

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. (December 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.*

ST *Carcinoscorpius rotundicauda*



ST *Carcinoscorpius rotundicauda*

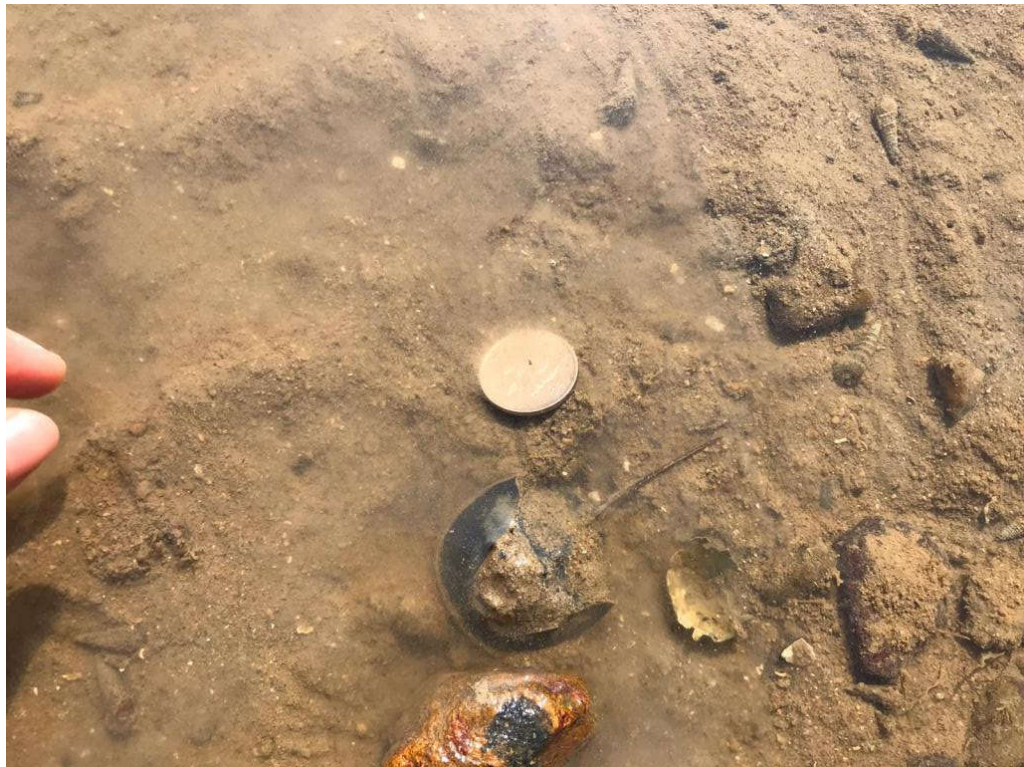


Figure 3.1 *Examples of photographic records of horseshoe crab (December 2019)*

ST *Carcinoscorpius rotundicauda*



TC3 *Tachypleus tridentatus*



Figure 3.1 (CON'T) *Examples of photographic records of horseshoe crab (December 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	0	1	9
Mean prosomal width (mm)	\	\	25.41	30.03
Max..prosomal width (mm)	\	\	25.41	35.14
Min. prosomal width (mm)	\	\	25.41	24.60
Search record (ind. hr-1 person-1)	0.00	0.00	0.17	1.50
<i>Tachypleus tridentatus</i>				
No. of individuals	0	0	1	3
Mean prosomal width (mm)	\	\	65.30	30.21
Max..prosomal width (mm)	\	\	65.30	31.50
Min. prosomal width (mm)	\	\	65.30	28.64
Search record (ind. hr-1 person-1)	0.00	0.00	0.17	0.50

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*

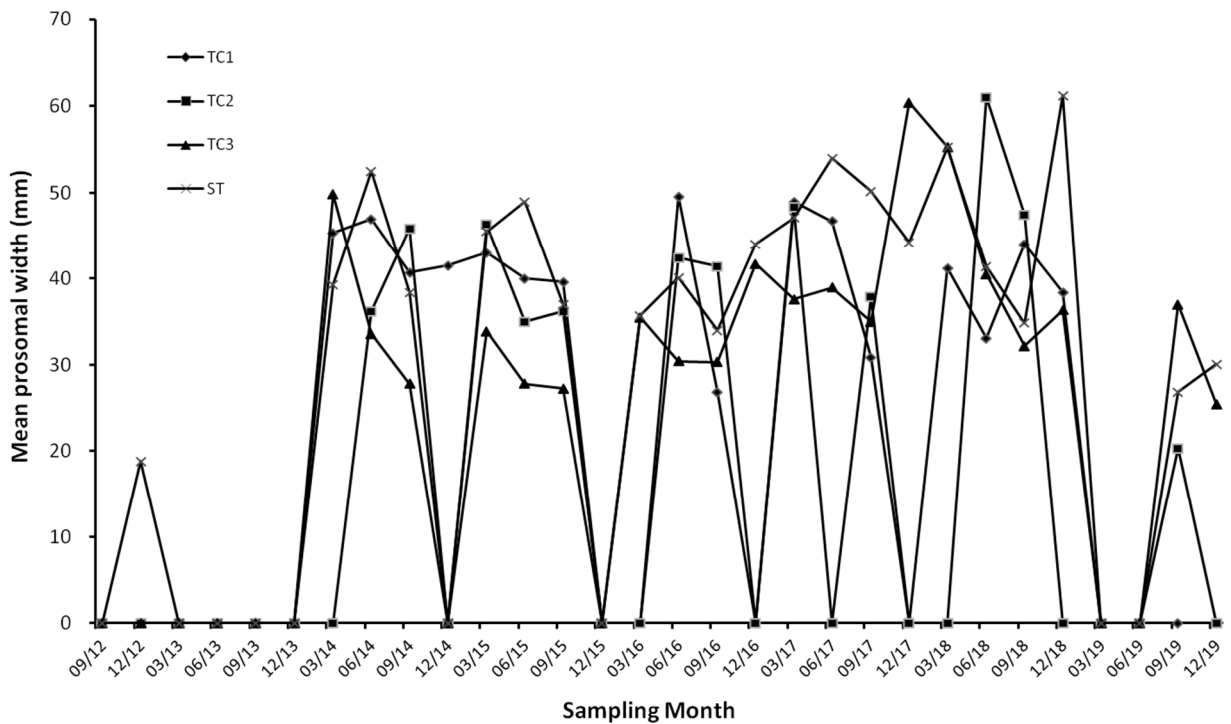
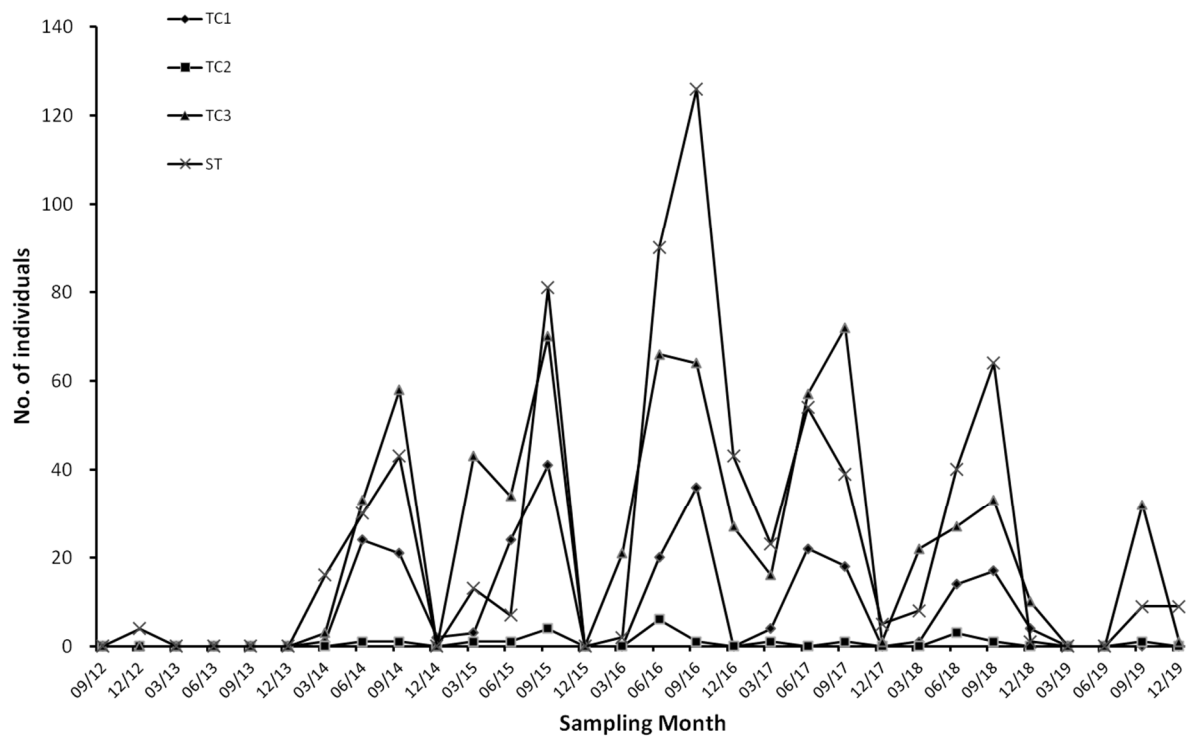


Figure 3.5 Changes of number of individuals mean prosomal width and search record of horseshoe crab *Carcinoscorpis rotundicauda* in every sampling zone along the sampling months

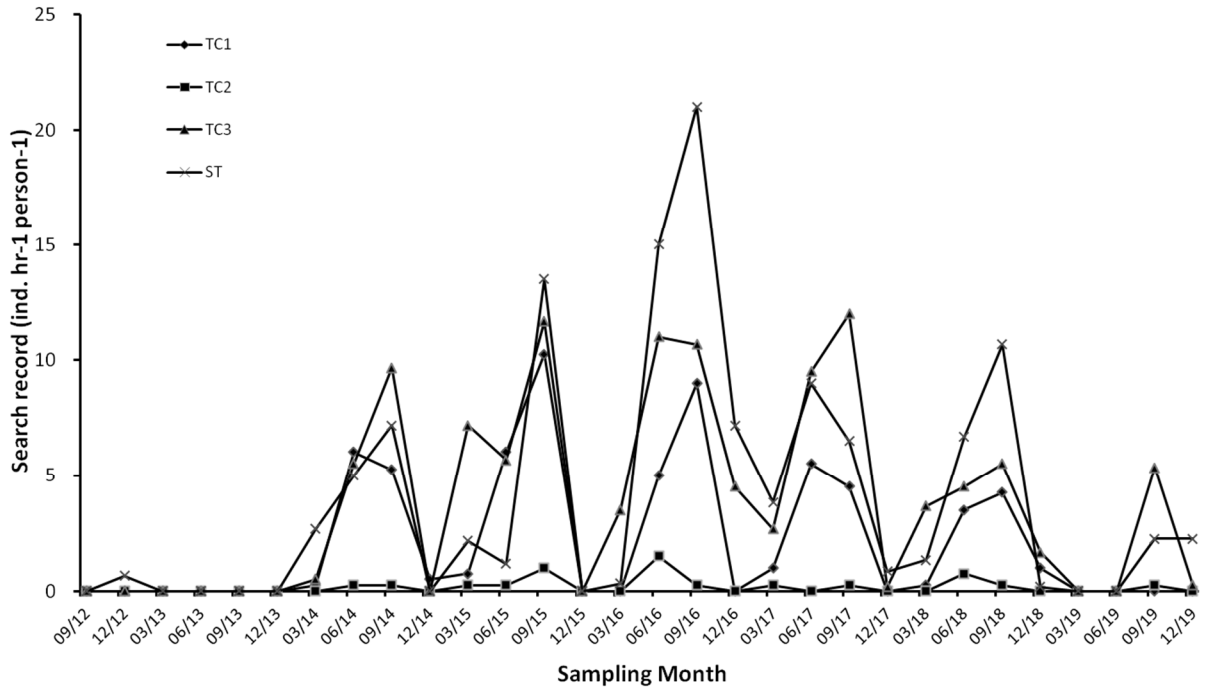


Figure 3.5 (Cont'd) Changes of number of individuals mean prosomal width and search record of horseshoe crab *Carcinoscorpius rotundicauda* in every sampling zone along the sampling months

