25
4	M	22°17'010"N	113°55'030"E	18.52		
5	M	22°17'015"N	113°55'031"E	18.25		
No. of ind.				9	0	

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 ²)	Estimated coverage (%)		GPS coordinate	Remark	
TC1& TC2 (search hour = 2 hrs)					
No record					
TC3 <i>Halophila ovalis</i> (search hour = 3 hrs)					
0.25	90-100	horizontal line	22°17'001"N 22°17'001"N	113°55'038"E 113°55'038"E	A horizontal strand of seagrass bed nearby the seaward side of mangrove area at tidal level 2.0 m above C.D.
4	90-100	horizontal line	22°17'003"N 22°17'003"N	113°55'036"E 113°55'036"E	A horizontal strand of seagrass bed nearby the seaward side of mangrove area at tidal level 2.0 m above C.D.
4	90-100	horizontal line	22°17'003"N 22°17'003"N	113°55'036"E 113°55'036"E	A horizontal strand of seagrass bed nearby the seaward side of mangrove area at tidal level 2.0 m above C.D.
9	90-100	horizontal line	22°16'053"N 22°16'053"N	113°56'005"E 113°56'005"E	A horizontal strand of seagrass bed nearby the seaward side of mangrove area at tidal level 2.0 m above C.D.
ST <i>Halophila ovalis</i> (search hour = 3 hrs)					
200	10-20	horizontal line	22°17'014"N 22°17'015"N	113°55'029"E 113°55'029"E	A horizontal strand of seagrass bed nearby the seaward side of mangrove area at tidal level 2.0 m above C.D.
1000	90-100	horizontal line	22°17'013"N 22°17'014"N	113°55'029"E 113°55'029"E	A horizontal strand of seagrass bed nearby the seaward side of mangrove area at tidal level 2.0 m 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	Polycheata	Echiuroidea	Thalassematidae	<i>Listriolobus riukuensis</i>
Animalia	Annelida	Polycheata	Phyllodocida	Nereididae	<i>Nereididae</i> spp.
Animalia	Annelida	Polycheata	Phyllodocida	Nereididae	<i>Perinereis</i> sp.
Animalia	Annelida	Polycheata	Sabellida	Oweniidae	<i>Oweniidae</i> spp.
Animalia	Annelida	Polycheata	Sabellida	Sabellidae	<i>Sabellidae imbricatus</i>
Animalia	Annelida	Polycheata	Terebellida	Ampharetidae	<i>Ampharetidae</i> spp.
Animalia	Annelida	Polycheata		Maldanidae	<i>Maldanidae</i> spp.
Animalia	Arthropoda	Malacostraca	Decapoda	Grapsidae	<i>Gaetice depressus</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Grapsidae	<i>Metopograpsus latifrons</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Grapsidae	<i>Metopograpsus quadridentatus</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Leucosiidae	<i>Pyrhila pisum</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Paguridae	<i>Pagurus dubius</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Sesarmidae	<i>Parasesarma bidens</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Varuniae	<i>Hemigrapsus penicillatus</i>
Animalia	Arthropoda	Malacostraca	Decapoda	Varunidae	<i>Chasmagnathus convexus</i>
Animalia	Arthropoda	Maxillopoda	Sessilia	Balanidae	<i>Balanus amphitrite</i>
Animalia	Chordata	Actinopterygii	Blenniformes	Blenniidae	<i>Omobranchus fasciolatoceps</i>
Animalia	Cnidaria	Anthozoa	Actiniaria	Diadumenidae	<i>Diadumene lineata</i>
Animalia	Mollusca	Bivalvia	Arcoida	Arcidae	<i>Barbatia virescens</i>
Animalia	Mollusca	Bivalvia	Mytioida	Mytilidae	<i>Xenostrobus atratus</i>
Animalia	Mollusca	Bivalvia	Ostreoida	Mytilidae	<i>Brachidontes variabilis</i>
Animalia	Mollusca	Bivalvia	Ostreoida	Ostreidae	<i>Saccostrea cucullata</i>
Animalia	Mollusca	Bivalvia	Pterioida	Pteriidae	<i>Isognomon isognomum</i>
Animalia	Mollusca	Bivalvia	Venerida	Cyrenidae	<i>Geloina erosa</i>
Animalia	Mollusca	Bivalvia	Venerida	Glauconomidae	<i>Glauconome chinensis</i>
Animalia	Mollusca	Bivalvia	Veneroida	Tellinidae	<i>Anomalocardia squamosa</i>
Animalia	Mollusca	Bivalvia	Veneroida	Veneridae	<i>Ruditapes philippinarum</i>
Animalia	Mollusca	Gastropoda	Archaeogastropoda	Nacellidae	<i>Cellana grata</i>
Animalia	Mollusca	Gastropoda	Archaeogastropoda	Nacellidae	<i>Cellana toreuma</i>
Animalia	Mollusca	Gastropoda	Archaeogastropoda	Trochidae	<i>Monodonta labio</i>
Animalia	Mollusca	Gastropoda	Archaeogastropoda	Trochidae	<i>Omphalius nigerrima</i>
Animalia	Mollusca	Gastropoda	Archaeogastropoda	Turbinidae	<i>Lunella coronata</i>
Animalia	Mollusca	Gastropoda	Archaeogastropoda	Turbinidae	<i>Lunella granulata</i>
Animalia	Mollusca	Gastropoda	Caenogastropoda	Batillariidae	<i>Batillaria multiformis</i>
Animalia	Mollusca	Gastropoda	Caenogastropoda	Batillariidae	<i>Batillaria sordida</i>

