

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. (June 2021)*

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 *Tachypleus tridentatus*



Figure 3.1 Examples of photographic records of horseshoe crab (June 2021)

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	8	24
Mean prosomal width (mm)	\	\	47.10	42.68
Max..prosomal width (mm)	\	\	57.66	58.95
Min. prosomal width (mm)	\	\	33.07	30.00
Search record (ind. hr-1 person-1)	0.00	0.00	1.33	4.00
<i>Tachypleus tridentatus</i>				
No. of individuals	0	0	9	24
Mean prosomal width (mm)	\	\	45.51	47.14
Max..prosomal width (mm)	\	\	59.23	59.80
Min. prosomal width (mm)	\	\	38.24	30.05
Search record (ind. hr-1 person-1)	0.00	0.00	1.50	4.00

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



March 2020 – TC1



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



March 2019



December 2018



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



March 2020



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

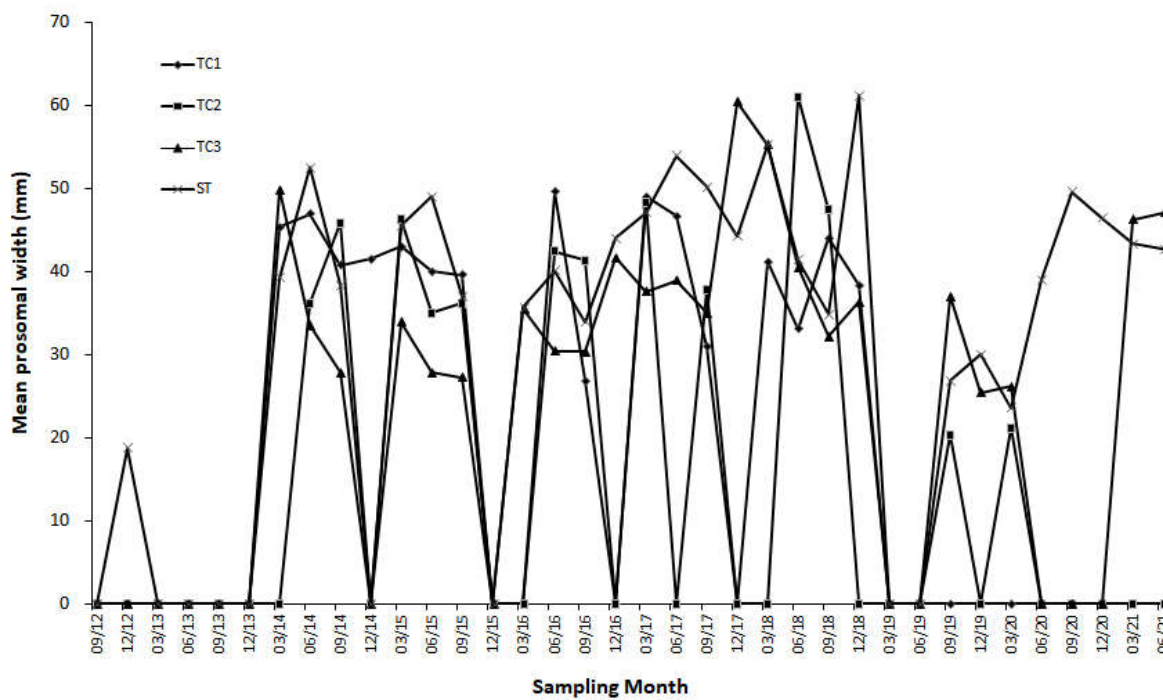
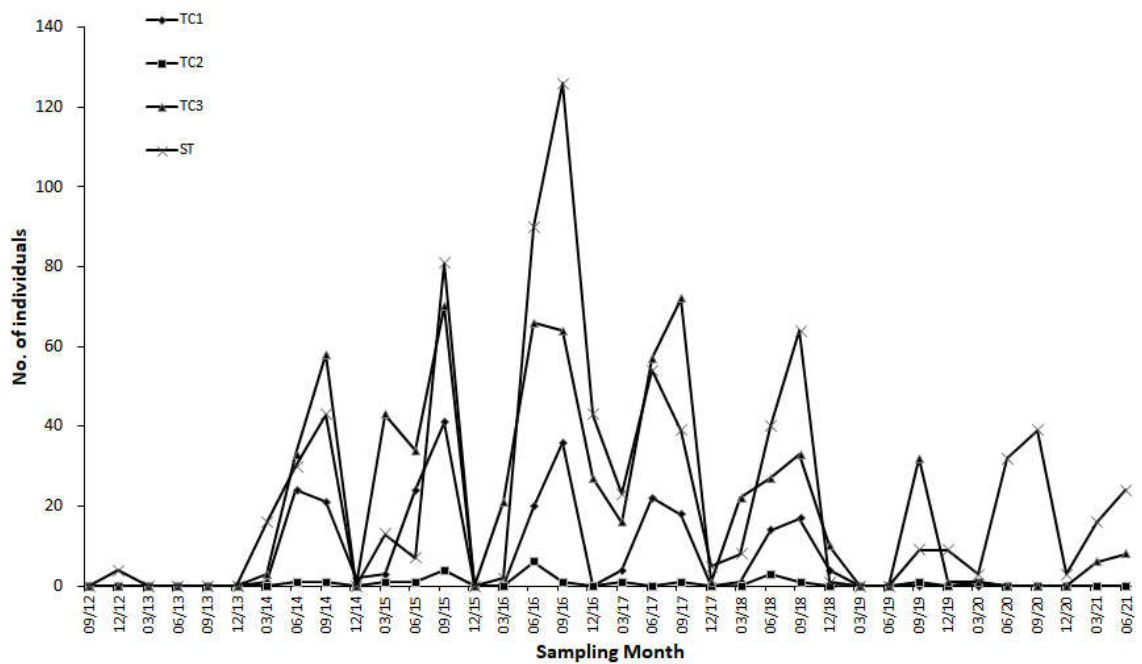


Figure 3.5 Changes of number of individuals mean prosomal width and search record of horseshoe crab *Carcinoscorpius rotundicauda* in every sampling zone along the sampling months

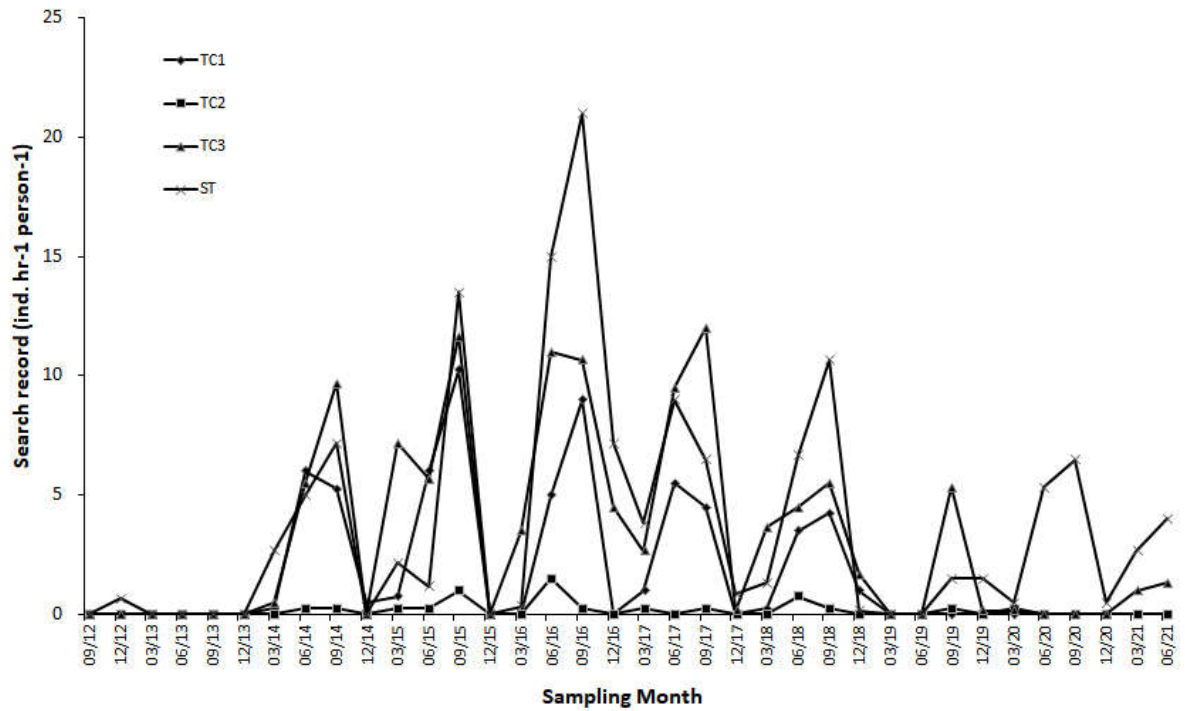


Figure 3.5 (Cont'd) Changes of number of individuals mean prosomal width and search record of horseshoe crab *Carcinoscorpius rotundicauda* in every sampling zone along the sampling months