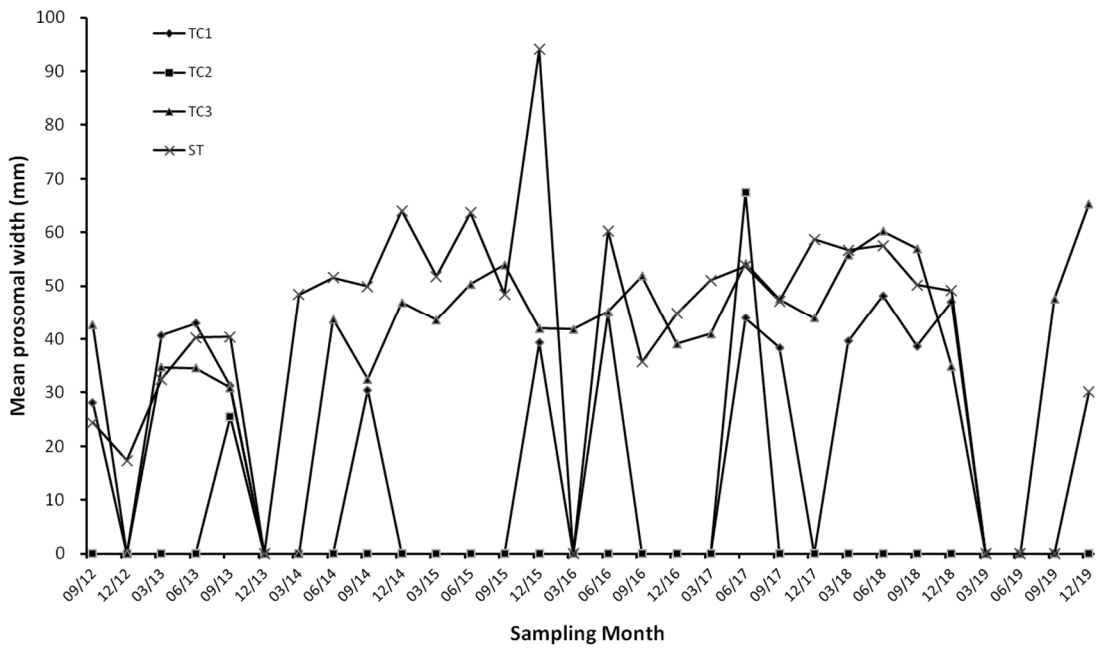
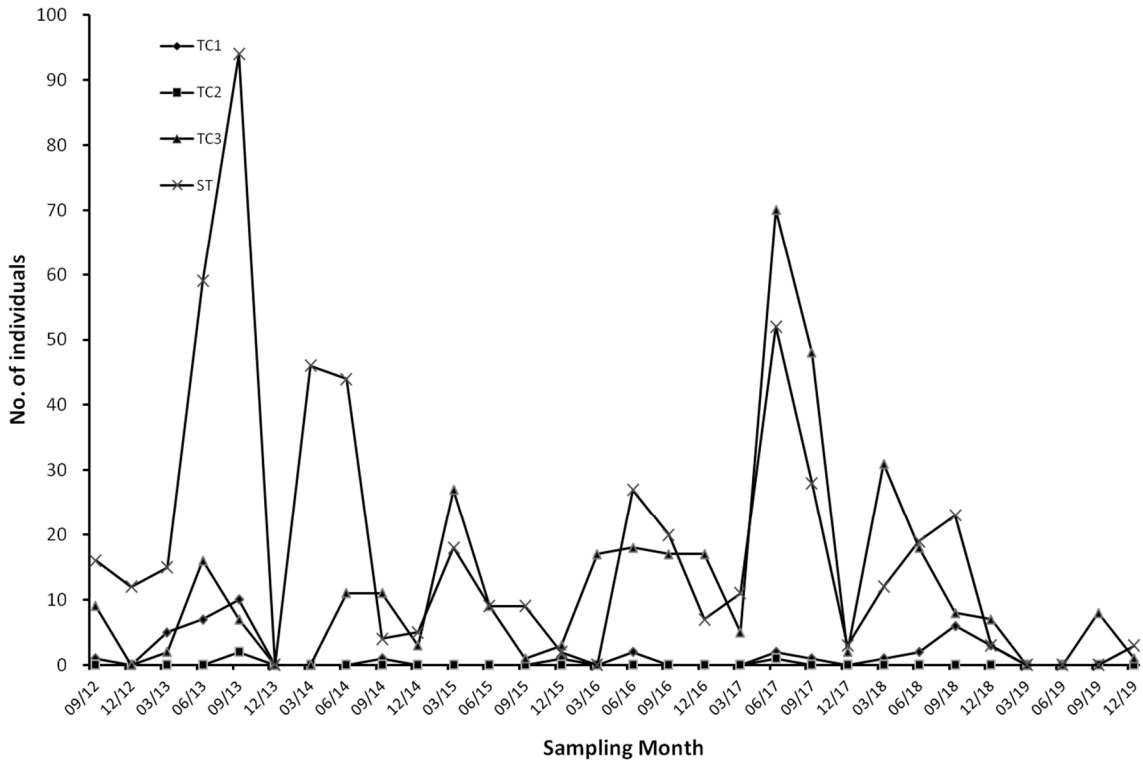


Figure 3.6 Changes of number of individuals mean prosomal width and search record of horseshoe crab *Tachypleus tridentatus* in every sampling zone along the sampling months

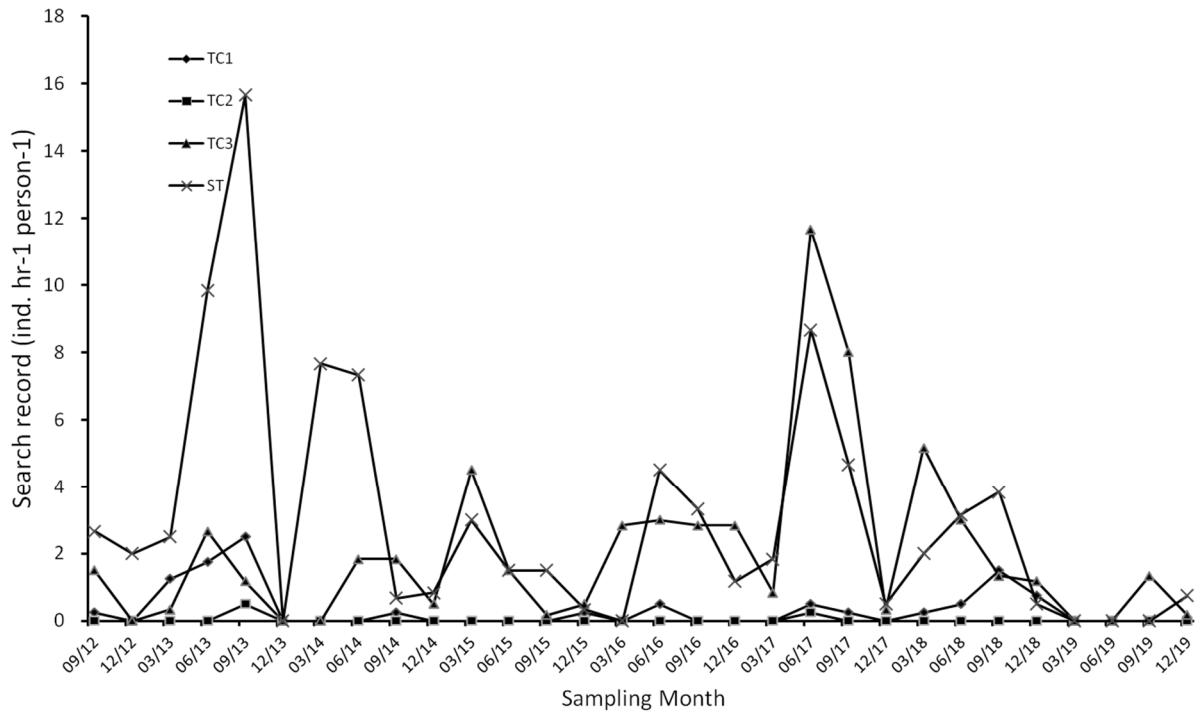


Figure 3.6 (Cont'd) Changes of number of individuals mean prosomal width and search record of horseshoe crab *Tachypleus tridentatus* in every sampling zone along the sampling months