Kingdom	Phylum	Class	Order	Family	Species
Animalia	Mollusca	Gastropoda	Caenogastropoda	Batillariidae	<i>Batillaria zonalis</i>
Animalia	Mollusca	Gastropoda	Caenogastropoda	Potamididae	<i>Terebralia sulcata</i>
Animalia	Mollusca	Gastropoda	Caenogastropoda	Potamididae	<i>Pirenella asiatica</i>
Animalia	Mollusca	Gastropoda	Caenogastropoda	Potamididae	<i>Pirenella incisa</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>Clithon retropictus</i>
Animalia	Mollusca	Gastropoda	Cycloneritimorpha	Neritidae	<i>Nerita chamaeleon</i>
Animalia	Mollusca	Gastropoda	Cycloneritimorpha	Neritidae	<i>Nerita lineata</i>
Animalia	Mollusca	Gastropoda	Cycloneritimorpha	Neritidae	<i>Nerita polita</i>
Animalia	Mollusca	Gastropoda	Cycloneritimorpha	Neritidae	<i>Nerita squamulata</i>
Animalia	Mollusca	Gastropoda	Littorinimorpha	Littorinidae	<i>Littoraria articulata</i>
Animalia	Mollusca	Gastropoda	Neogastropoda	Muricidae	<i>Cronia margaritcola</i>
Animalia	Mollusca	Gastropoda	Neogastropoda	Muricidae	<i>Thais sp.</i>
Animalia	Mollusca	Gastropoda	Neogastropoda	Nassariidae	<i>Nassarius festivus</i>
Animalia	Mollusca	Gastropoda	Neotaenioglossa	Cerithiidae	<i>Clypeomorus moniliferum</i>
Animalia	Mollusca	Gastropoda	Neotaenioglossa	Littorinidae	<i>Nodilittorina radiata</i>
Animalia	Mollusca	Gastropoda	Neotaenioglossa	Littorinidae	<i>Nodilittorina vidua</i>
Animalia	Mollusca	Gastropoda	Patellogastropoda	Lottiidae	<i>Lottia dorsuosa</i>
Animalia	Mollusca	Gastropoda	Patellogastropoda	Lottiidae	<i>Lottia luchuana</i>
Animalia	Mollusca	Gastropoda	Patellogastropoda	Lottiidae	<i>Nipponacmea concinna</i>
Animalia	Mollusca	Gastropoda		Lottiidae	<i>Patelloida pygmaea</i>
Animalia	Mollusca	Polyplacophora	Chitonida	Ischnochitonidae	<i>Lepidozona spp.</i>
Animalia	Nemertea				
Animalia	Platyhelminthes				<i>Platyhelminthes sp.</i>
Animalia	Sipuncula	Sipunculidae	Golfingiida	Sipunculidae	<i>Sipunculidae sp.</i>
Animalia	Sipuncula	Sipunculidae	Golfingiida	Sipunculidae	<i>Sipunculus nudus</i>
Animalia	Sipuncula	Sipunculidae	Golfingiida	Sipunculidae	<i>Sipunculus sp.</i>