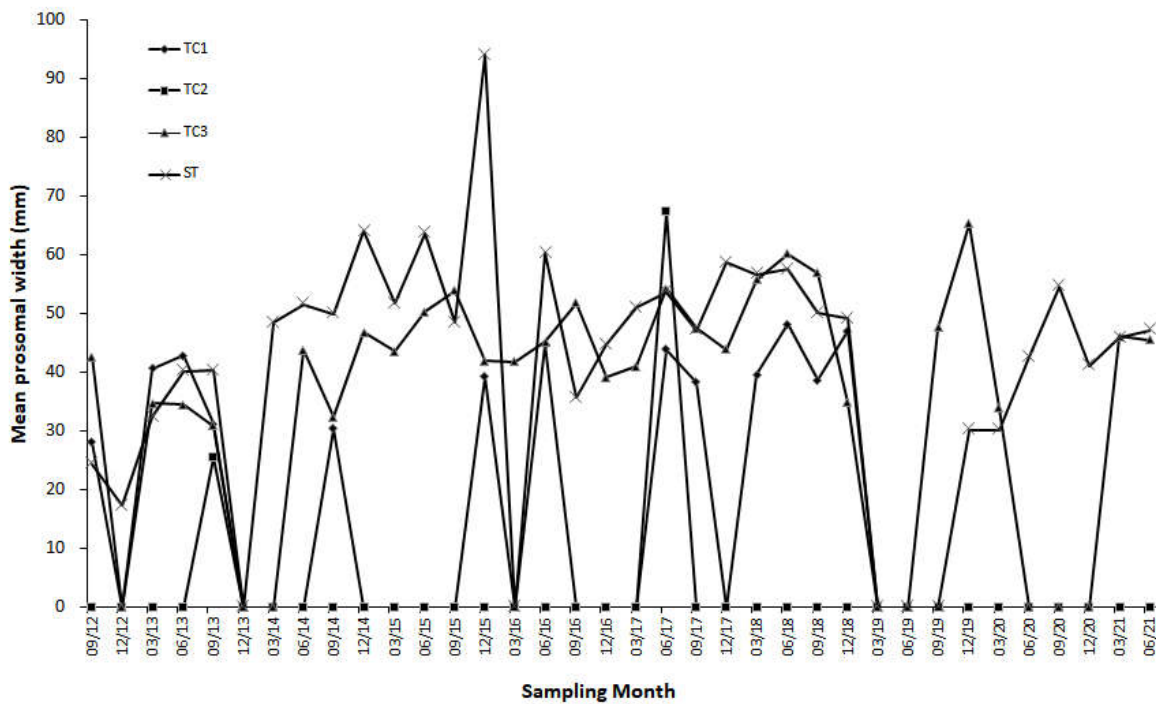
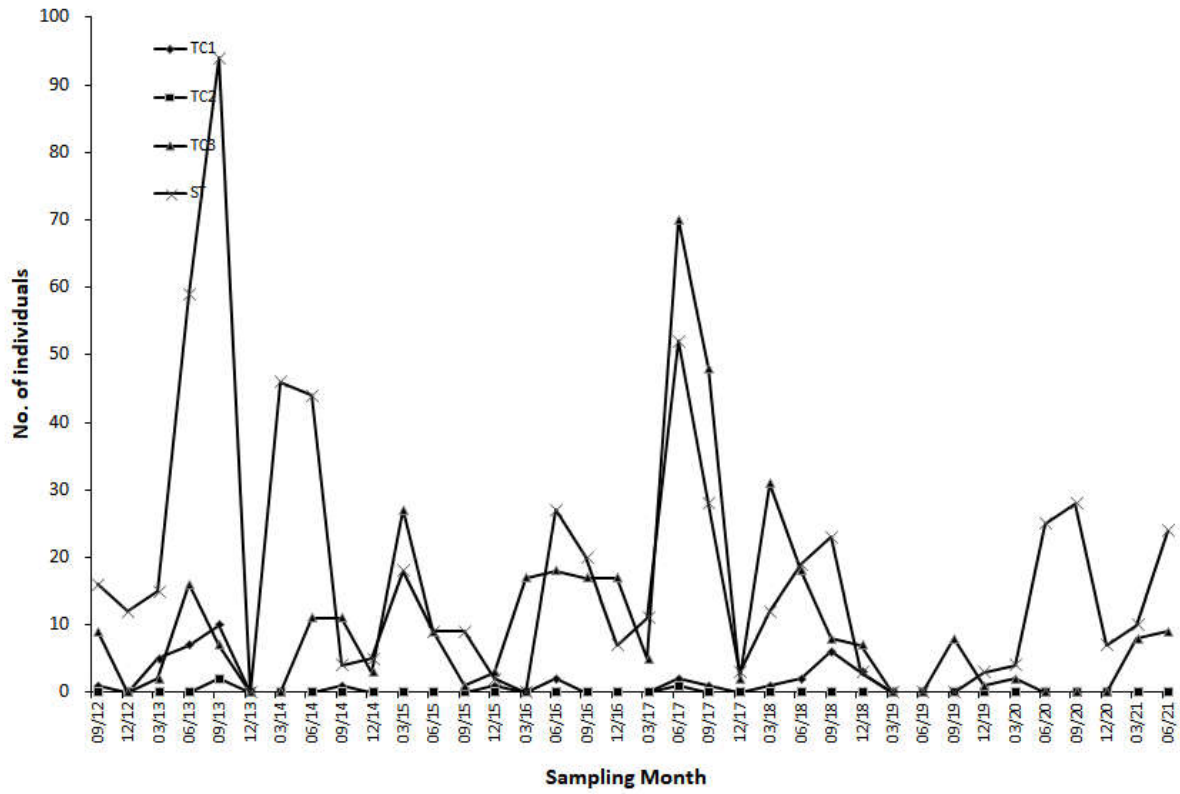


Figure 3.6 Changes of number of individuals mean prosomal width and search record of horseshoe crab *Tachypleus tridentatus* in every sampling zone along the sampling months

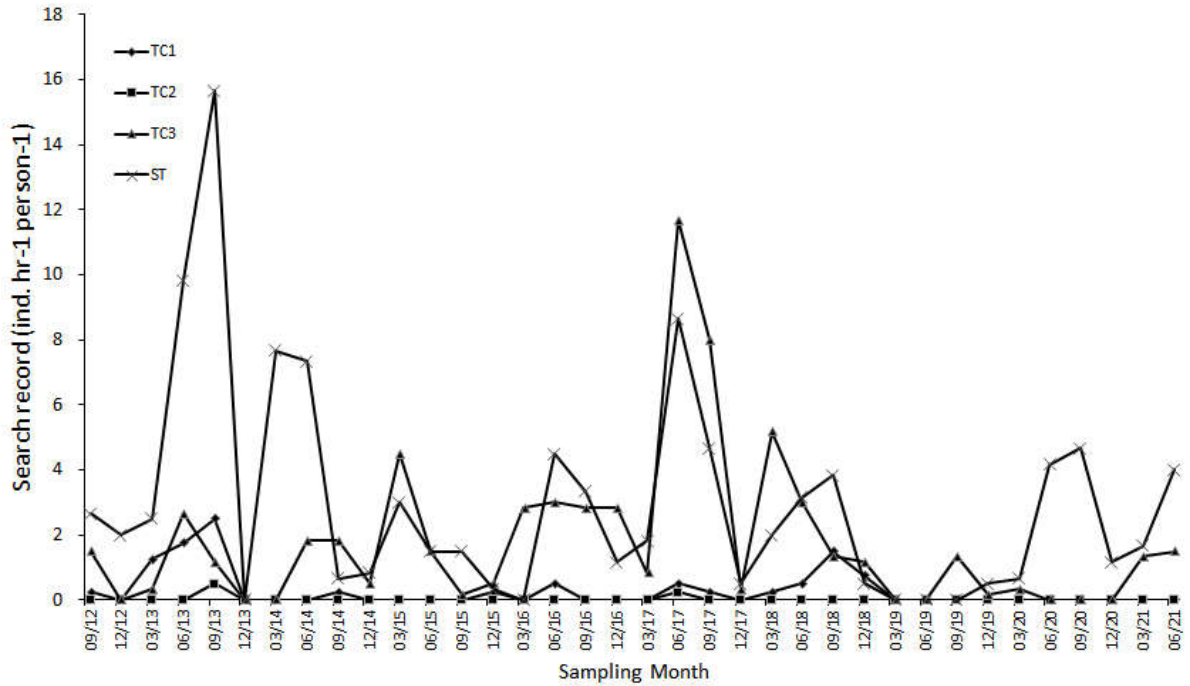


Figure 3.6 (Cont'd) Changes of number of individuals mean prosomal width and search record of horseshoe crab *Tachypleus tridentatus* in every sampling zone along the sampling months

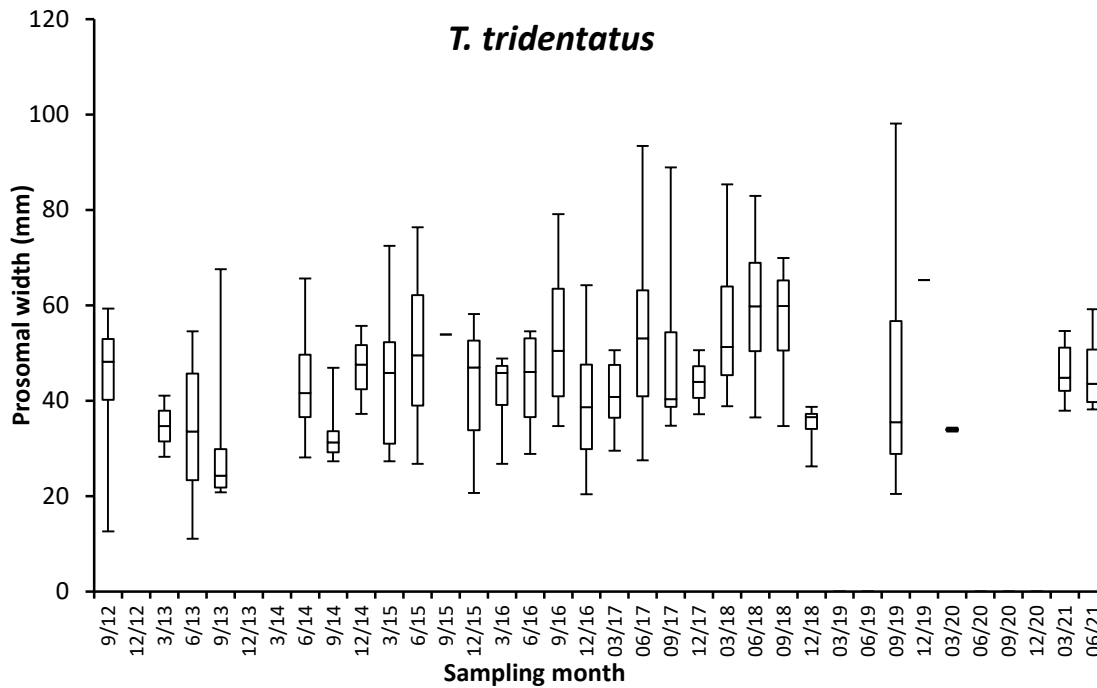
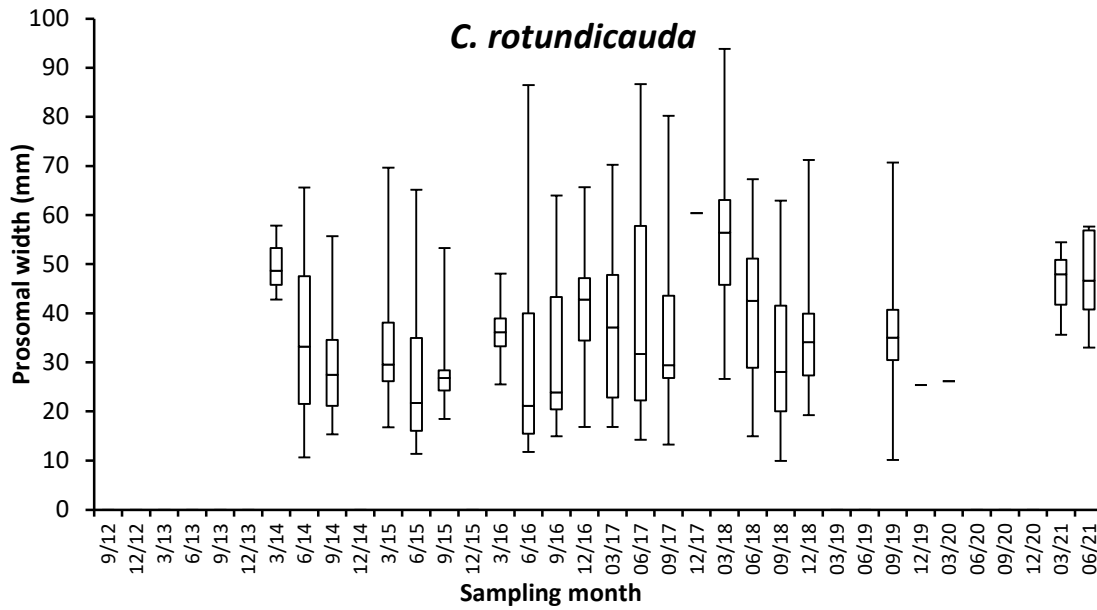