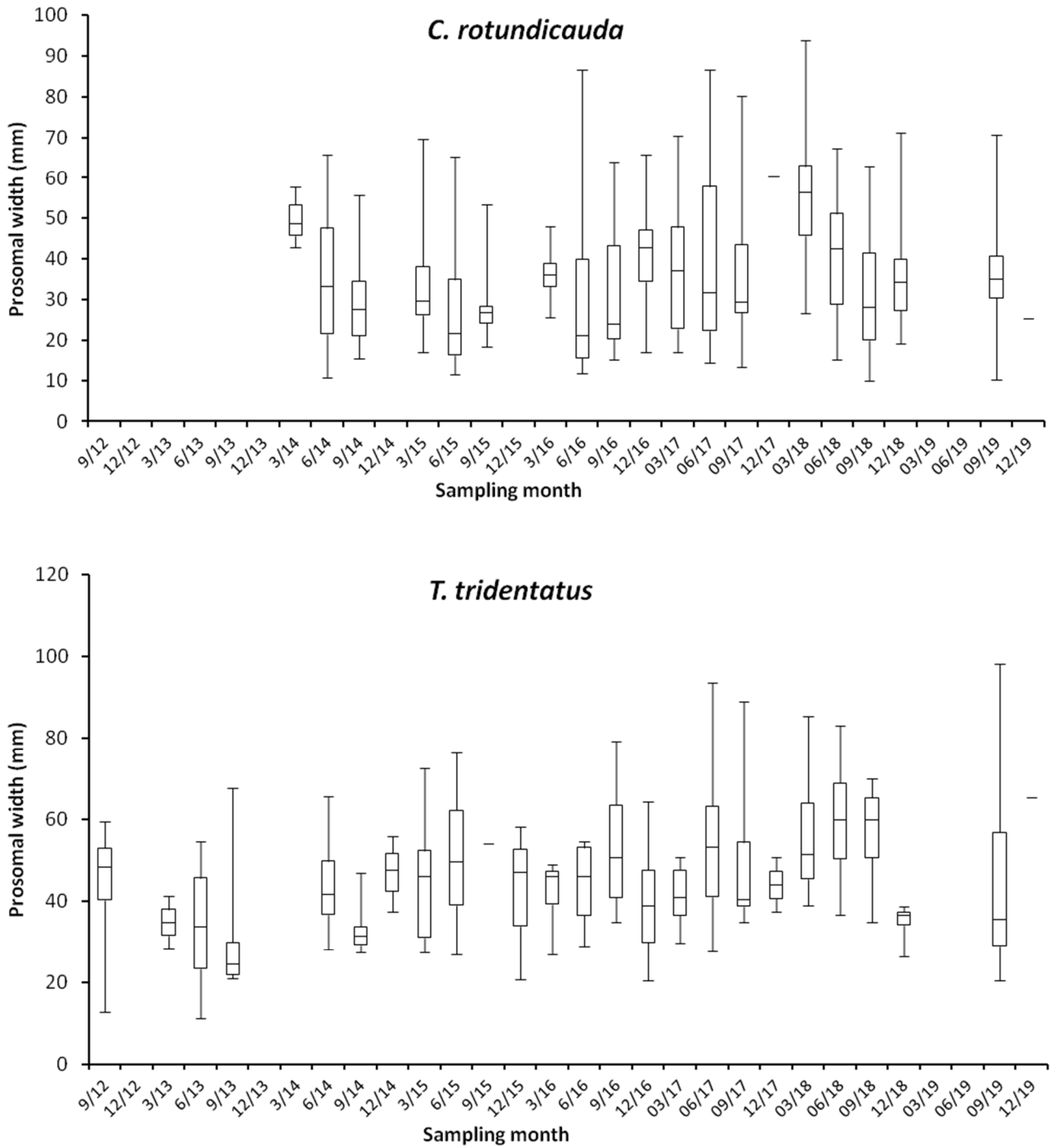


Figure 3.7 Box plot of prosomal width of horseshoe crab in the sampling zone TC3 along the sampling months. (The box represents 50% of the sample (upper to lower quartile) with a middle line showing the median value. The upper whisker and lower whisker showed the 25% of sample above upper quartile and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

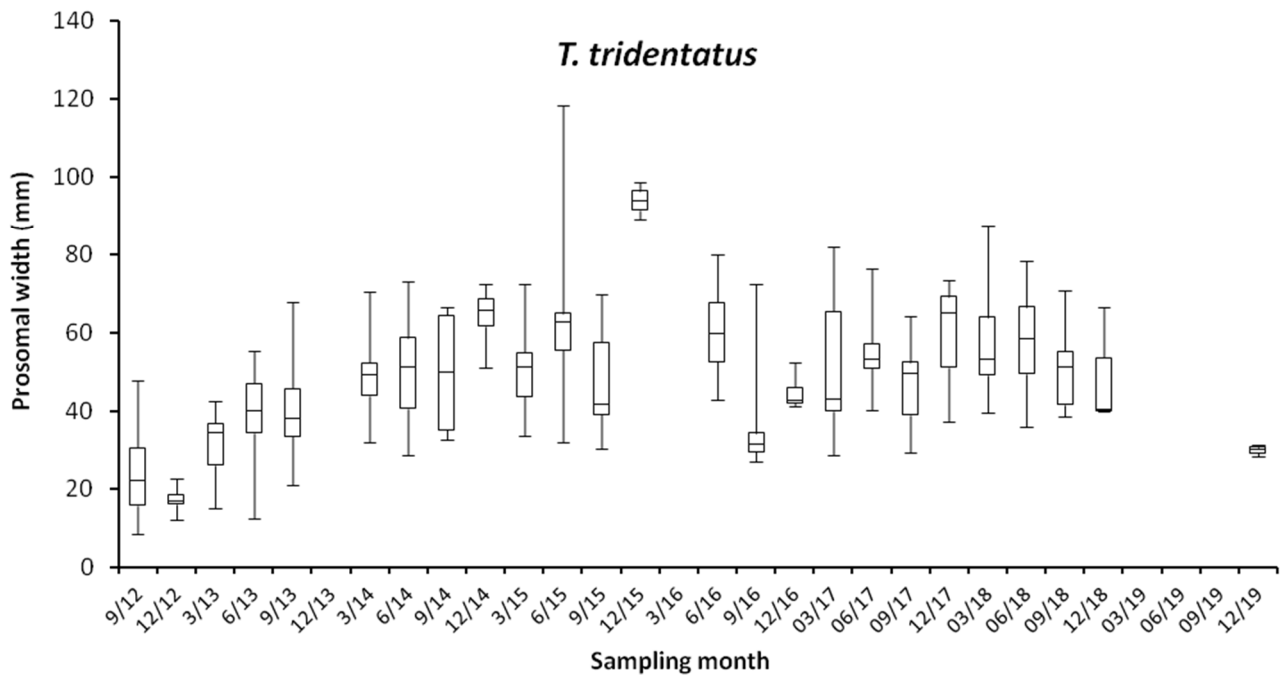
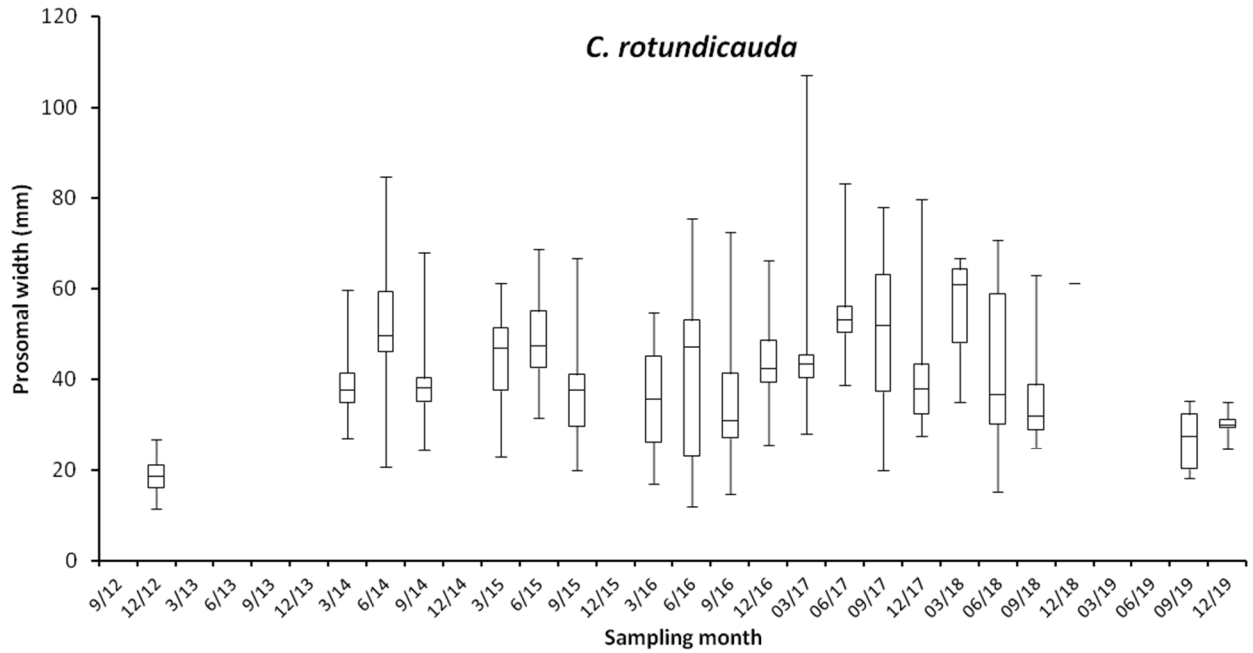


Figure 3.8 Box plot of prosomal width of horseshoe crab in the sampling zone ST along the sampling months. (The box represents 50% of the sample (upper to lower quartile) with a middle line showing the median value. The upper whisker and lower whisker showed the 25% of sample above upper quartile and 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	1	2
Total area (m²)	9	1050
Average area (m²)	9	525