AnnexV. List of recorded fauna of intertidal soft shore community survey in every sampling zone

Sep 2019		High tidal level (2.0 m above C.D.)																				
Sampling Zone TC1																						
Gp	Taxon	1		2		3		4		5		6		7		8		9		10		Sub-total
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	
Bi	<i>Barbatia virescens</i>	2								3								5		9		19
Bi	<i>Glauconome chinensis</i>													1		1					1	3
Bi	<i>Saccostrea cucullata</i>			2		21		20		20				16		29		32		26		166
Bi	<i>Xenostrobus atratus</i>					5												4				9
C	<i>Gaetice depressus</i>											1		1				1		1		4
G	<i>Batillaria multiformis</i>	10		10		15		10		12		15		21		11						104
G	<i>Batillaria zonalis</i>	10		10		20		20		8		12		26		4						110
G	<i>Cellana toreuma</i>																				1	1
G	<i>Clithon faba</i>													1				2		3		6
G	<i>Clithon retropictus</i>							1										1		5		7
G	<i>Littoraria articulata</i>																				1	1
G	<i>Lottia dorsuosa</i>	1				1								2				1				5
G	<i>Lottia luchuana</i>																	2				2
G	<i>Lunella coronata</i>	5						3		2												10
G	<i>Lunella granulata</i>	2				4										5						11
G	<i>Monodonta labio</i>	20				10		10		20		12		26		9						107
G	<i>Nodilittorina radiata</i>	5						8										19				32
G	<i>Patelloida pygmaea</i>							1						1							7	9
G	<i>Pirenella asiatica</i>	2						15		2						16		23				58

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

Sep 2019	Sampling Zone TC1	High tidal level (2.0 m above C.D.)																				Sub-total
		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	Q	C	Q	C	
G	<i>Pirenella incisa</i>											24		21		5		3				53
Ne	<i>Nemertea</i> sp.																	1				1
P	<i>Listriolobus riukuensis</i>									3					1							4
Sp	<i>Sipunculus</i> sp.											1						1	1			3
Sp	<i>Sipunculus nudus</i>							1				1									1	3
																					Total	728

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

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

Sep 2019	Sampling Zone TC1	Mid tidal level (1.5 m above C.D.)																				
		1		2		3		4		5		6		7		8		9		10		Sub-total
Gp	Taxon	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	
Bi	<i>Barbatia virescens</i>			1						3				1		4		4		9		22
Bi	<i>Glauconome chinensis</i>													1		2				1		4
Bi	<i>Saccostrea cucullata</i>	42		44		37		27		64		20		38		21		28		38		359
Bi	<i>Xenostrobus atratus</i>			13		4								16		5		12		24		74
C	<i>Metopograpsus latifrons</i>													4								4
G	<i>Batillaria multiformis</i>	22		7		36		14		25		18		14		5				5		146
G	<i>Batillaria zonalis</i>					14										12						26
G	<i>Clithon oualaniensis</i>																	2				2
G	<i>Clithon retropictus</i>					1								2		5		8				16
G	<i>Littoraria articulata</i>															1				2		3
G	<i>Lottia dorsuosa</i>			2								2						1				5
G	<i>Lottia luchuana</i>			4												1		5		6		16
G	<i>Lunella coronata</i>			2		2												1		5		10
G	<i>Lunella granulata</i>			14						2		10						11		16		53
G	<i>Monodonta labio</i>	26		8		30				20				21		15		15		20		155
G	<i>Nerita chamaeleon</i>							2				2						1		1		6
G	<i>Nerita polita</i>											10										10
G	<i>Nerita squamulata</i>													1		1						2
G	<i>Nipponacmea concinna</i>																	7				7
G	<i>Nodilittorina radiata</i>															8		20		24		52
G	<i>Patelloida pygmaea</i>															2		1				3

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

Sep 2019	Sampling Zone TC1	Mid tidal level (1.5 m above C.D.)																				Sub-total
		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	Q	C	Q	C	
G	<i>Pirenella asiatica</i>	10		8		10				14												42
G	<i>Pirenella incisa</i>	17		16		7		8		10		5										63
Hc	<i>Pagurus dubius</i>																			1		1
P	<i>Nereididae</i> spp.							1									1	1				3
P	<i>Perinereis</i> sp.	1																				1
Sp	<i>Siphonosomasp.</i>									1		1										2
																					Total	1087