Figure 3.7 Box plot of prosomal width of horseshoe crab in the sampling zone TC3 along the sampling months. (The box represents 50% of the sample (upper to lower quartile) with a middle line showing the median value. The upper whisker and lower whisker showed the 25% of sample above upper quartile and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

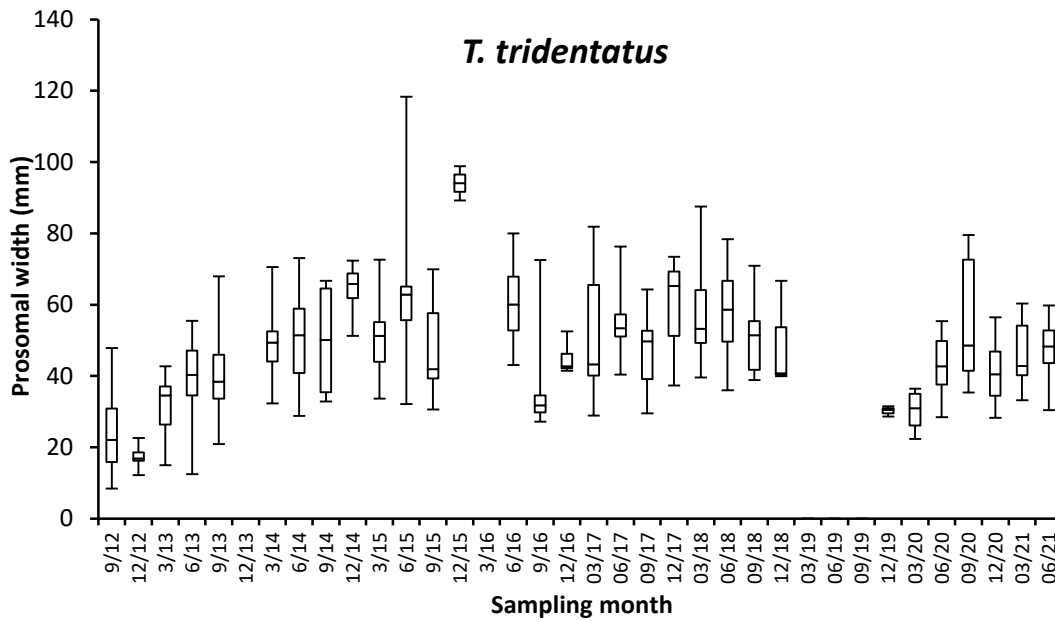
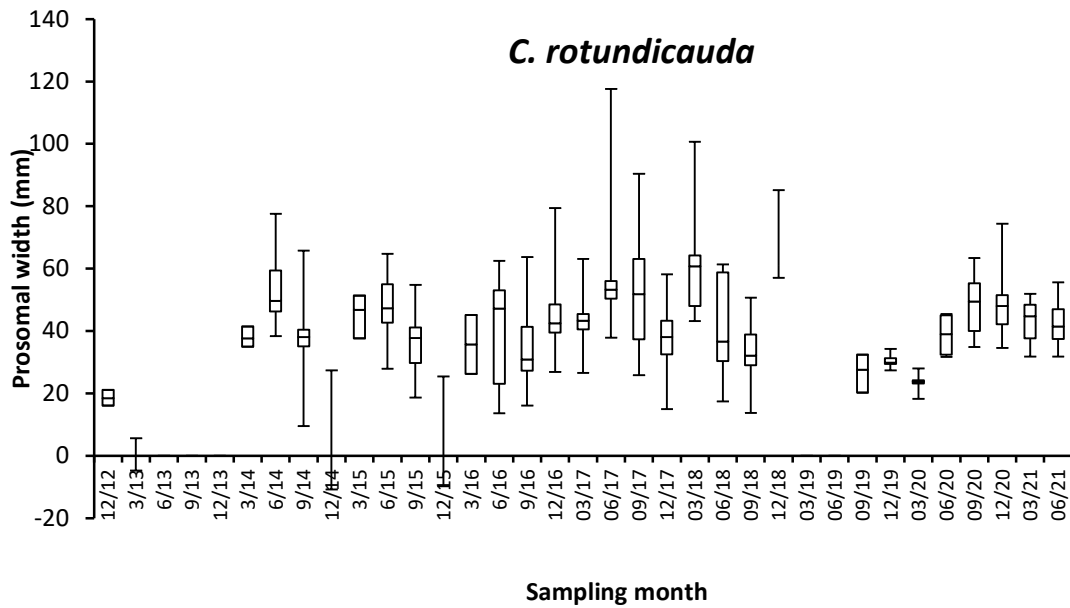


Figure 3.8 Box plot of prosomal width of horseshoe crab in the sampling zone ST along the sampling months. (The box represents 50% of the sample (upper to lower quartile) with a middle line showing the median value. The upper whisker and lower whisker showed the 25% of sample above upper quartile and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

***Halophila ovalis* in TC3**



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

***Halophila ovalis* and *Zostera japonica* in ST**

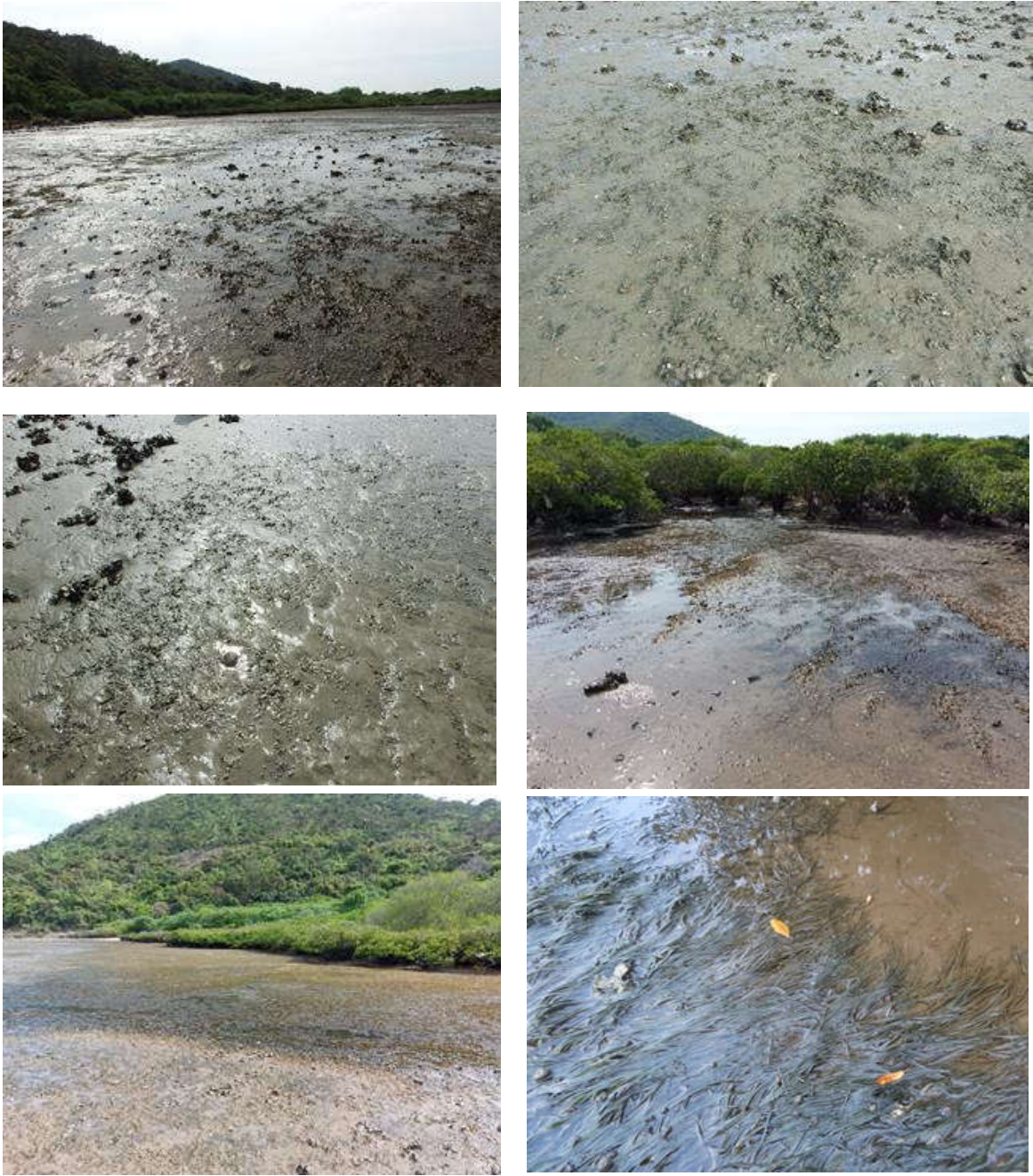


Figure 3.9 (Cont'd) *Photographic record of seagrass beds in present survey.*

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>	ST <i>Zostera japonica</i>
Number of patches	12	10	1
Total area (m²)	587.5	1490.3	45
Average area (m²)	48.96	149.03	45