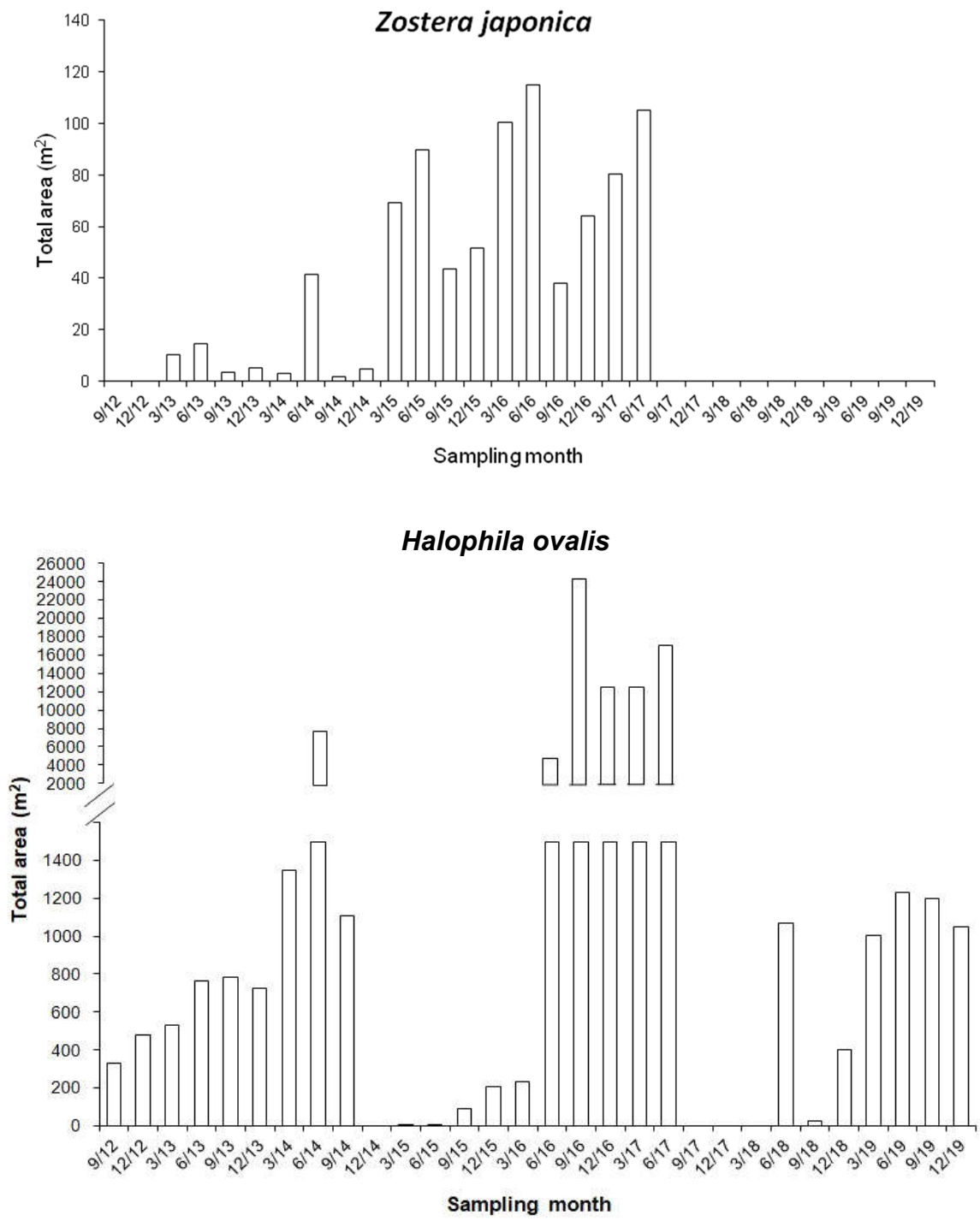


Figure 3.11 Temporal changes of estimated total area of seagrass beds in ST

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



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

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



5/12/2019

TC2 H



TC2 L



19/12/2019

TC3 H



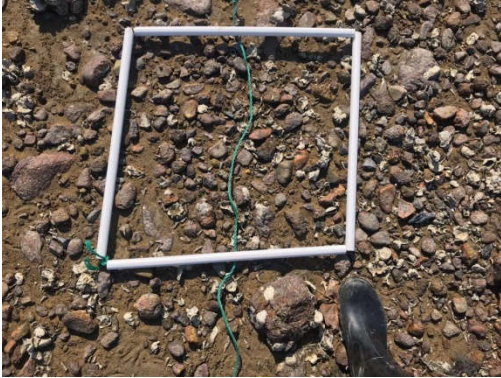
TC3 L



20/12/2019

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



4/12/2019

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>December 2019</i>				
Mollusca	13083	94.8	436	32
Arthropoda	577	4.2	19	7
Annelida	52	0.4	1.7	6
Sipuncula	52	0.4	1.7	2
Nemertea	10	0.1	0.3	1
Cnidaria	26	0.2	0.9	1
Platyhelminthes	3	0.0	0.1	1
Total	13803			

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	3632	97	484	3898	95	520	2394	90	319	3159	96	421
Arthropoda	70	2	9	180	4	24	222	8	30	105	3	14
Annelida	12	0	2	0	0	0	37	1	5	3	0	0
Sipuncula	12	0	2	27	1	4	0	0	0	13	0	2
Nemertea	3	0	0	3	0	0	4	0	1	0	0	0
Cnidaria	5	0	1	3	0	0	10	0	1	8	0	1
Platyhelminthes	0	0	0	0	0	0	0	0	0	3	0	0
Sub-total	3734			4111			2667			3291		

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>	122	27	4
	G	<i>Batillaria multiformis</i>	76	17	64
	G	<i>Monodonta labio</i>	64	14	5
Mid	Bi	<i>Saccostrea cucullata</i>	140	30	17
	G	<i>Monodonta labio</i>	60	13	31
Low	Bi	<i>Saccostrea cucullata</i>	152	26	33
	G	<i>Monodonta labio</i>	99	17	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	Bi	<i>Saccostrea cucullata</i>	98	19	44
	G	<i>Batillaria multiformis</i>	112	22	81
Mid	Bi	<i>Saccostrea cucullata</i>	149	25	34
	G	<i>Batillaria multiformis</i>	104	18	12
	G	<i>Monodonta labio</i>	72	12	7
Low	Bi	<i>Saccostrea cucullata</i>	162	29	51
	G	<i>Monodonta labio</i>	84	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>	82	26	3
	G	<i>Batillaria multiformis</i>	53	18	73
Mid	Bi	<i>Saccostrea cucullata</i>	58	19	4
	G	<i>Batillaria multiformis</i>	68	22	83
Low	Bi	<i>Saccostrea cucullata</i>	130	36	37

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>	68	26	12
	G	<i>Monodonta labio</i>	44	17	44
Mid	Bi	<i>Saccostrea cucullata</i>	74	14	26
	G	<i>Batillaria zonalis</i>	75	14	3
	G	<i>Monodonta labio</i>	66	12	52
Low	Bi	<i>Saccostrea cucullata</i>	126	25	23
	G	<i>Monodonta labio</i>	56	11	48

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	13		449		2.0		0.8	
	M	15	15	465	498	2.2	2.13	0.8	0.79
	L	16		580		2.2		0.8	
TC2	H	14		507		2.2		0.8	
	M	15	15	588	548	2.2	2.20	0.8	0.82
	L	16		550		2.2		0.8	
TC3	H	14		390		1.9		0.7	
	M	13	13	312	355	2.2	2.03	0.9	0.79
	L	12		362		2.0		0.8	
ST	H	10		256		1.8		0.8	
	M	19	15	545	439	2.4	2.17	0.8	0.82
	L	16		515		2.3		0.8	

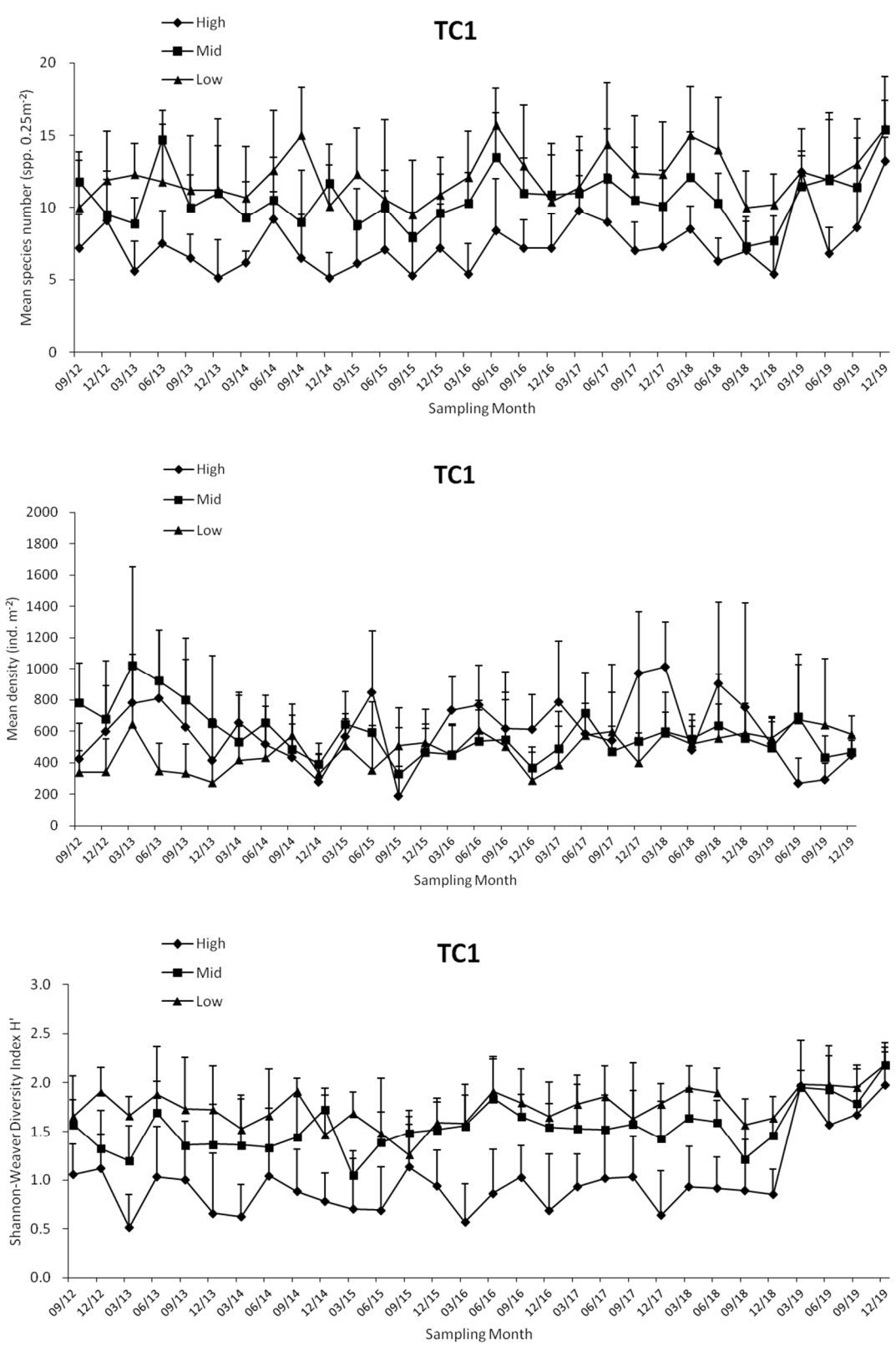


Figure 3.14 Temporal changes of mean number of species, mean density, Shannon-Weaver Diversity Index (H') and Pielou's Species Evenness (J) (mean + SD) at every tidal level in sampling zone TC1

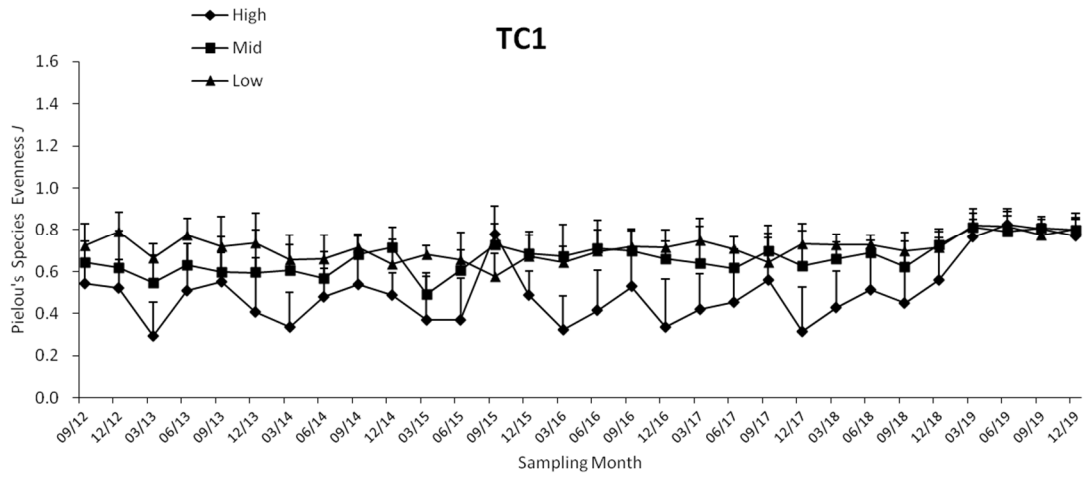


Figure 3.14(Cont'd) Temporal changes of mean number of species, mean density, Shannon-Weaver Diversity Index (H') and Pielou's Species Evenness (J) (mean + SD) at every tidal level in sampling zone TC1