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

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

Sep 2019	Sampling Zone TC1	Low tidal level (0.5 m above C.D.)																				
		1		2		3		4		5		6		7		8		9		10		Sub-total
Gp	Taxon	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		2		7
Bi	<i>Anomalocardia squamosa</i>											1										1
Bi	<i>Barbatia virescens</i>	1				13		7				4				1				8		34
Bi	<i>Glauconome chinensis</i>	1				5						3				6				1		20
Bi	<i>Ruditapes philippinarum</i>															1						1
Bi	<i>Saccostrea cucullata</i>	70		25		150		42		27		22		29		17		36		48		466
Bi	<i>Xenostrobus atratus</i>	16				40		20		1		5		4		5						91
C	<i>Gaetice depressus</i>			3						1						2				1		7
C	<i>Hemigrapsus penicillatus</i>							1												1		2
C	<i>Metopograpsus latifrons</i>													1				1				2
Cn	<i>Diadumene lineata</i>											1		1								2
G	<i>Batillaria multiformis</i>															5		15				20
G	<i>Batillaria zonalis</i>	10						20		20								3				53
G	<i>Cellana grata</i>															1						1
G	<i>Clithon faba</i>															1		1		3		5
G	<i>Clithon retropictus</i>					21														2		23
G	<i>Littoraria articulata</i>													4								4
G	<i>Lottia dorsuosa</i>	15				2						2						4				23
G	<i>Lottia luchuana</i>	7																1				8
G	<i>Lunella coronata</i>					2				3		6		5		8						24
G	<i>Lunella granulata</i>	5												26		6		26				63

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

Sep 2019	Sampling Zone TC1	Low tidal level (0.5 m above C.D.)																				Sub-total
		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	Q	C	Q	C	
G	<i>Monodonta labio</i>	33		38		77		50				12		19						19		248
G	<i>Nerita lineata</i>					2												1		1		4
G	<i>Nerita polita</i>													1								1
G	<i>Nipponacmea concinna</i>	6										1				1				2		10
G	<i>Nodilittorina radiata</i>	36		20		83		40		24		15		20		12		6		15		271
G	<i>Nodilittorina vidua</i>	1		7		17				1								4		1		31
G	<i>Patelloida pygmaea</i>					7		1		1		5		2		2		5		3		26
G	<i>Pirenella asiatica</i>	16		62				10		12												100
G	<i>Pirenella incisa</i>	15						10		8				2		2						37
Hc	<i>Pagurus dubius</i>													1								1
P	<i>Ampharetidae</i> sp.																	1				1
P	<i>Nereididae</i> sp.					1																1
Pl	<i>Platyhelminthes</i>											2										2
Po	<i>Lepidozona</i> spp.	2				1						1				2						6
Sp	<i>Siphonosoma</i> sp.															1						1
Sp	<i>Siphonosoma</i> sp.															1						1
																					Total	1597

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

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

Sep 2019	Sampling Zone TC2	High tidal level (2.0 m above C.D.)																		Sub-total		
		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	Q	C	Q	C	
Ba	<i>Balanus amphitrite</i>											58		18				1		1		78
Bi	<i>Barbatia virescens</i>					10						6		5		1					2	24
Bi	<i>Saccostrea cucullata</i>	9		7		21		13		13		24		36		4		6		16		149
Bi	<i>Xenostrobus atratus</i>	3		3		13						5		16				2				42
C	<i>Gaetice depressus</i>											1		1								2
C	<i>Hemigrapsus penicillatus</i>					1				1		4		1		1						8
Cn	<i>Diadumene lineata</i>					1															15	16
G	<i>Batillaria multiformis</i>	12		5		11		27		35		28		5		16		16		24		179
G	<i>Batillaria zonalis</i>	15		2		15		8		6		11		6		25		30				118
G	<i>Clithon faba</i>					1								6							5	12
G	<i>Clithon retropictus</i>													1							1	2
G	<i>Lunella coronata</i>					1								21				1				23
G	<i>Lunella granulata</i>			1		9				2		7		19				2				40
G	<i>Monodonta labio</i>	21		8		9		6				19										63
G	<i>Nipponacmea concinna</i>	2																				2
G	<i>Nodilittorina radiata</i>	14		12								5		4				17		6		58
G	<i>Patelloida pygmaea</i>	9												5				5				19
G	<i>Pirenella asiatica</i>							1										15				16
G	<i>Pirenella incisa</i>									2		5		1		5						13
Po	<i>Lepidozona</i> spp.							1						2		6						9