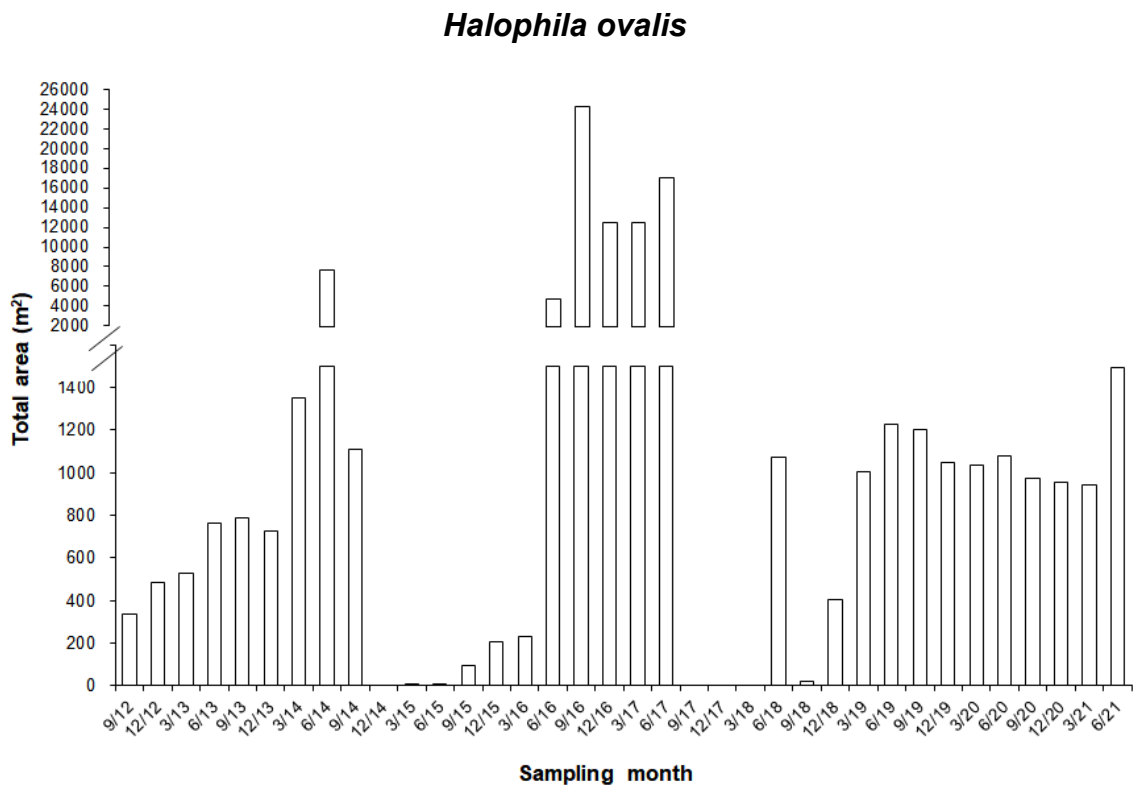
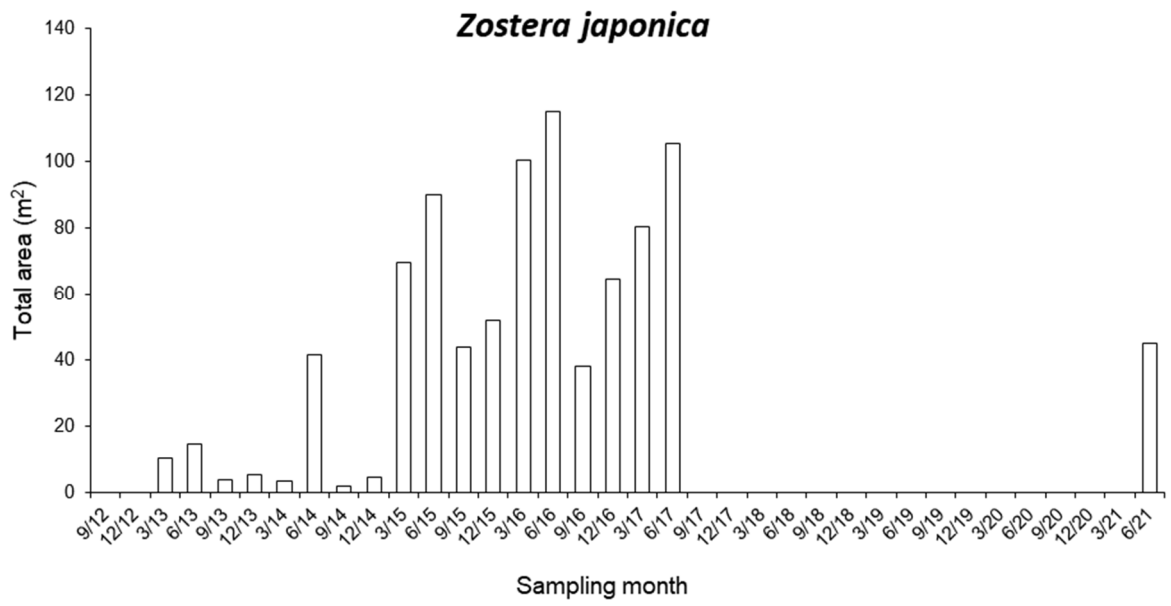


Figure 3.11 Temporal changes of estimated total area of seagrass beds in ST

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



March 2020



June 2020



September 2020



December 2020



March 2021



June 2021



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

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



11/06/2021

TC2 H



TC2 L



22/06/2021

TC3 H

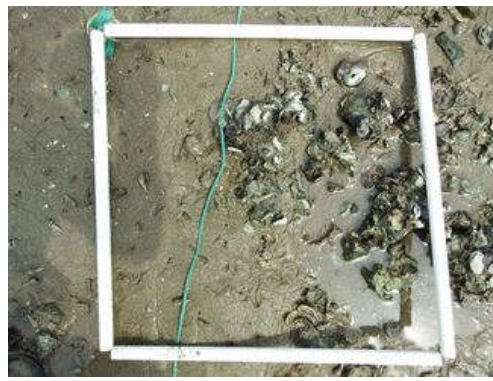


TC3 L



23/06/2021

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**

10/06/2021

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>June 2021</i>				
Mollusca	11037	96.4	368	31
Arthropoda	261	2.3	9	6
Annelida	54	0.5	2	3
Sipuncula	72	0.6	2	2
Nemertea	12	0.1	0	1
Cnidaria	10	0.1	0	1
Platyhelminthes	3	0.0	0	1
Total	11449			

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	2971	96.3	396	3142	97.1	419	2182	96.8	291	2742	95.4	366
Arthropoda	71	2.3	9	66	2.0	9	43	1.9	6	81	2.8	11
Annelida	22	0.7	3	2	0.1	0	14	0.6	2	16	0.6	2
Sipuncula	16	0.5	2	17	0.5	2	13	0.6	2	26	0.9	3
Nemertea	0	0.0	0	6	0.2	1	0	0.0	0	6	0.2	1
Cnidaria	4	0.1	1	4	0.1	1	0	0.0	0	2	0.1	0
Platyhelminthes	0	0.0	0	0	0.0	0	3	0.1	0	0	0.0	0
Sub-total	3084			3237			2255			2873		

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>	132	36	7
	G	<i>Monodonta labio</i>	70	19	7
Mid	Bi	<i>Saccostrea cucullata</i>	162	39	19
	G	<i>Monodonta labio</i>	76	18	30
Low	Bi	<i>Saccostrea cucullata</i>	160	35	33
	G	<i>Monodonta labio</i>	81	18	54

Bi = Bivalve, G = Gastropod

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

Sampling zone TC2	Group	Species	Mean density (ind. m ⁻²)	Relative abundance (%)	Cumulative relative abundance (%)
High	Bi	<i>Saccostrea cucullata</i>	156	33	42
	G	<i>Batillaria multiformis</i>	79	17	71
	G	<i>Monodonta labio</i>	88	18	6
Mid	Bi	<i>Saccostrea cucullata</i>	151	35	34
	G	<i>Batillaria zonalis</i>	65	15	52
	G	<i>Monodonta labio</i>	72	17	9
Low	Bi	<i>Saccostrea cucullata</i>	158	41	46
	G	<i>Monodonta labio</i>	82	21	9

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>	105	46	6
	G	<i>Monodonta labio</i>	40	17	2
Mid	Bi	<i>Saccostrea cucullata</i>	112	33	8
	G	<i>Batillaria multiformis</i>	42	12	74
	G	<i>Monodonta labio</i>	95	28	4
Low	Bi	<i>Saccostrea cucullata</i>	156	47	37
	G	<i>Monodonta labio</i>	62	18	0

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>	150	36	15
	G	<i>Batillaria multiformis</i>	64	15	23
	G	<i>Monodonta labio</i>	94	22	40
Mid	Bi	<i>Saccostrea cucullata</i>	149	35	27
	G	<i>Monodonta labio</i>	126	30	47
Low	Bi	<i>Saccostrea cucullata</i>	76	25	24
	G	<i>Monodonta labio</i>	50	21	38

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	15		368		2.2		0.8	
	M	16	16	412	411	2.1	2.17	0.7	0.77
	L	17		454		2.2		0.8	
TC2	H	13		475		2.0		0.8	
	M	14	14	428	431	2.0	1.97	0.8	0.77
	L	14		390		1.9		0.7	
TC3	H	12		228		1.8		0.7	
	M	10	11	344	300	1.7	1.70	0.7	0.70
	L	11		327		1.6		0.7	
ST	H	14		420		1.9		0.7	
	M	13	15	424	382	1.8	2.00	0.7	0.73
	L	17		303		2.3		0.8	