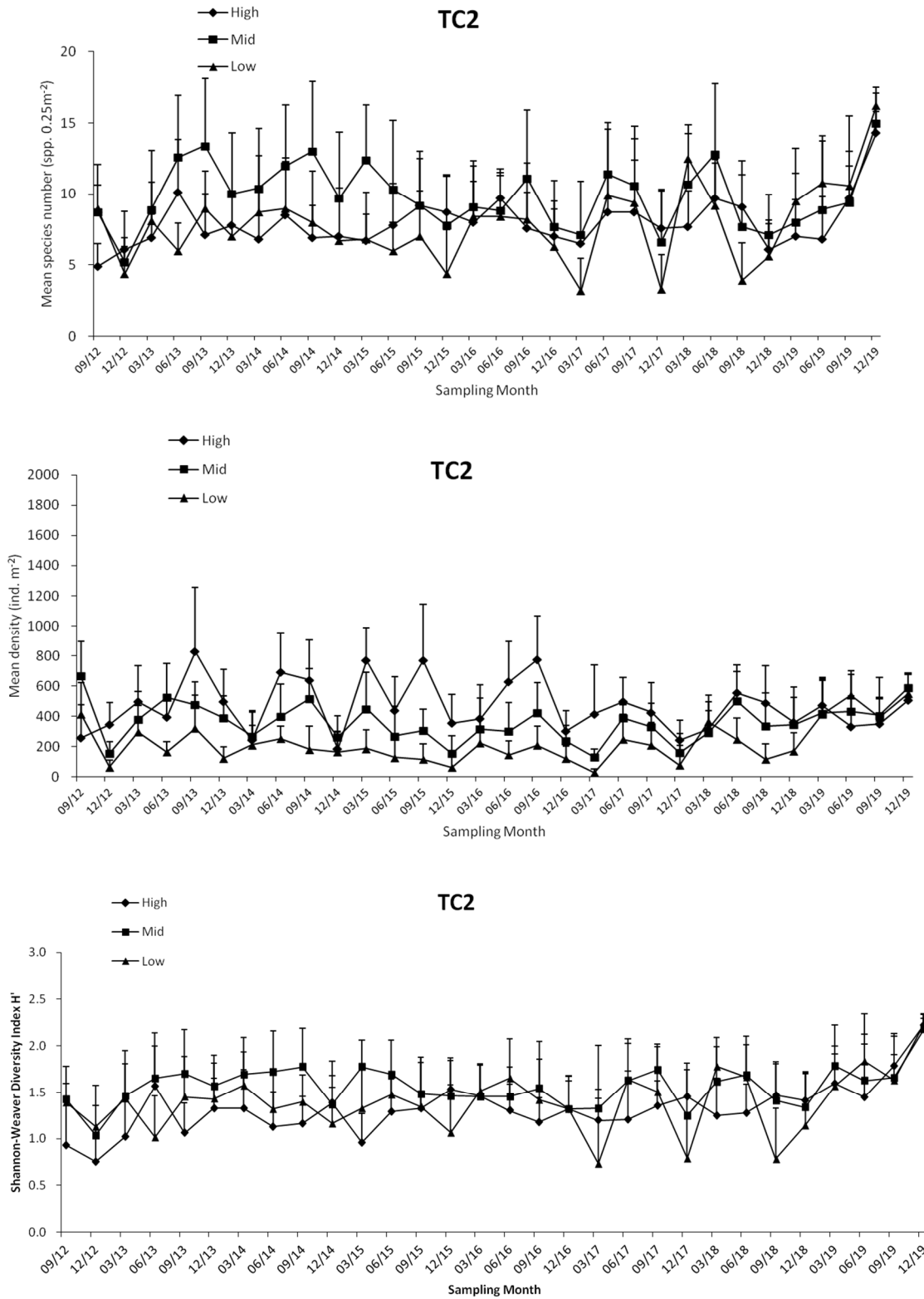


Figure 3.15 Temporal changes of mean number of species, mean density, Shannon-Weaver Diversity Index (H') and Pielou's Species Evenness (J) (mean + SD) at every tidal level in sampling zone TC2

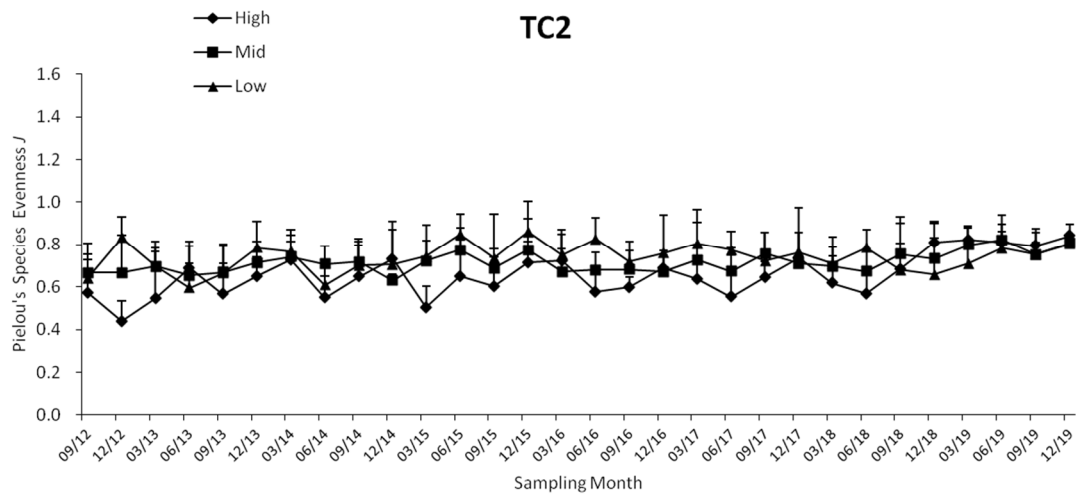


Figure 3.15(Cont'd) Temporal changes of mean number of species, mean density, Shannon-Weaver Diversity Index (H') and Pielou's Species Evenness (J) (mean + SD) at every tidal level in sampling zone TC2

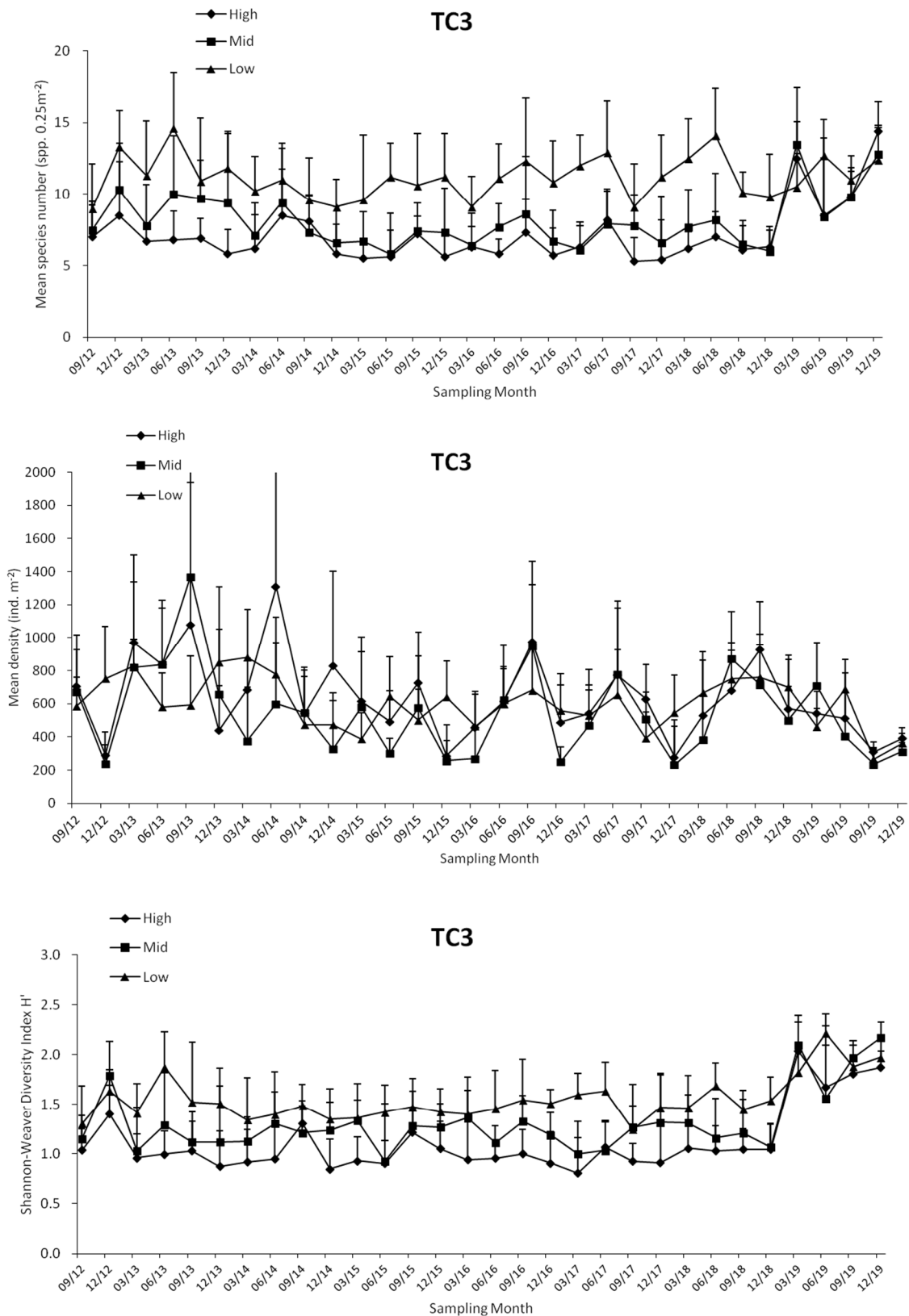


Figure 3.16 Temporal changes of mean number of species, mean density, Shannon-Weaver Diversity Index (H') and Pielou's Species Evenness (J) (mean + SD) at every tidal level in sampling zone TC3

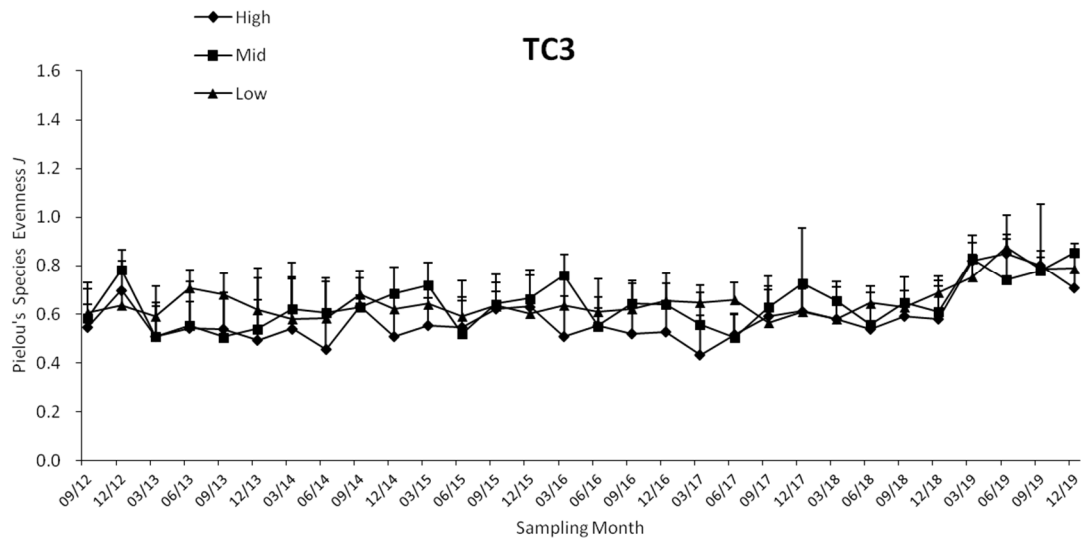


Figure 3.16(Cont'd) Temporal changes of mean number of species, mean density, Shannon-Weaver Diversity Index (H') and Pielou's Species Evenness (J) (mean + SD) at every tidal level in sampling zone TC3