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

Sep 2019	Sampling Zone TC2	High tidal level (2.0 m above C.D.)																				Sub-total
		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	Q	C	Q	C	
Sp	<i>Siphonosoma</i> sp.							2		1		1		1		1						6
Sp	<i>Sipunculus nudus</i>					1																1
Total																					880	

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

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

Sep 2019	Sampling Zone TC2	Mid tidal level (1.5 m above C.D.)																				
		1		2		3		4		5		6		7		8		9		10		Sub-total
Gp	Taxon	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		4								6		14
Bi	<i>Barbatia virescens</i>									1		5				3				1		10
Bi	<i>Glauconome chinensis</i>															1						1
Bi	<i>Saccostrea cucullata</i>	45		38		56		10		5		11				40				30		235
Bi	<i>Xenostrobus atratus</i>			9		2										16				12		39
C	<i>Chasmagnathus convexus</i>			3														1				4
C	<i>Gaetice depressus</i>													2								2
C	<i>Hemigrapsus penicillatus</i>					12						1										13
C	<i>Metopograpsus latifrons</i>													4								4
C	<i>Metopograpsus quadridentatus</i>													1								1
C	<i>Parasesarma bidens</i>			2																		2
G	<i>Batillaria multiformis</i>					16		50	1	33	2	33		36		20			32			223
G	<i>Batillaria zonalis</i>							2		20		9		2		2			7			42
G	<i>Clithon faba</i>																				2	2
G	<i>Clithon retropictus</i>			1										5		1				2		9
G	<i>Lunella coronata</i>	8														24				2		34
G	<i>Lunella granulata</i>	5		11		7		2		1		3								3		32
G	<i>Monodonta labio</i>	30		32		24		12		12		5		29					4			148
G	<i>Nipponacmea concinna</i>					2						3				2						7
G	<i>Nodilittorina radiata</i>	26		41		20		8				1								22		118
G	<i>Patelloida pygmaea</i>					3		2				3				1				1		10

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

Sep 2019		Sampling Zone TC2		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>Pirenella asiatica</i>							2		5	1	5		14				4				31
G	<i>Pirenella incisa</i>							3				10				3		6				22
Hc	<i>Pagurus dubius</i>			2																		2
P	<i>Nereididae</i> sp.																1					1
P	<i>Oweniidae</i> spp.											4										4
Sp	<i>Sipunculus nudus</i>			2						1				2								5
		Total																			1015	

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

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

Sep 2019 Sampling Zone TC2		Low tidal level (0.5 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>	4										16									2	22
Bi	<i>Barbatia virescens</i>			7								2				2					6	17
Bi	<i>Glauconome chinensis</i>	3		1		14										1		2			1	22
Bi	<i>Isognomon isognomum</i>											1									2	3
Bi	<i>Saccostrea cucullata</i>	50		48		45		4				28		24		18		25			29	271
Bi	<i>Xenostrobus atratus</i>														3							3
C	<i>Chasmagnathus convexus</i>	1				1									1							3
C	<i>Gaetice depressus</i>			2								1										3
C	<i>Hemigrapsus penicillatus</i>	3				7																10
C	<i>Metopograpsus latifrons</i>																				1	1
C	<i>Metopograpsus quadridentatus</i>					7																7
C	<i>Parasesarma bidens</i>	2																				2
G	<i>Batillaria multiformis</i>	8		26		26						10		15								85
G	<i>Batillaria zonalis</i>	10		12		9		2				4										37
G	<i>Cellana grata</i>																				15	15
G	<i>Cellana toreuma</i>	1												2				2				5
G	<i>Clithon faba</i>	8				10														1		19
G	<i>Clithon retropictus</i>					1														2		3
G	<i>Lunella coronata</i>	8		12		5						2				2					1	30
G	<i>Lunella granulata</i>	9		11		10								5		18		7			6	66
G	<i>Monodonta labio</i>			20		84						12		15							20	151