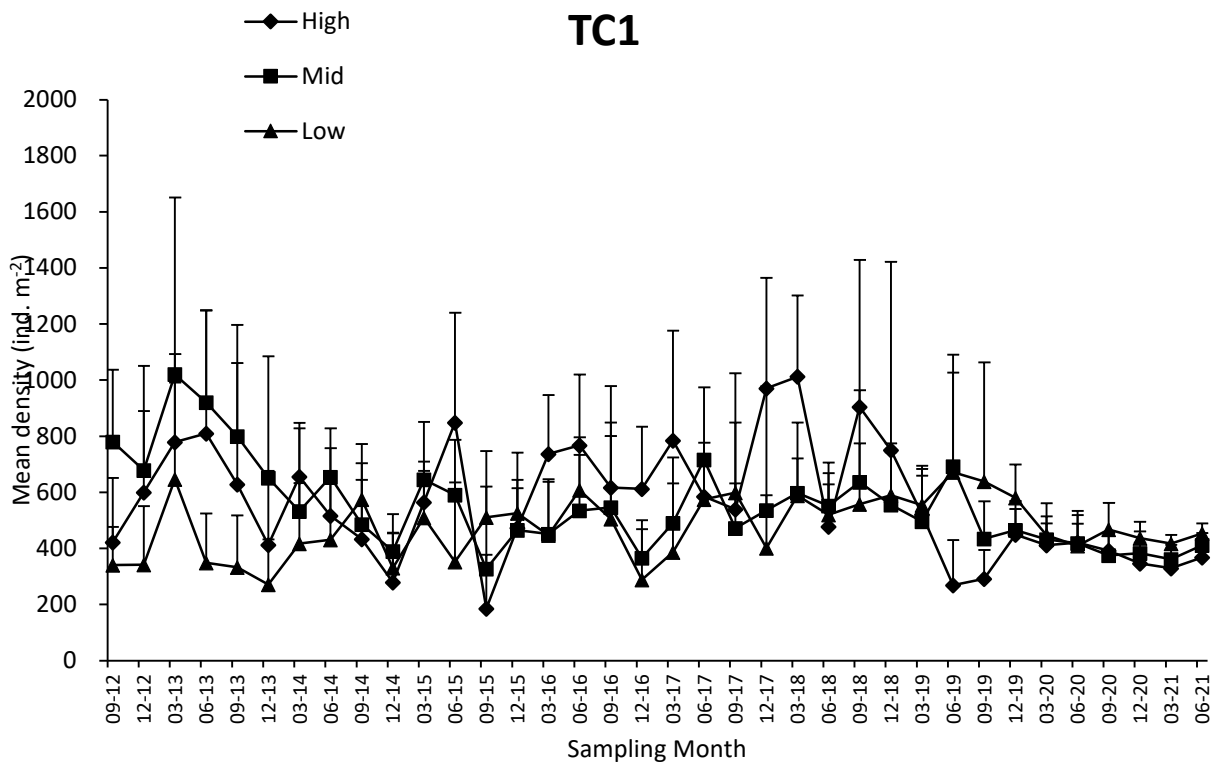
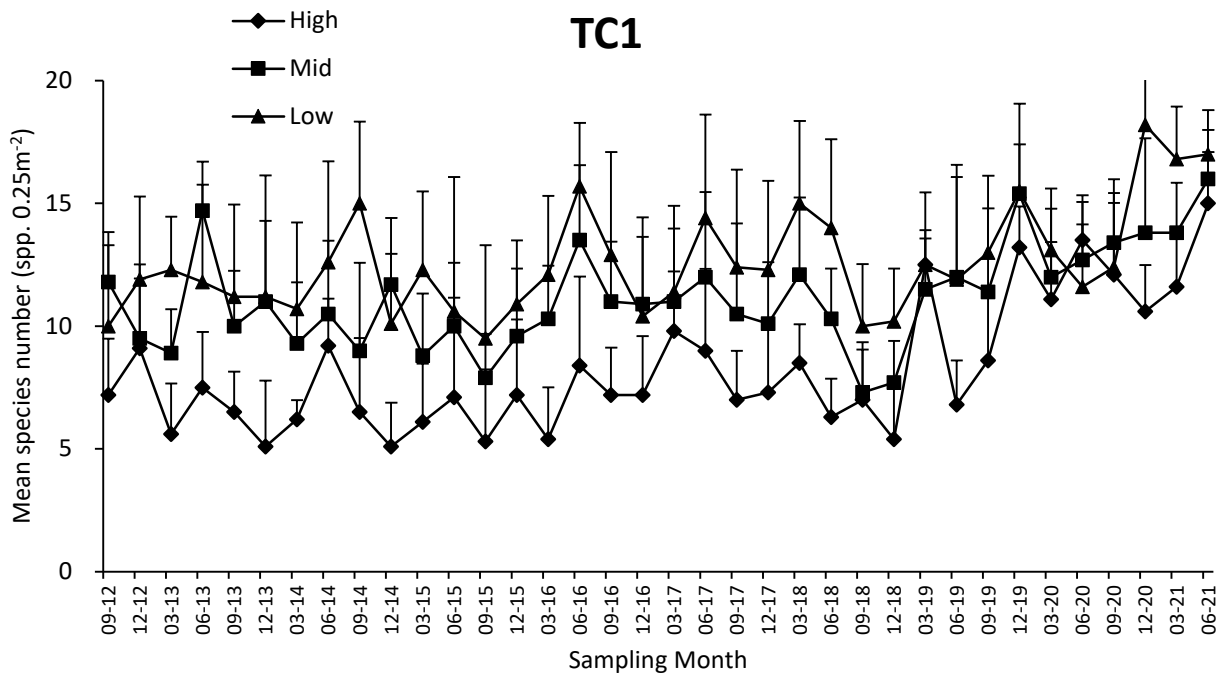


Figure 3.14 Temporal changes of mean number of species, mean density, Shannon-Weaver Diversity Index (H') and Pielou's Species Evenness (J) (mean + SD) at every tidal level in sampling zone TC1

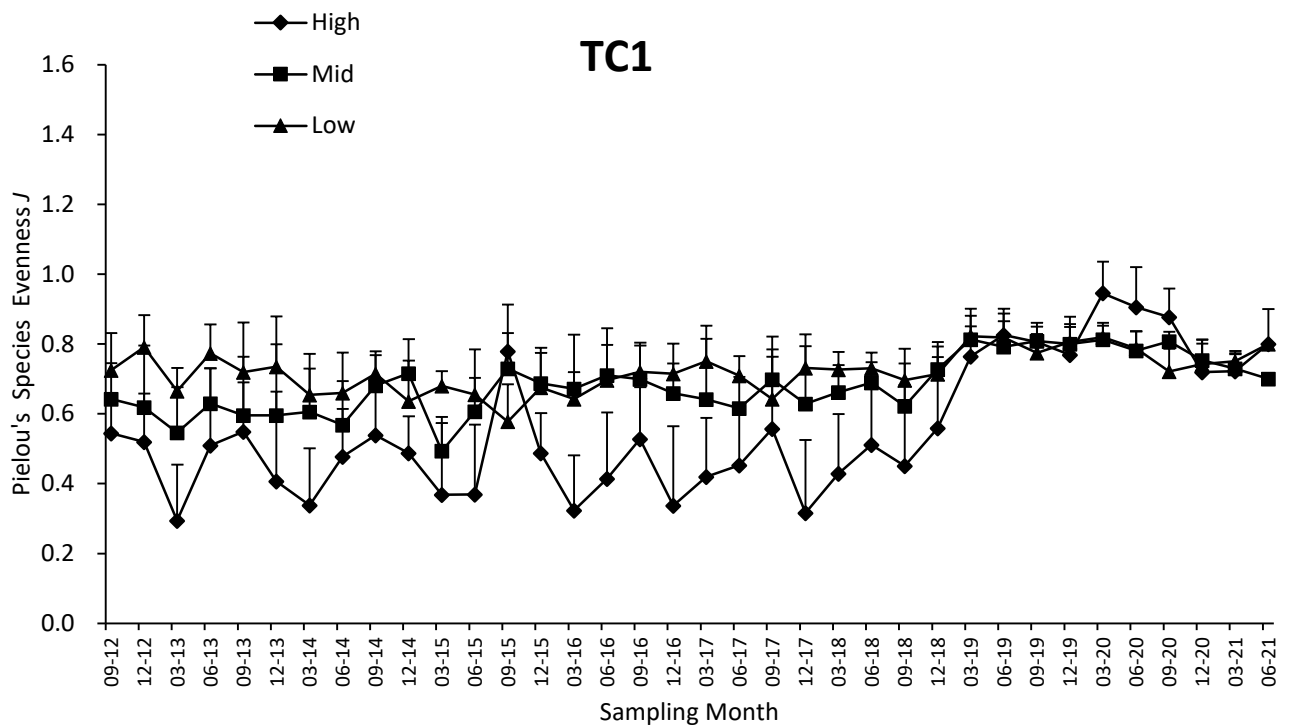
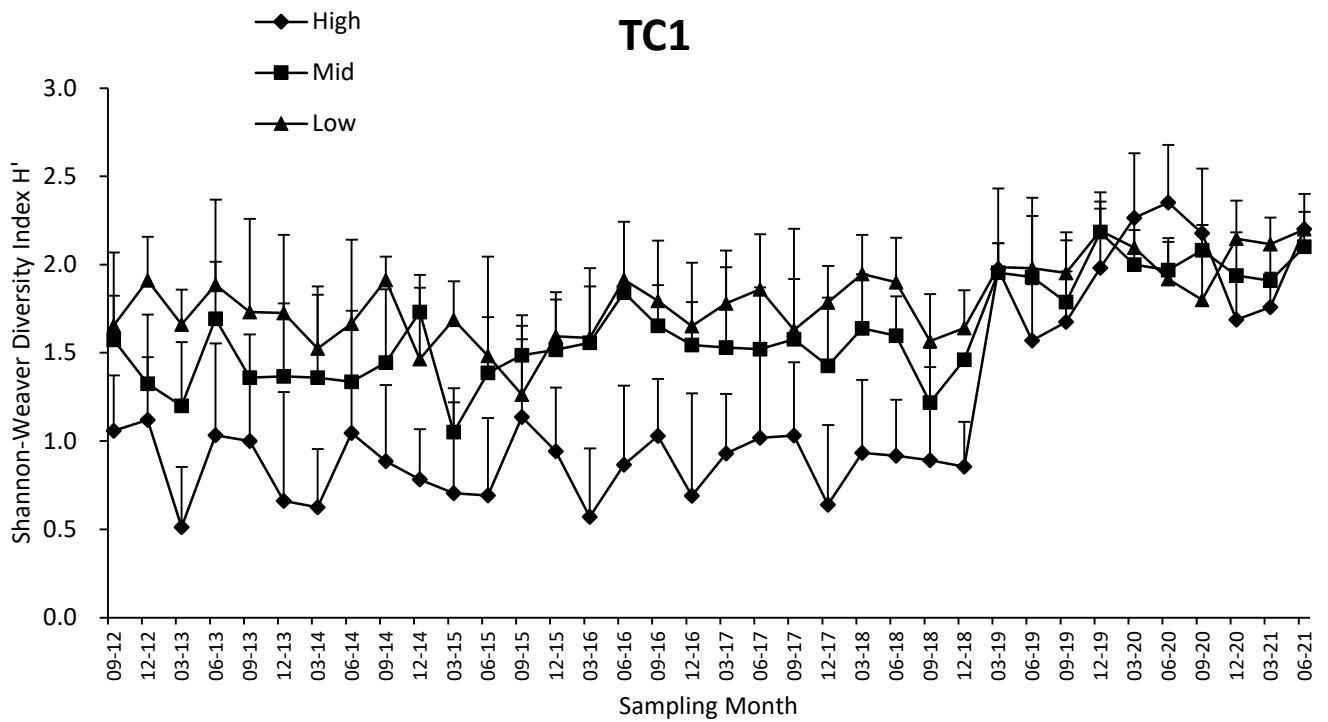