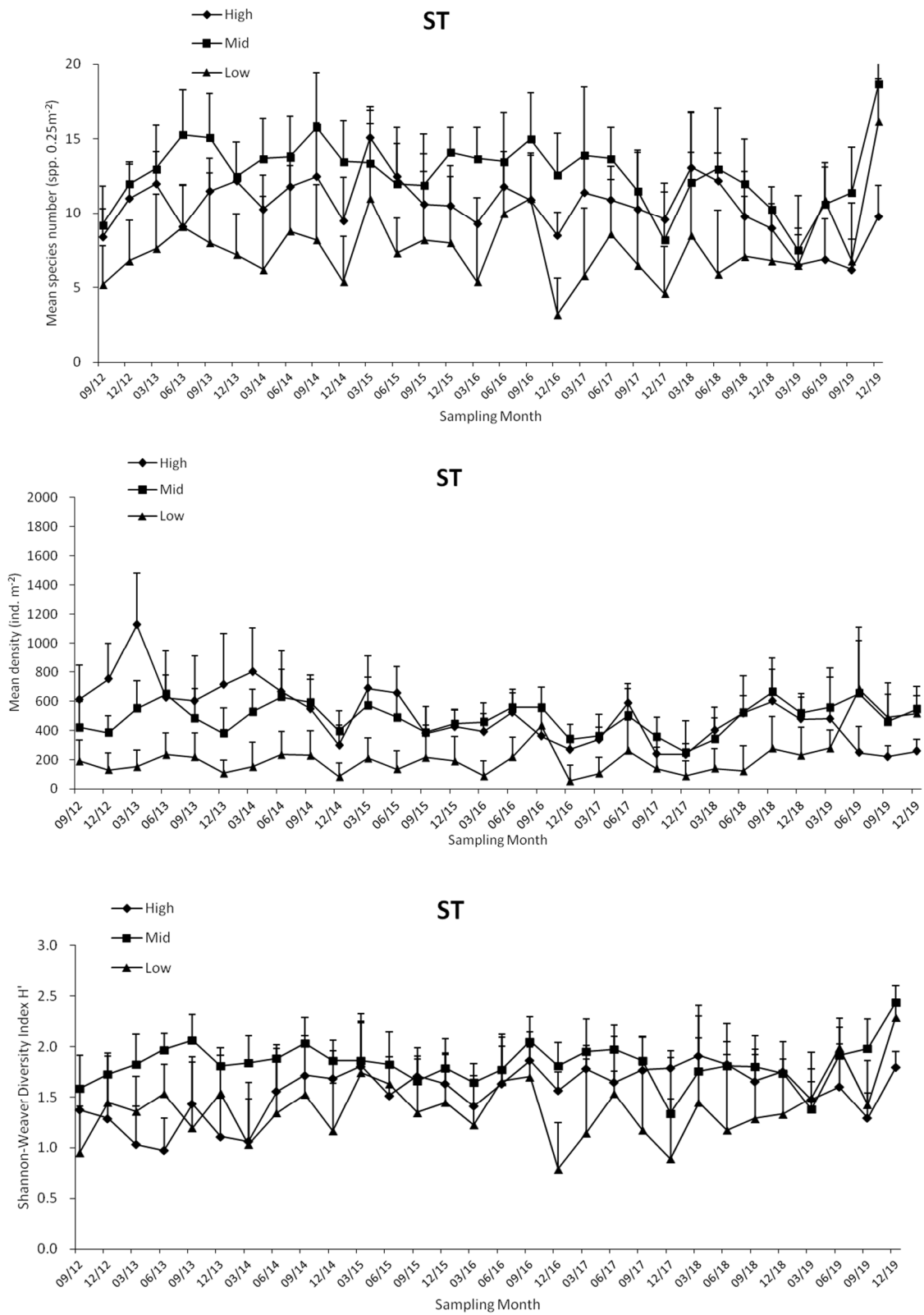


Figure 3.17 Temporal changes of mean number of species, mean density, Shannon-Weaver Diversity Index (H') and Pielou's Species Evenness (J) (mean + SD) at every tidal level in sampling zone S

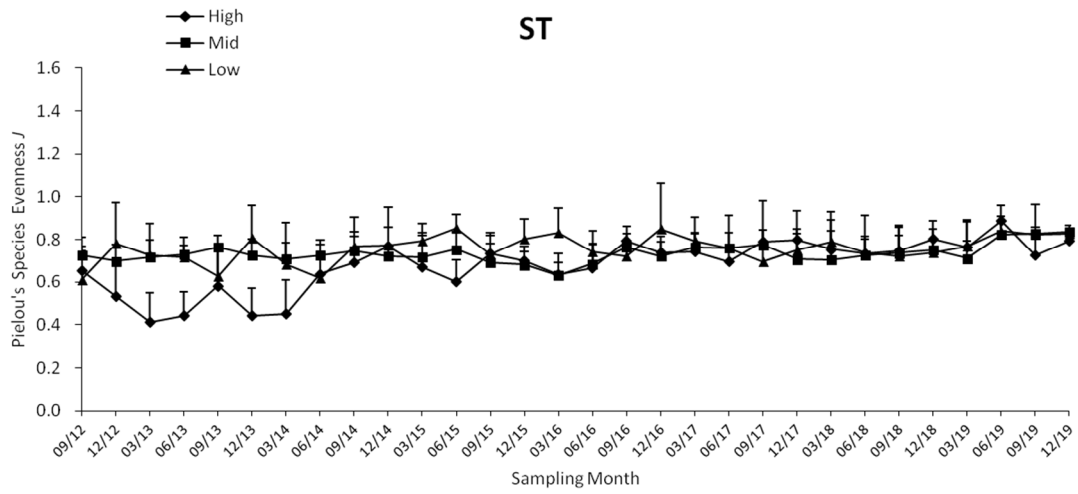


Figure 3.17(Cont'd) Temporal changes of mean number of species, mean density, Shannon-Weaver Diversity Index (H') and Pielou's Species Evenness (J) (mean + SD) at every tidal level in sampling zone ST

Annex I Location of smapling 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)	
Sampling site TC1	(Search hour = 2 hrs)		<i>Carcinoscorpius rotundicauda</i>	<i>Tachypleus tridentatus</i>
	No Record			
	No. of ind.		0	0
Sampling site TC2	(Search hour = 2 hrs)		<i>Carcinoscorpius rotundicauda</i>	<i>Tachypleus tridentatus</i>
	No Record			
	No. of ind.		0	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°17'006"N	113°55'032"E	25.41		
2	M	22°17'005"N	113°55'033"E			65.3
No. of ind.				1		1
<u>Sampling site ST (Search hour = 3 hrs)</u>				<i>Carcinoscorpius rotundicauda</i>		<i>Tachypleus tridentatus</i>
1	M	22°17'009"N	113°55'031"E	31.26		
2	M	22°17'009"N	113°55'032"E	33.2	29.42 29.85	
3	M	22°17'035"N	113°55'037"E	30.66		
4	M	22°17'036"N	113°55'038"E			31.5 28.64
5	M	22°17'010"N	113°55'032"E	29.59		
6	M	22°17'010"N	113°55'033"E			30.48
7	M	22°17'010"N	113°55'030"E	35.14		
8	M	22°17'010"N	113°55'031"E	24.6		
9	M	22°17'013"N	113°55'030"E	26.57		
No. of ind.				9		3

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)					
9	90-100	horizontal line	22°16'053"N	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.
			22°16'053"N	113°56'005"E	
ST <i>Halophila ovalis</i> (search hour = 3 hrs)					
50	10-20	horizontal line	22°17'014"N	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.
			22°17'015"N	113°55'029"E	
1000	90-100	horizontal line	22°17'013"N	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.
			22°17'014"N	113°55'029"E	

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

Kingdom	Phylum	Class	Order	Family	Species
Animalia	Annelida	Polycheata	Phyllodocida	Nereididae	<i>Nereididae</i> spp.
Animalia	Annelida	Polycheata	Canalipalpata	Ampharetidae	<i>Ampharetidae</i> sp.
Animalia	Annelida	Polycheata	Phyllodocida	Nereidae	<i>Perinereis</i> sp.
Animalia	Annelida	Polycheata	Sabellida	Sabellidae	<i>Sabellidae imbricatus</i>
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	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	Maxillopoda	Sessilia	Balanidae	<i>Balanus amphitrite</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>Brachidontes variabilis</i>
Animalia	Mollusca	Bivalvia	Mytioida	Mytilidae	<i>Xenostrobus atratus</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>Glaucnome chinensis</i>
Animalia	Mollusca	Gastropoda	Archaeogastropoda	Nacellidae	<i>Cellana toreuma</i>
Animalia	Mollusca	Gastropoda	Archaeogastropoda	Trochidae	<i>Monodonta labio</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 zonalis</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>

Kingdom	Phylum	Class	Order	Family	Species
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	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</i> spp.
Animalia	Nemertea	Pilidiophora	Heteronemertea	Valenciidae	<i>Baseodiscus hemprichii</i>
Animalia	Nemertea				<i>Nemertea</i> spp.
Animalia	Platyhelminthes			<i>Platyhelminthes</i> sp.	Animalia
Animalia	Sipuncula	Sipunculidae	Golfingiida	Sipunculidae	<i>Siphonosoma</i> sp.
Animalia	Sipuncula	Sipunculidae	Golfingiida	Sipunculidae	<i>Sipunculus nudus</i>

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

Dec 2019		Sampling Zone TC1																				High tidal level (2.0 m above C.D.)	
Gp	Taxon	1		2		3		4		5		6		7		8		9		10		Sub-total	
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C		
Bi	<i>Barbatia virescens</i>	4		2		2				4		5						4		2		23	
Bi	<i>Glauconome chinensis</i>	2				1				2								1		1		7	
Bi	<i>Saccostrea cucullata</i>	24		10		34		46		24		10		20		48		40		50		306	
Bi	<i>Xenostrobus atratus</i>			5		5		4		2										2		18	
C	<i>Gaetice depressus</i>	1										4				1						6	
C	<i>Hemigrapsus penicillatus</i>	4		1		1						2						1		1		10	
C	<i>Metopograpsus latifrons</i>			1										1								2	
G	<i>Batillaria multiformis</i>	15		22		32		18		12		26		20		24		10		10		189	
G	<i>Batillaria zonalis</i>	12		15		17		18		7		8		7		12		4		5		105	
G	<i>Cellana toreuma</i>													1			3	2		4		10	
G	<i>Clithon faba</i>	2				1								1		1				1		6	
G	<i>Littoraria articulata</i>			5		7		1				2										15	
G	<i>Lottia luchuana</i>	4		1														2				7	
G	<i>Lunella coronata</i>			2		1		5		1				1		8		1		2		21	
G	<i>Lunella granulata</i>	7				2		2		4						4				6		25	
G	<i>Monodonta labio</i>	17		14		15		17		22		14		20		8		18		15		160	
G	<i>Nodilittorina radiata</i>			2		12		5				2		8				11				40	
G	<i>Pirenella asiatica</i>	8		5		17		13		10		5		9		7		5		2		81	
G	<i>Pirenella incisa</i>	7		11		10		10		8		11		2		14				7		80	