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

Sep 2019		Sampling Zone TC2		Low tidal level (0.5 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>															1						1
G	<i>Nerita squamulata</i>	2												1				2				5
G	<i>Nipponacmea concinna</i>	2				2										1		4				9
G	<i>Nodilittorina radiata</i>			4		20								3		12					10	49
G	<i>Nodilittorina vidua</i>													2							2	4
G	<i>Patelloida pygmaea</i>					8								1							1	10
G	<i>Pirenella asiatica</i>			5				6		25												36
G	<i>Pirenella incisa</i>							26		24		20										70
G	<i>Thais</i> sp.					3																3
Hc	<i>Pagurus dubius</i>					2										1						3
Ne	<i>Nemertea</i> sp.																				1	1
Po	<i>Lepidozona</i> spp.			1								1		1								3
Sp	<i>Sipunculus nudus</i>	8		6																	3	17
																					Total	986

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

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

Sep 2019	Sampling Zone TC3	High tidal level (2.0 m above C.D.)																				
		1		2		3		4		5		6		7		8		9		10		Sub-total
Gp	Taxon	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>					6				8		5		1						5		25
Bi	<i>Geloina erosa</i>	1												1						1		3
Bi	<i>Glauconome chinensis</i>			3		5								1		1						10
Bi	<i>Saccostrea cucullata</i>	3		32		27		37		23		16		16		29		3		29		215
Bi	<i>Xenostrobus atratus</i>							18						5		8		3				34
C	<i>Gaetice depressus</i>					1				1										6		8
C	<i>Hemigrapsus penicillatus</i>													1		3						4
C	<i>Metopograpsus latifrons</i>			1										1				1				3
Cn	<i>Diadumene lineata</i>	1				1						2				15		1				20
G	<i>Batillaria multiformis</i>	25		8		22		18		23												96
G	<i>Batillaria zonalis</i>							6		10								2				18
G	<i>Clithon retropictus</i>							1				4		8		3		25				41
G	<i>Clypeomorus moniliferum</i>													1								1
G	<i>Littoraria articulata</i>											2				3				1		6
G	<i>Lottia dorsuosa</i>																			4		4
G	<i>Lunella coronata</i>									7		1								5		13
G	<i>Lunella granulata</i>			9		6						4		10						15		44
G	<i>Nerita squamulata</i>							7		1				1								9
G	<i>Nodilittorina radiata</i>															5						5
G	<i>Nodilittorina vidua</i>			12																5		17
G	<i>Patelloida pygmaea</i>					3						1				1				4		9

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

Sep 2019	Sampling Zone TC3	High tidal level (2.0 m above C.D.)																				Sub-total
		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	Q	C	Q	C	
G	<i>Pirenella asiatica</i>	15		12		10				17												54
G	<i>Pirenella incisa</i>	10		12		8		7						1				15				53
G	<i>Terebralia sulcata</i>	18				2						15		15				18				68
Hc	<i>Pagurus dubius</i>															1		2		1		4
P	<i>Maldanidae</i> spp.																	4				4
Po	<i>Lepidozona</i> spp.					3				1		1		1								6
Total																					774	

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

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

Sep 2019	Sampling Zone TC3	Mid tidal level (1.5 m above C.D.)																				
		1		2		3		4		5		6		7		8		9		10		Sub-total
Gp	Taxon	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>	12						17				2				2		1		11		45
Bi	<i>Barbatia virescens</i>	2				3						2				2		5		4		18
Bi	<i>Glauconome chinensis</i>					2		7				1										10
Bi	<i>Isognomon isognomum</i>											1										1
Bi	<i>Saccostrea cucullata</i>			6		13		13		6		15		18		6		13		18		108
Bi	<i>Xenostrobus atratus</i>					2								8		3		8				21
C	<i>Gaetice depressus</i>	2						2								1				1		6
C	<i>Hemigrapsus penicillatus</i>							1						5								6
C	<i>Metopograpsus latifrons</i>	1						1										15				17
G	<i>Batillaria multiformis</i>	4		23		4		12		12		1								4		60
G	<i>Batillaria zonalis</i>			17																15		32
G	<i>Clithon retropictus</i>	2				5						1				1						9
G	<i>Lottia dorsuosa</i>	2												4		5						11
G	<i>Terebralia sulcata</i>	7		8		17				6		5		4				8		5		60
G	<i>Monodonta labio</i>	8		7		22		7		3		1		3				1		4		56
G	<i>Nerita squamulata</i>	8				4		4								5		2		5		28
G	<i>Pirenella asiatica</i>	5		7				5		8		4		5						4		38
G	<i>Pirenella incisa</i>	3		8		8		5		1				4				1		24		54
Ne	<i>Nemertea</i> spp.			1														1				3
P	<i>Sabellidae imbricatus</i>			2										1		1						4
																					Total	587