Figure 3.14(Cont'd) Temporal changes of mean number of species, mean density, Shannon-Weaver Diversity Index (H') and Pielou's Species Evenness (J) (mean + SD) at every tidal level in sampling zone TC1

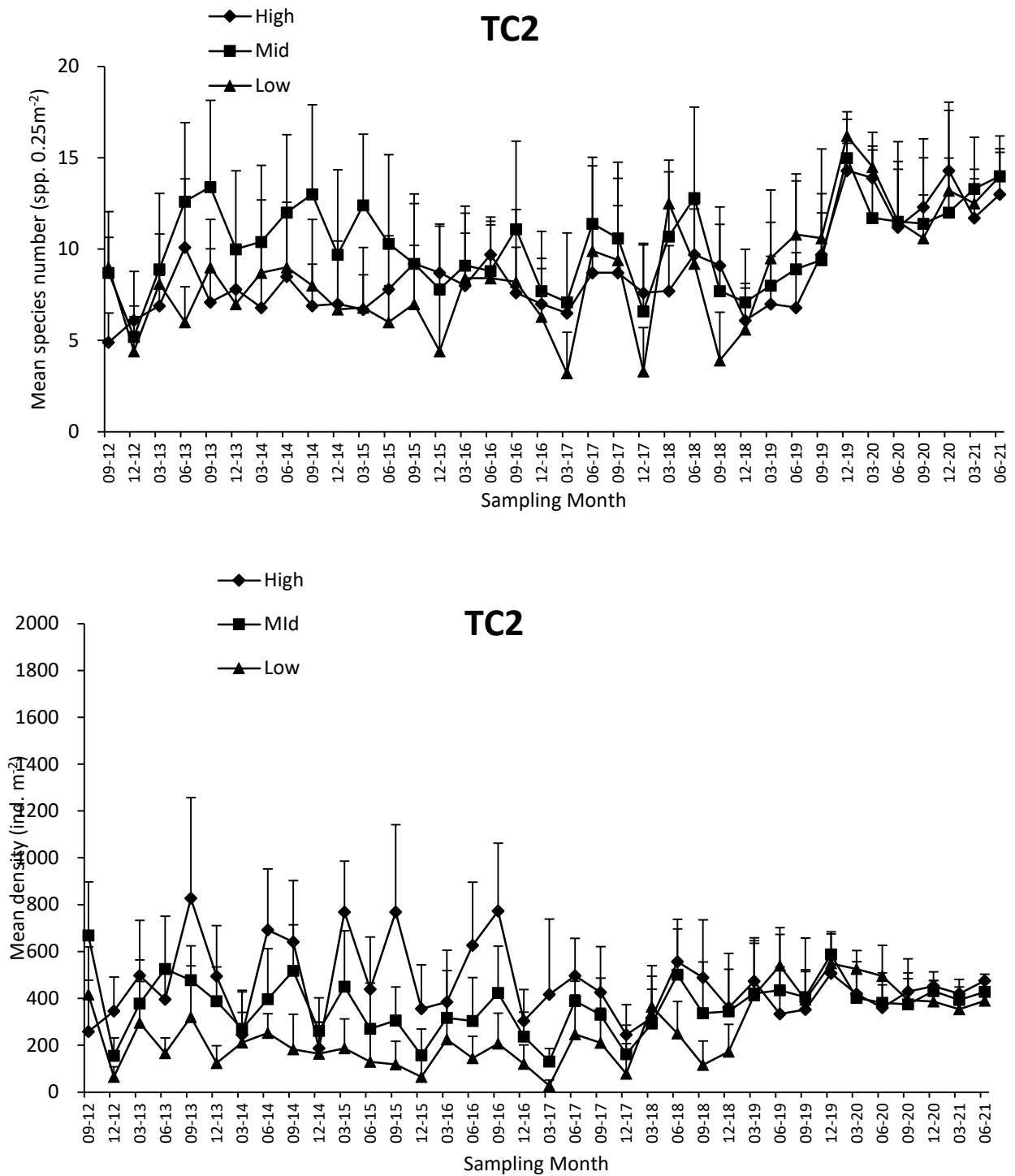


Figure 3.15 Temporal changes of mean number of species, mean density, Shannon-Weaver Diversity Index (H') and Pielou's Species Evenness (J) (mean + SD) at every tidal level in sampling zone TC2

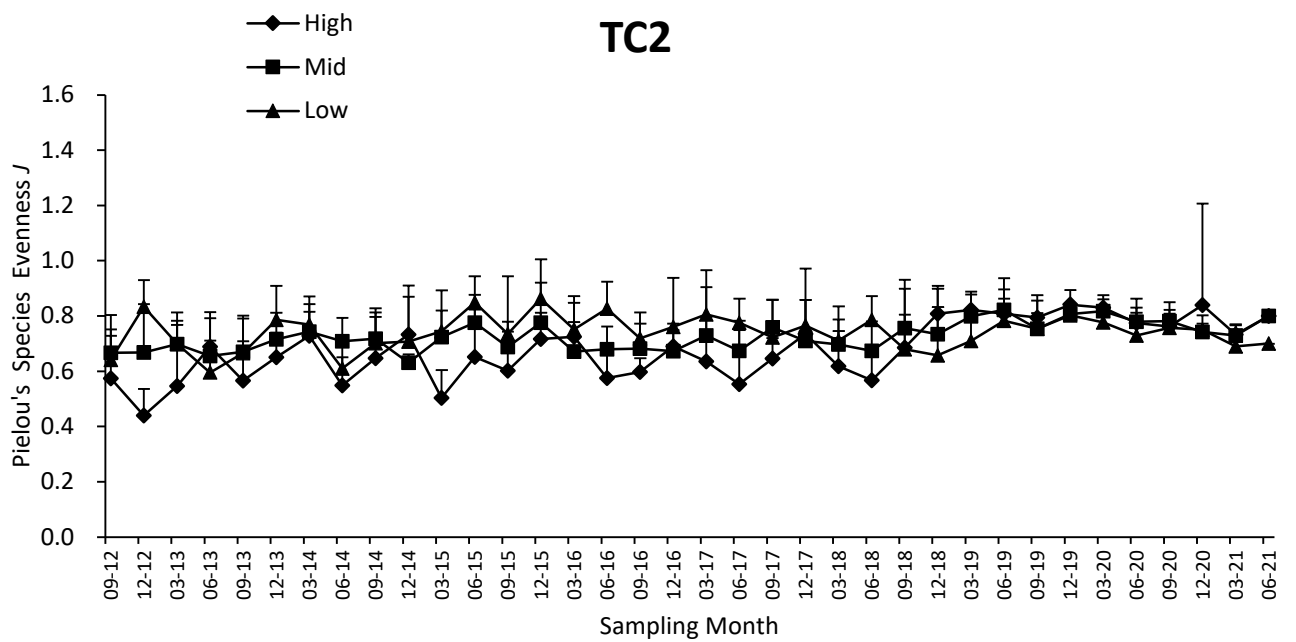
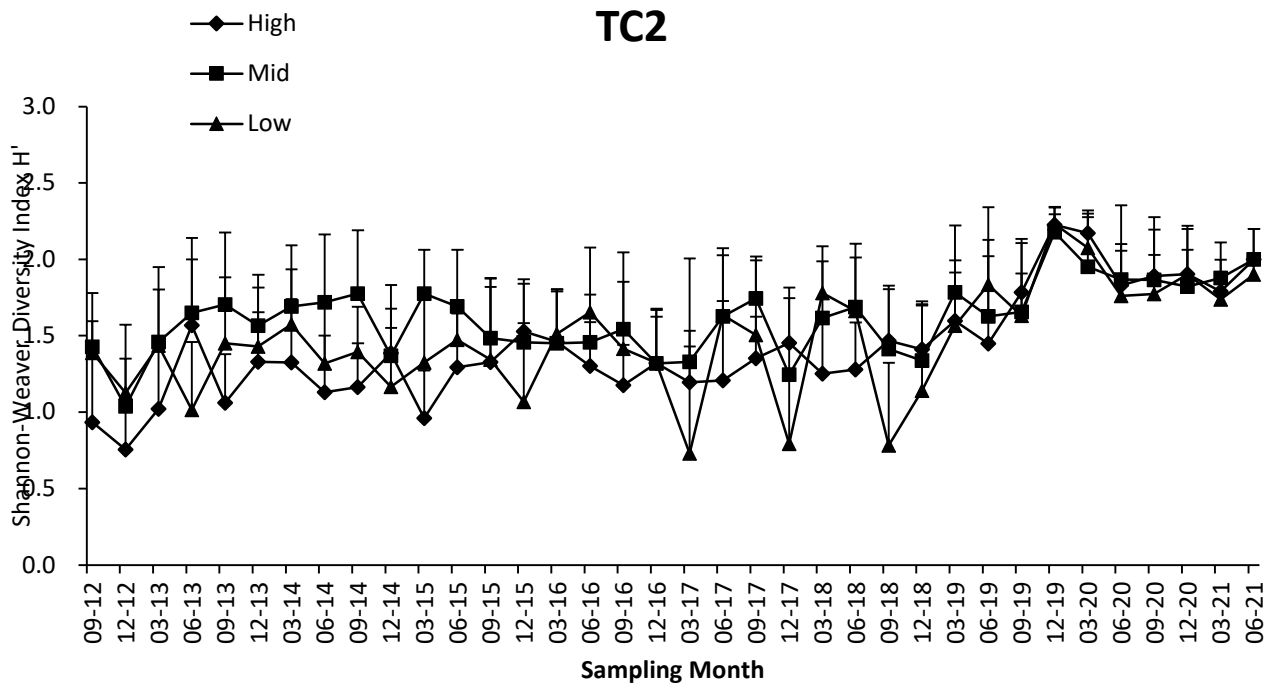


Figure 3.15(Cont'd) Temporal changes of mean number of species, mean density, Shannon-Weaver Diversity Index (H') and Pielou's Species Evenness (J) (mean + SD) at every tidal level in sampling zone TC2