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

Dec 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	
Ne	<i>Nemertea spp.</i>									1								1		1		3
Sp	<i>Siphonosoma sp.</i>									2										1		3
Sp	<i>Sipunculus nudus</i>			2		1						1				1						5
																				Total	1122	

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

Dec 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>	2				4		5				4		5		2		4				26
Bi	<i>Glauconome chinensis</i>	1				2				1						1				2		7
Bi	<i>Saccostrea cucullata</i>	38		42	3	25		38		54		25		36		35		24		29		349
Bi	<i>Xenostrobus atratus</i>	2		16	1	14		5		2		14		11		7		5		15		92
C	<i>Metopograpsus latifrons</i>							2						2		1				2		7
C	<i>Pagurus dubius</i>	1				1												2		1		5
G	<i>Batillaria multiformis</i>			12						5				4						10		31
G	<i>Batillaria zonalis</i>					5		6						7		1				2		21
G	<i>Clithon faba</i>	7						1				2		2						1		13
G	<i>Clithon oualaniensis</i>			2		2								1		4				1		10
G	<i>Clithon retropictus</i>	1		1				2		3				1		1		5				14
G	<i>Littoraria articulata</i>			1						1						2				1		5
G	<i>Lottia dorsuosa</i>	1								2						1				1		5
G	<i>Lunella coronata</i>	5		5		18		5				7		5		2		8		4		59
G	<i>Lunella granulata</i>	17		18		2				7		11						5		5		65
G	<i>Monodonta labio</i>	27		20		13		15		10		17		5		13		17		14		151
G	<i>Nerita chamaeleon</i>	2										2				1				3		8
G	<i>Nerita polita</i>					1						1						1				3
G	<i>Nerita squamulata</i>			2				4		1				2								9
G	<i>Nipponacmea concinna</i>	1		1		2		1										2				7
G	<i>Nodilittorina radiata</i>	22		16		8		2		7		5		1		9		5		16		91

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

Dec 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>Patelloida pygmaea</i>	3						4				3				2		1				13
G	<i>Pirenella asiatica</i>	12		7		8		5		13		6				3				16		70
G	<i>Pirenella incisa</i>	19		13		10		9		8		15				5			8	7		94
P	<i>Nereididae spp.</i>					1									1				1			3
P	<i>Perinereis sp.</i>	1								1											1	3
Sp	<i>Siphonosoma sp.</i>																				1	1
																					Total	1162

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

Dec 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		4		4						3				2		1		1		17
Bi	<i>Barbatia virescens</i>	2		4		8		4				5				2						25
Bi	<i>Glauconome chinensis</i>			2		1						3								1		7
Bi	<i>Saccostrea cucullata</i>	56		24		75		42		25		28		36		28		42		25		381
Bi	<i>Xenostrobus atratus</i>	12		13		10		24		18		6		15		11		14		10		133
C	<i>Gaetice depressus</i>							2		3				2		1				3		11
C	<i>Hemigrapsus penicillatus</i>					2		1												1		4
C	<i>Metopograpsus latifrons</i>	1				1						1		1				1		1		6
C	<i>Pagurus dubius</i>					1														1		2
Cn	<i>Diadumene lineata</i>			1										1	2						1	5
G	<i>Batillaria multiformis</i>	8		5				4		25		5						10		5		62
G	<i>Batillaria zonalis</i>	4				6		10		14						12		9				55
G	<i>Clithon faba</i>							2				3								1		6
G	<i>Clithon retropictus</i>					5				8		4				2				1		20
G	<i>Littoraria articulata</i>			1				5				6		5				4				21
G	<i>Lottia luchuana</i>			5										6						2		13
G	<i>Lunella coronata</i>	5				5				2		4		8		4				6		34
G	<i>Lunella granulata</i>	2								5		10		4				18		5		44
G	<i>Monodonta labio</i>	32		52		43		16		24		5		8		12		39		16		247
G	<i>Nipponacmea concinna</i>	2						1						2		1		4		2		12
G	<i>Nodilittorina radiata</i>	12		5		18		13				20		28				14		13		123

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

Dec 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>Pirenella asiatica</i>	13		7		16		16		24		5		8		12		12		4		117
G	<i>Pirenella incisa</i>	14				2		5		4		18		4		24		12		5		88
P	<i>Ampharetidae sp.</i>					1															1	2
P	<i>Nereididae spp.</i>											1	2								1	4
Po	<i>Lepidozona spp.</i>	1				2				1		2				1				1		8
Sp	<i>Siphonosoma sp.</i>			1								1								1		3
																					Total	1450

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

Dec 2019	Sampling Zone TC2	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>	17		5						4				10		11						47
Bi	<i>Gelonia erosa</i>	1										1								1		3
Bi	<i>Barbatia virescens</i>	14		7		5		8		2				2		4		5		4		51
Bi	<i>Saccostrea cucullata</i>	36		17		26		28		24		6		27		32		29		19		244
Bi	<i>Xenostrobus atratus</i>	2		8		7		3		1		5		5		9				3		43
C	<i>Gaetice depressus</i>					1						2		1				1		2		7
C	<i>Hemigrapsus penicillatus</i>					2				1				1								4
C	<i>Metopograpsus latifrons</i>											1										1
C	<i>Metopograpsus quadridentatus</i>	1				1																2
Cn	<i>Diadumene lineata</i>									1										2		3
G	<i>Batillaria multiformis</i>	25		16		21		28		36		34		25		28		30		36		279
G	<i>Batillaria zonalis</i>	12		5		4		11		16		17		9		10		15		14		113
G	<i>Clithon faba</i>			1		1						2						4				8
G	<i>Clithon retropictus</i>	1																				1
G	<i>Lottia dorsuosa</i>	1		5		1														2		9
G	<i>Lunella coronata</i>					2		5				4		9				1		1		22
G	<i>Lunella granulata</i>			2		4		8		6		1		12		5		11		2		51
G	<i>Monodonta labio</i>	17		11		19		5		12		2						18		12		96
G	<i>Nipponacmea concinna</i>			2				1								3				2		8
G	<i>Nodilittorina radiata</i>	19		15		17		11		5		9		4		5		6		2		93

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

Dec 2019		Sampling Zone TC2		High tidal level (2.0 m above C.D.)																		
Gp	Taxon	1		2		3		4		5		6		7		8		9		10		Sub-total
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	
G	<i>Patelloida pygmaea</i>			2						1						1		5				9
G	<i>Pirenella asiatica</i>	5		8		5		12		10	1	6		14		5		14		5		85
G	<i>Pirenella incisa</i>	6		9		11	1	8		2		2		7		17		10	2	1		76
Sp	<i>Sipunculus nudus</i>							4		2								5		1		12
																					Total	1267

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

Dec 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	
Ba	<i>Balanus amphitrite</i>			4		3		1		4								5				17
Bi	<i>Barbatia virescens</i>	15						2		5				5		2		1		2		32
Bi	<i>Glauconome chinensis</i>							2												1		3
Bi	<i>Saccostrea cucullata</i>	52		42		45		25		35		28		36		40		37		32		372
Bi	<i>Xenostrobus atratus</i>	9		5		12		2		5						14		8		6		61
C	<i>Gaetice depressus</i>	1								1				2				1				5
C	<i>Hemigrapsus penicillatus</i>											1						1				2
C	<i>Metopograpsus quadridentatus</i>	2								1						1				1		5
C	<i>Pagurus dubius</i>					4				2						1				1		8
C	<i>Parasesarma bidens</i>			1														1				2
G	<i>Batillaria multiformis</i>	23		25		19		32	1	35	2	31		36		25		15		16	1	261
G	<i>Batillaria zonalis</i>	14		7		8		17		13		11		10	1	6		18		12	2	119
G	<i>Clithon faba</i>					3								1				3		1		8
G	<i>Clithon retropictus</i>	1		1		2		1								2				1		8
G	<i>Lottia dorsuosa</i>	3												1		5						9
G	<i>Lunella coronata</i>	5		6		2		5		2				2		17		5		6		50
G	<i>Lunella granulata</i>	8		16		9		13				8		11		14				12	4	95
G	<i>Monodonta labio</i>	32		38		32		8		12		14		10		21				5	9	181
G	<i>Nerita squamulata</i>	1		2				2		1				1				2		1		10
G	<i>Nerita lineata</i>													1								1
G	<i>Nipponacmea concinna</i>			2				2				1				2						7

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

Dec 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>Nodilittorina radiata</i>	18		22		23		5		7		12		9				8		5		109	
G	<i>Patelloida pygmaea</i>			2						3		1						2		1		9	
G	<i>Pirenella asiatica</i>					5		10				14		4		2	9	1			11	4	60
G	<i>Pirenella incisa</i>					6						10					5		6		5		32
Ne	<i>Baseodiscus hemprichii</i>		1																			1	
Sp	<i>Sipunculus nudus</i>	1												1							1	3	
																						Total	1470

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

Dec 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>	5		7		12		4				10		5		6		4		2		55
Bi	<i>Barbatia virescens</i>			5		4						4		3						4		20
Bi	<i>Isognomon isognomum</i>	1												1				2				4
Bi	<i>Saccostrea cucullata</i>	48		52		36		45		45		51		36		25		34		32		404
Bi	<i>Xenostrobus atratus</i>	4		5		2		8		11		2		4				6		8		50
C	<i>Gaetice depressus</i>	1																				1
C	<i>Metopograpsus latifrons</i>			2												1		1				4
C	<i>Metopograpsus quadridentatus</i>	1																		1		2
C	<i>Pagurus dubius</i>					4				2		1		4						3		14
C	<i>Parasesarma bidens</i>	1						1				2										4
G	<i>Batillaria multiformis</i>	17		13		18		22		18	2	13		8	1	6		7		5		130
G	<i>Batillaria zonalis</i>	8		19		12		16		5		8		4		2		4		6		84
G	<i>Cellana toreuma</i>					1								1						1		3
G	<i>Clithon retropictus</i>	1				2				1		1										5
G	<i>Lunella coronata</i>	9		15		5		5		9		1		5		4						53
G	<i>Lunella granulata</i>	13		8		16		15		12		4		5		16		8		8		105
G	<i>Monodonta labio</i>	25		29		24		20		23		5		30		18		14		23		211
G	<i>Nerita polita</i>					4										2		1				7
G	<i>Nipponacmea concinna</i>			1						1								1		2		5
G	<i>Nodilittorina radiata</i>	8	1	5		7		10		4		5		8		6		5				59
G	<i>Nodilittorina vidua</i>					1		2		4		1				2						10

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

Dec 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>Patelloida pygmaea</i>	2		3		2				4						1		2				14
G	<i>Pirenella asiatica</i>	5		6		5		4		12		17		4		6		1			1	61
G	<i>Pirenella incisa</i>	6		8		2		4		8		12		2		5					2	49
Ne	<i>Nemertea sp.</i>					1														1		2
Po	<i>Lepidozona spp.</i>					1								1		2		1			1	6
Sp	<i>Sipunculus nudus</i>			4				5		1						2						12
																					Total	1374