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

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

Sep 2019 Sampling Zone TC3		Low tidal level (0.5 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>	18		17		12		14		12		2				1		2				78
Bi	<i>Barbatia virescens</i>	1				2						1				3		2				9
Bi	<i>Glauconome chinensis</i>			1						3		1				1		2				8
Bi	<i>Saccostrea cucullata</i>	22		10		6		5		16		23		35		21		32		15		185
Bi	<i>Xenostrobus atratus</i>	5		25				6		3				6		9		15				69
C	<i>Gaetice depressus</i>	1						1		2						1						5
C	<i>Hemigrapsus penicillatus</i>			1						1		1										3
C	<i>Metopograpsus latifrons</i>	1		1								3									2	7
C	<i>Metopograpsus quadridentatus</i>	2																				2
G	<i>Batillaria zonalis</i>			1											1						26	28
G	<i>Clithon retropictus</i>					1		2				1						1				5
G	<i>Lottia dorsuosa</i>	1										6		4		5		5				21
G	<i>Lunella coronata</i>			2				4						1		2		4				13
G	<i>Lunella granulata</i>			4		9				14		15		10				18				70
G	<i>Monodonta labio</i>	1																				1
G	<i>Nerita squamulata</i>			1				3		5		6		1		4		19		4		43
G	<i>Omphalius nigerrima</i>					1										2						3
G	<i>Patelloida pygmaea</i>	2				9								1		2		1				15
G	<i>Pirenella asiatica</i>	2				5		3		2				5							15	32
G	<i>Pirenella incisa</i>	5				10				6											8	29
Hc	<i>Pagurus dubius</i>			1						1								1				3

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

Sep 2019 Sampling Zone TC3		Low tidal level (0.5 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	Q	C	Q	C	Sub-total	
P	<i>Sabellidae imbricatus</i>			5		7				6		1				1						20	
Po	<i>Lepidozonia</i> spp.	12				3								2								1	18
Sp	<i>Siphonosoma</i> sp.							1														1	2
																					Total	669	

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

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

Sep 2019	Sampling Zone ST	High tidal level (2.0 m above C.D.)																				Sub-total
		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	Q	C	Q	C	
Bi	<i>Barbatia virescens</i>													1		2				1		4
Bi	<i>Saccostrea cucullata</i>	18		10		8		22		7		15		25		16		5		26		152
Bi	<i>Xenostrobus atratus</i>													2								2
C	<i>Gaetice depressus</i>					1		1				2										4
C	<i>Metopograpsus latifrons</i>					1		1												2		4
G	<i>Batillaria multiformis</i>	4		7						2		24		1				15				53
G	<i>Batillaria zonalis</i>											2						26				28
G	<i>Clithon faba</i>	1																		2		3
G	<i>Clithon retropictus</i>					1		2														3
G	<i>Littoraria articulata</i>												3									3
G	<i>Lottia dorsuosa</i>	1																				1
G	<i>Lunella coronata</i>			4		2		4				4								1		15
G	<i>Lunella granulata</i>	18		4				1				5				10						38
G	<i>Monodonta labio</i>	31		17		2		32										17		18		117
G	<i>Nassarius festivus</i>									36												36
G	<i>Nerita squamulata</i>															1						1
G	<i>Nodilittorina radiata</i>	12				10		11				2								21		56
G	<i>Pirenella asiatica</i>					3				4				16		5						28
G	<i>Pirenella incisa</i>									4												4
																					Total	552