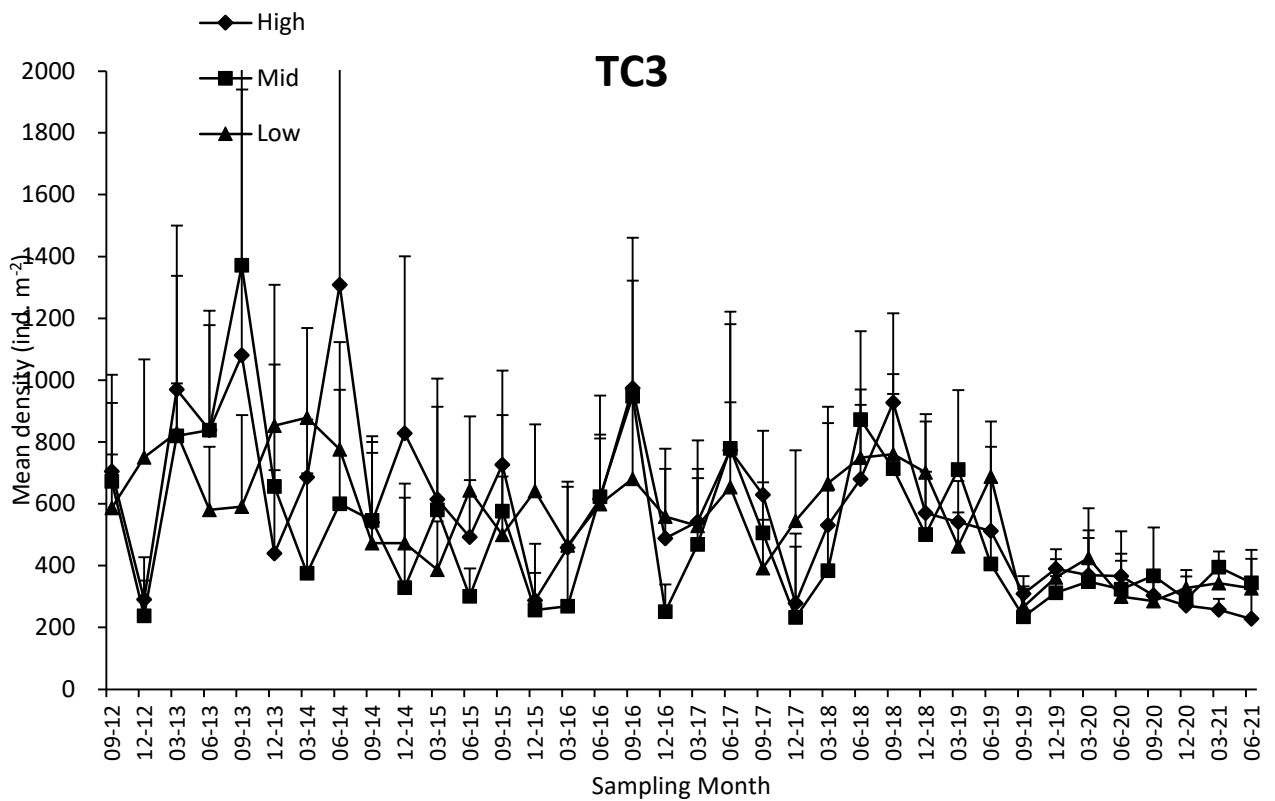
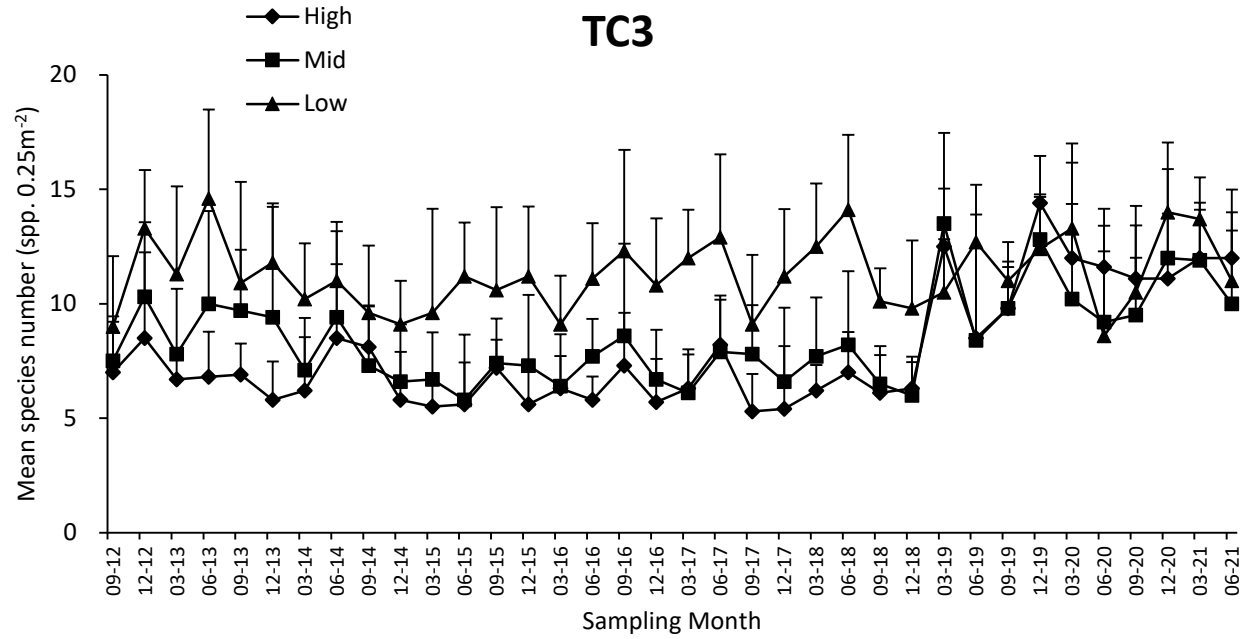


Figure 3.16 Temporal changes of mean number of species, mean density, Shannon-Weaver Diversity Index (H') and Pielou's Species Evenness (J) (mean + SD) at every tidal level in sampling zone TC3

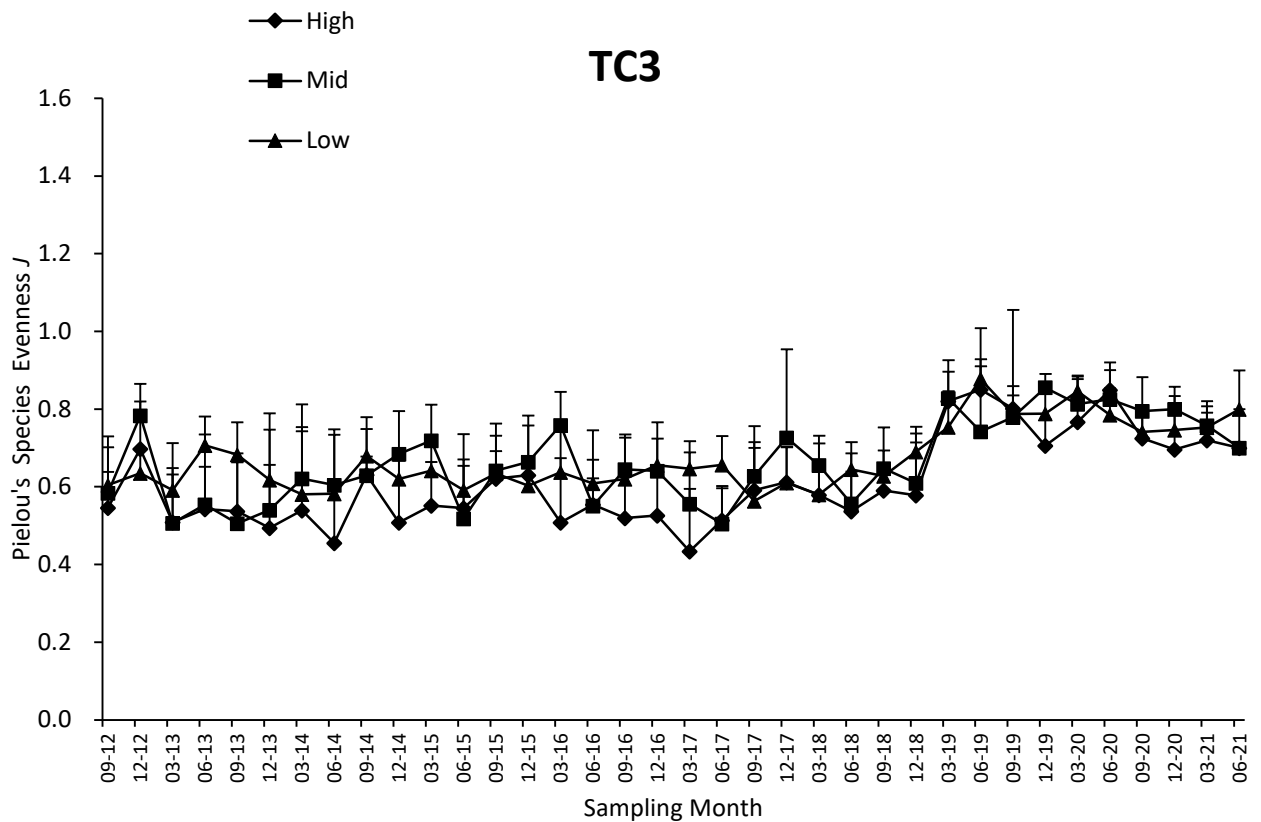
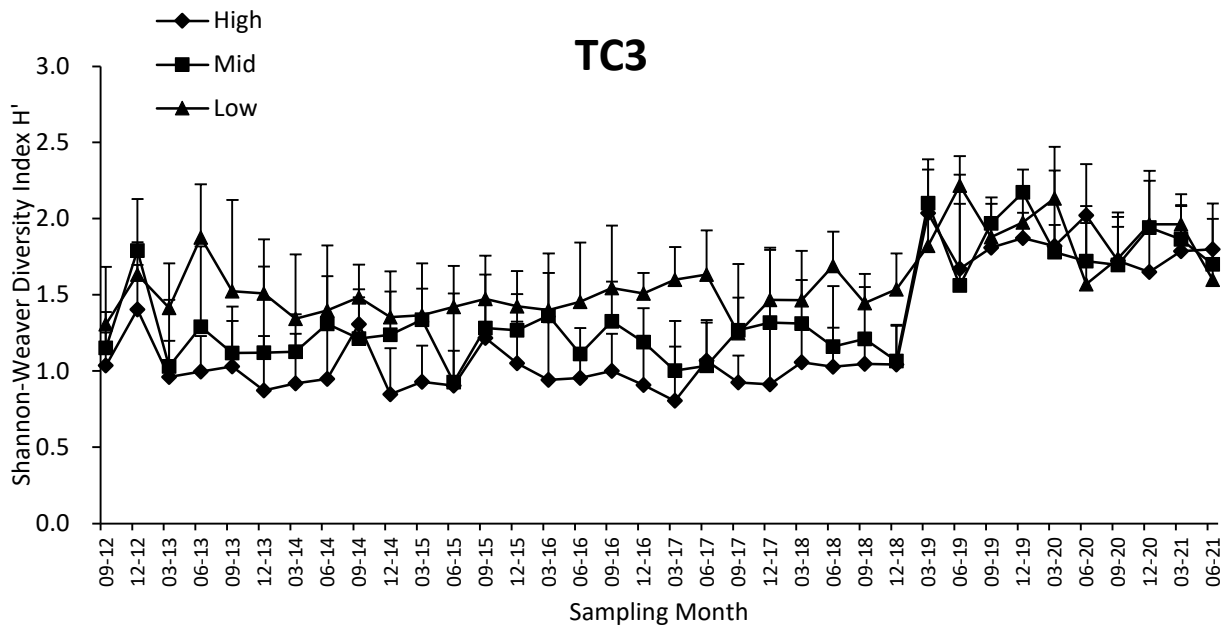