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

Dec 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	Balanus amphitrite			1						5		5								1		12
Bi	Glauconome chinensis	1				4				1				1								7
Bi	Saccostrea cucullata	32		17		25		32		26		16		25		29		30		25		257
Bi	Xenostrobus atratus	2		4				5		4				9		11		5		2		42
C	Hemigrapsus penicillatus	2						2						3				5		2		14
C	Metopograpsus latifrons			4				1		2												7
C	Pagurus dubius	1														2		1		2		6
Cn	Diadumene lineata	1				1				2		2						4				10
G	Batillaria multiformis	25		18		24		24		25		15		10		16		6		15		178
G	Batillaria zonalis	14		12		7		13		9		13		5		10		5		5		93
G	Clithon faba					1						1		2								4
G	Clithon retropictus							1						4		3		1		5		14
G	Clypeomorus moniliferum	1						1						2								4
G	Littoraria articulata			1								2						1				4
G	Lottia dorsuosa			2				1		1		2		1								7
G	Lunella coronata	2		1		2				1						2				4		12
G	Lunella granulata	4				5				4		5		8		6				8		40
G	Monodonta labio	2		8				7						4				5		12		38
G	Nerita squamulata			1						1		2										4
G	Nipponacmea concinna			2						1										1		4
G	Nodilittorina radiata	4				2								7		6				2		21

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

Dec 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	Patelloida pygmaea	2						2						1		3		2		1		11
G	Pirenella asiatica	12		20		15		5		12		6		4		10		5		4		93
G	Pirenella incisa	10		26		16		7		9		5		1		4		2		12		92
P	Maldanidae spp.			1																		1
P	Nereididae spp.					1													1			2
Po	Lepidozona spp.			3						1		1										5
																					Total	982

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

Dec 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>			8		4		15		12		6		15		4		2		8		74
Bi	<i>Barbatia virescens</i>	4		2		2		5		4				2						2		21
Bi	<i>Glauconome chinensis</i>			1						2		1				1						5
Bi	<i>Isognomon isognomum</i>					1		1												1		3
Bi	<i>Saccostrea cucullata</i>	23		11		15		8		12		9		13		22		17		15		145
Bi	<i>Xenostrobus atratus</i>	4		5		8		2				5						2		3		29
C	<i>Gaetice depressus</i>					1						1								2		4
C	<i>Hemigrapsus penicillatus</i>	1				1		1						1				1				5
C	<i>Metopograpsus latifrons</i>			1				2												2		5
G	<i>Batillaria multiformis</i>	25		22		14		15		19		14		16		18		12		16		171
G	<i>Batillaria zonalis</i>	17		13		5		8		5		7		5		2		5		5		72
G	<i>Clithon faba</i>	1				1						3				1				1		7
G	<i>Clithon retropictus</i>					2				2						1				1		6
G	<i>Littoraria articulata</i>			1				2		2		3								4		12
G	<i>Lottia dorsuosa</i>			2				3		2				5		3		4				19
G	<i>Lunella granulata</i>	5		6		9		17		13		9		5				4		2		70
G	<i>Nerita squamulata</i>	2				5								1				1				9
G	<i>Pirenella asiatica</i>	10		6		9		5		8		4		5	2	10		7		6		72
G	<i>Pirenella incisa</i>	13		2		2		4		5				2		10		4		2		44
Ne	<i>Nemertea spp.</i>									1								1				2
P	<i>Sabellidae imbricatus</i>			4												1				1		6

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

Dec 2019		Sampling Zone TC3		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	
		Total																		781		

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

Dec 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>	7		18		6		7		12		4		5		2		3		2		66
Bi	<i>Barbatia virescens</i>	2		5		2		7		5								2		2		25
Bi	<i>Saccostrea cucullata</i>	29		32		30		42		31		29		26		32		35		40		326
Bi	<i>Xenostrobus atratus</i>	4				2								15		4		8		2		35
C	<i>Gaetice depressus</i>					1						4				1				1		7
C	<i>Hemigrapsus penicillatus</i>					1				1								1		1		4
C	<i>Metopograpsus latifrons</i>	1				1				3		2				2						9
C	<i>Metopograpsus quadridentatus</i>	1						1						1								3
C	<i>Pagurus dubius</i>	4														2						6
G	<i>Batillaria multiformis</i>	9		7		12		18		8		6		5		8		5		6		84
G	<i>Batillaria zonalis</i>	7		12		8		6		9		4		4		9		2		8		69
G	<i>Clithon retropictus</i>	1				2						2						2				7
G	<i>Lottia dorsuosa</i>					2						2		4		1		3				12
G	<i>Lunella coronata</i>	4		5				4						1						4		18
G	<i>Lunella granulata</i>	6		16				14		5				9		10				13		73
G	<i>Monodonta labio</i>	5						4								6						15
G	<i>Nerita squamulata</i>	1		1				3		5		6		1		4		19		4		44
G	<i>Pirenella asiatica</i>	14				5				2				2		2				4		29
G	<i>Pirenella incisa</i>	10				2				6				13		5				6		42
Ne	<i>Nemertea spp.</i>					1										1						2
P	<i>Sabellidae imbricatus</i>			8		2				7		1		2						8		28

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

Dec 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		
																						Total	904

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

Dec 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>	2				5		1				1		5		1		2		1		18
Bi	<i>Saccostrea cucullata</i>	25		14		7		16		18		12		28		21		6		20	2	169
Bi	<i>Xenostrobus atratus</i>			2						1								2		1		6
C	<i>Gaetice depressus</i>	1																				1
C	<i>Metopograpsus latifrons</i>	1						1								1					2	5
C	<i>Hemigrapsus penicillatus</i>					1								1								2
G	<i>Batillaria multiformis</i>	4		2		2		5		2		17		14		4		3	4	2		59
G	<i>Batillaria zonalis</i>	4										5		5				25				39
G	<i>Clithon retropictus</i>					5		1													2	8
G	<i>Littoraria articulata</i>													1		3						4
G	<i>Lottia dorsuosa</i>					2				1								1				4
G	<i>Lunella coronata</i>							4						1	1						1	7
G	<i>Lunella granulata</i>	18		2		1						2		1				8	1	2		35
G	<i>Monodonta labio</i>	24	1	14		2		21				5		15		10		4		15		111
G	<i>Nassarius festivus</i>	1												10							4	15
G	<i>Nodilittorina radiata</i>	8		9		5		4		6		1		2		4					21	60
G	<i>Pirenella asiatica</i>			1		2				14				12		3		5		1		38
G	<i>Pirenella incisa</i>	5		1		14		2		10		5				2		19		2		60
																					Total	641

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

Dec 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>					2						1				2		4		5		14
Bi	<i>Barbatia virescens</i>	10		5		6		5		2		1				1				1		31
Bi	<i>Brachidontes variabilis</i>							1								3						4
Bi	<i>Glaucanome chinensis</i>	2		1		2				1		2		1		1				1		11
Bi	<i>Saccostrea cucullata</i>	22		25		23		18		14		6		25		17		22		14		186
Bi	<i>Xenostrobus atratus</i>	1		2				3				1				2				1		10
C	<i>Gaetice depressus</i>							1						1								2
C	<i>Metopograpsus latifrons</i>	2						1				1								2		6
C	<i>Metopograpsus quadridentatus</i>	1				1										1				1		4
C	<i>Pagurus dubius</i>			2		2				3								2		1		10
Cn	<i>Diadumene lineata</i>											1								1		2
G	<i>Batillaria multiformis</i>	17		25		4		7		11		2		19		11		8		10		114
G	<i>Batillaria zonalis</i>	27		28		14	1	19		15		11		17		14	2	17	1	21		187
G	<i>Clithon faba</i>	1				1				1				1		5		4	1	3		17
G	<i>Clithon oualaniensis</i>	1		1								1		0					1			4
G	<i>Clithon retropictus</i>					1				1				1		2		1		1		7
G	<i>Littoraria articulata</i>	2		1		1										1		2		1	1	9
G	<i>Lottia dorsuosa</i>	2		1		1		5				4				2				1		16
G	<i>Lunella coronata</i>	18		17		4		7		5		14		2		16		5		4		92
G	<i>Lunella granulata</i>	19		24		21		14		5				15		7		12		11		128
G	<i>Monodonta labio</i>	27		25		10				17		11		25		25		13		12		165

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

Dec 2019	Sampling Zone ST	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	
G	<i>Nerita lineata</i>	1																				1
G	<i>Nipponacmea concinna</i>	2				1		1		2						5					2	13
G	<i>Nodilittorina radiata</i>	17		25		14		5		14		25		5		8					15	128
G	<i>Patelloida pygmaea</i>			2		2						1		2							2	9
G	<i>Pirenella asiatica</i>	14		11		12		8		11		14		9		12		8			7	106
G	<i>Pirenella incisa</i>	8		15		7		2		14		2		3		6		5			12	74
P	<i>Sabellidae imbricatus</i>			1										1								2
Pl	<i>Platyhelminthes</i>									1						1					1	3
Sp	<i>Siphonosoma sp.</i>	2										1									1	4
Sp	<i>Sipunculus nudus</i>	1				1						1				1						4
																					Total	1363

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

Dec 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>	14		5				7				2		2								30
Bi	<i>Barbatia virescens</i>	2				1				2		5		7		5		5		6		33
Bi	<i>Glauconome chinensis</i>	1					1	1				5			1		1					10
Bi	<i>Saccostrea cucullata</i>	54		17		26		38		42		40		36		2		26		35		316
Bi	<i>Xenostrobus atratus</i>	8		2				14				17		2		13		5		12		73
C	<i>Gaetice depressus</i>	1						2		1						4		1		1		10
C	<i>Metopograpsus latifrons</i>	1		1		2						1				2				2		9
C	<i>Pagurus dubius</i>	2		1		3		1				2		1		1				1		12
Cn	<i>Diadumene lineata</i>									2						2				2		6
G	<i>Batillaria multiformis</i>	5		8		10		12		17				24		22		15		8		121
G	<i>Batillaria zonalis</i>	8		5		8		13		10		14		15		17		16		12		118
G	<i>Clithon faba</i>			2										4		3		2		1		12
G	<i>Clithon retropictus</i>	1		2		5								7						2		17
G	<i>Littoraria articulata</i>	4		4		1		2						2		1				1		15
G	<i>Lunella coronata</i>	14				2				2		5		11				8		6		48
G	<i>Lunella granulata</i>	12		4		15		11		6		2		1		1		2		2		56
G	<i>Monodonta labio</i>	13		14		10		21		10		19		18		4		14		18		141
G	<i>Nerita polita</i>	1						2						1		2	1	2		4		13
G	<i>Nodilittorina radiata</i>	22		8		10		8		17		9		5		15		11		4		109
G	<i>Pirenella asiatica</i>							13		5		27		5		5		17		5		77
G	<i>Pirenella incisa</i>	1						14				2		12		4		12		6		51

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

Dec 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	
P	<i>Nereididae spp.</i>											1										1
Po	<i>Lepidozona spp.</i>	1				2						1										4
Sp	<i>Sipunculus nudus</i>				1							1			1	2					1	6
Total																					1288	