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

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

Sep 2019	Sampling Zone ST	Mid tidal level (1.5 m above C.D.)																		Sub-total		
		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	Q	C	Q	C	
Ba	<i>Balanus amphitrite</i>					7																7
Bi	<i>Barbatia virescens</i>			12						4		2										18
Bi	<i>Brachidontes variabilis</i>									1												1
Bi	<i>Glaucanome chinensis</i>	3		8		9								1		4					4	29
Bi	<i>Saccostrea cucullata</i>	27		34		31		14		8		8		12		19		25		23		201
Bi	<i>Xenostrobus atratus</i>					4										1						5
C	<i>Gaetice depressus</i>									2								1				3
C	<i>Metopograpsus latifrons</i>			1																	1	2
C	<i>Metopograpsus quadridentatus</i>			1										1								2
C	<i>Pyrhila pisum</i>																	1				1
Cn	<i>Diadumene lineata</i>			1																		1
F	<i>Omobranchus fasciolatoceps</i>																				1	1
G	<i>Batillaria multiformis</i>	16		20		5		6				13		18		10					14	102
G	<i>Batillaria sordida</i>			6																		6
G	<i>Batillaria zonalis</i>	28				20	1	24		17		20		18		22	2	18		12		182
G	<i>Clithon faba</i>	7						1				2		2							1	13
G	<i>Clithon oualaniensis</i>			2										2							2	6
G	<i>Clithon retropictus</i>	3				1				1		2		1		3				1		12
G	<i>Lottia dorsuosa</i>											2				1						3
G	<i>Lunella coronata</i>	20				3		15														38
G	<i>Lunella granulata</i>	26		30		15				18				34				22				145

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

Sep 2019	Sampling Zone ST	Mid tidal level (1.5 m above C.D.)																				Sub-total
		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	Q	C	Q	C	
G	<i>Monodonta labio</i>	18		32		18		16		8				24		15		16		7		154
G	<i>Nerita lineata</i>			4												35						39
G	<i>Nipponacmea concinna</i>					1				2		2				2						7
G	<i>Nodilittorina radiata</i>	12		32		8				11				10		19						92
G	<i>Patelloida pygmaea</i>					4																4
G	<i>Pirenella asiatica</i>	12		3		4				15		5										39
G	<i>Pirenella incisa</i>	9		3						7												19
Hc	<i>Pagurus dubius</i>													7								7
P	<i>Baseodiscus hemprichii</i>																				1	1
P	<i>Sabellidae imbricatus</i>			1																		1
Pl	<i>Platyhelminthes</i>											1										1
Sp	<i>Siphonosoma</i> sp.			1				2														3
Sp	<i>Sipunculus nudus</i>															1					2	3
																					Total	1148

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

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

Sep 2019	Sampling Zone ST	Low tidal level (0.5 m above C.D.)																				Sub-total
		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	Q	C	Q	C	
Ba	<i>Balanus amphitrite</i>							22														22
Bi	<i>Barbatia virescens</i>									16		6										22
Bi	<i>Glauconome chinensis</i>					1						7										8
Bi	<i>Saccostrea cucullata</i>	96		6		38		50		65		62									49	366
Bi	<i>Xenostrobus atratus</i>											20										20
C	<i>Gaetice depressus</i>									1		6									6	13
C	<i>Metopograpsus latifrons</i>											2									6	8
C	<i>Metopograpsus quadridentatus</i>							2		2											4	8
F	<i>Omobranchus fasciolatoceps</i>												1									1
G	<i>Batillaria multiformis</i>							16						24		28		20				88
G	<i>Batillaria zonalis</i>	28				20		13		18		22									17	118
G	<i>Clithon retropictus</i>					8															1	9
G	<i>Cronia margariticola</i>							24													8	32
G	<i>Lottia dorsuosa</i>											1										1
G	<i>Lunella coronata</i>	34																				34
G	<i>Lunella granulata</i>	31						7				14									24	76
G	<i>Monodonta labio</i>			12		12		28		24		14		16		21		28			8	163
G	<i>Nerita chamaeleon</i>					2										13					1	16
G	<i>Nodilittorina radiata</i>	15						17		14		6									18	70
G	<i>Pirenella asiatica</i>											13		30		24		16				83
G	<i>Pirenella incisa</i>											17		12		5		25				59

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

Sep 2019	Sampling Zone ST	Low tidal level (0.5 m above C.D.)																					
Gp	Taxon	1		2		3		4		5		6		7		8		9		10		Sub-total	
Sp	<i>Sipunculus nudus</i>	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	3	3
																						Total	1220

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