Figure 3.16(Cont'd) Temporal changes of mean number of species, mean density, Shannon-Weaver Diversity Index (H') and Pielou's Species Evenness (J) (mean + SD) at every tidal level in sampling zone TC3

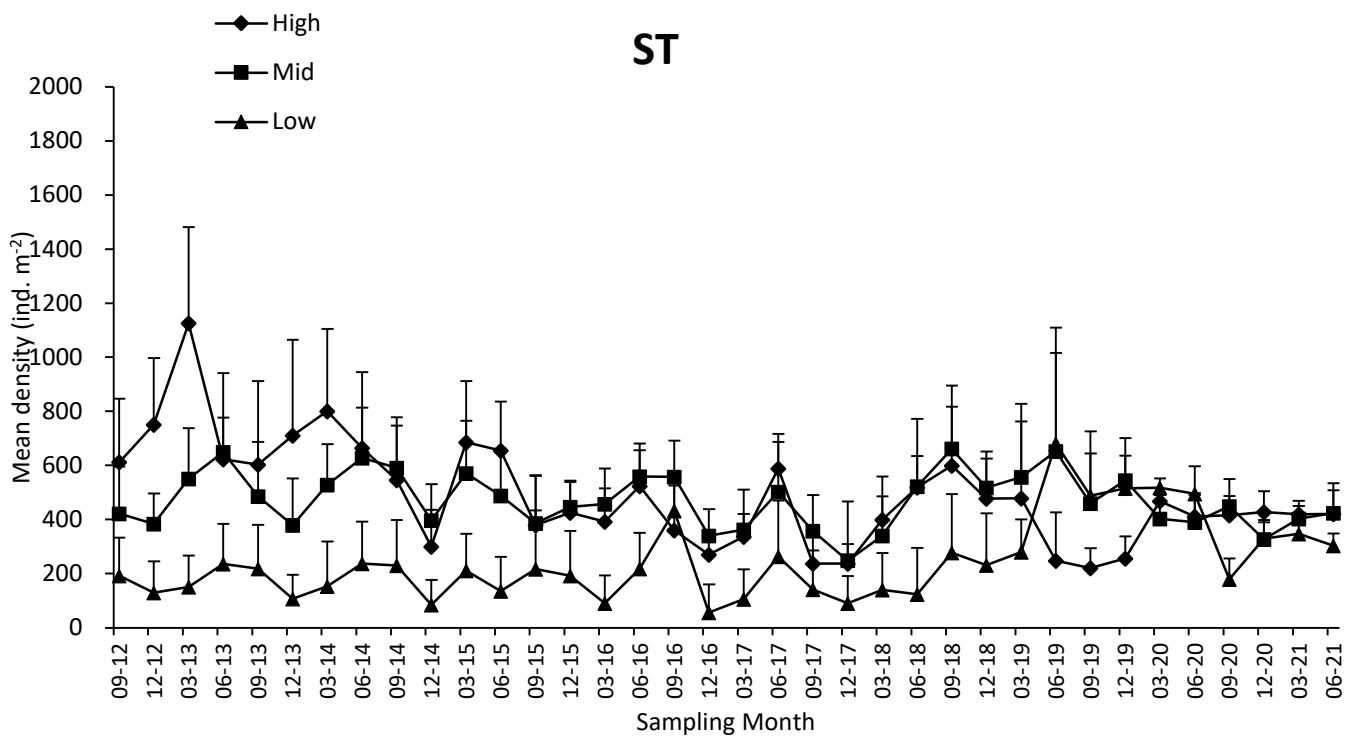
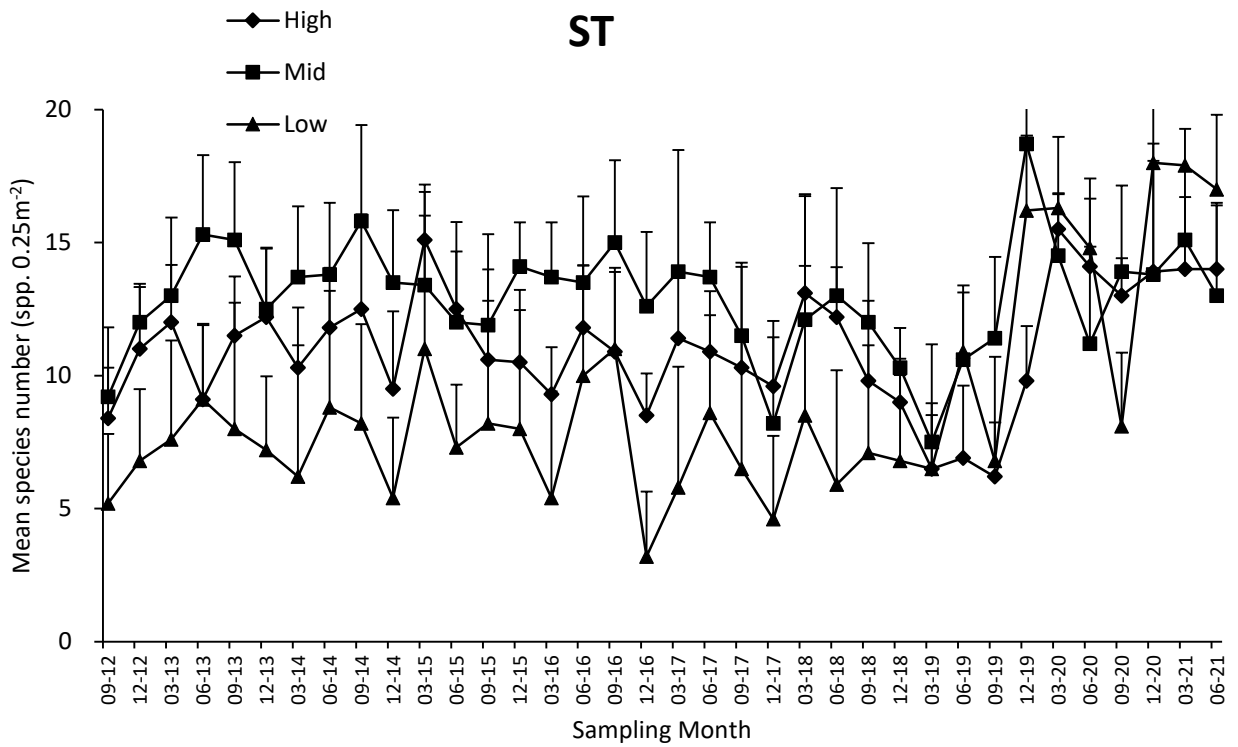


Figure 3.17 Temporal changes of mean number of species, mean density, Shannon-Weaver Diversity Index (H') and Pielou's Species Evenness (J) (mean + SD) at every tidal level in sampling zone S

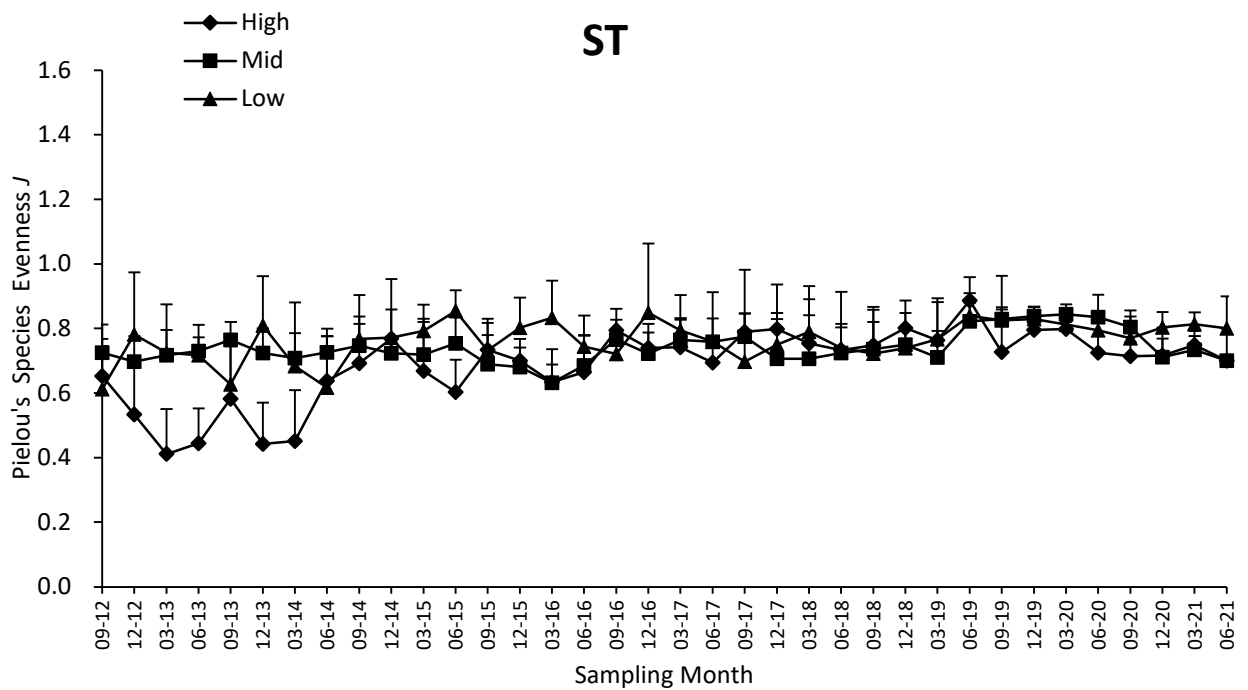
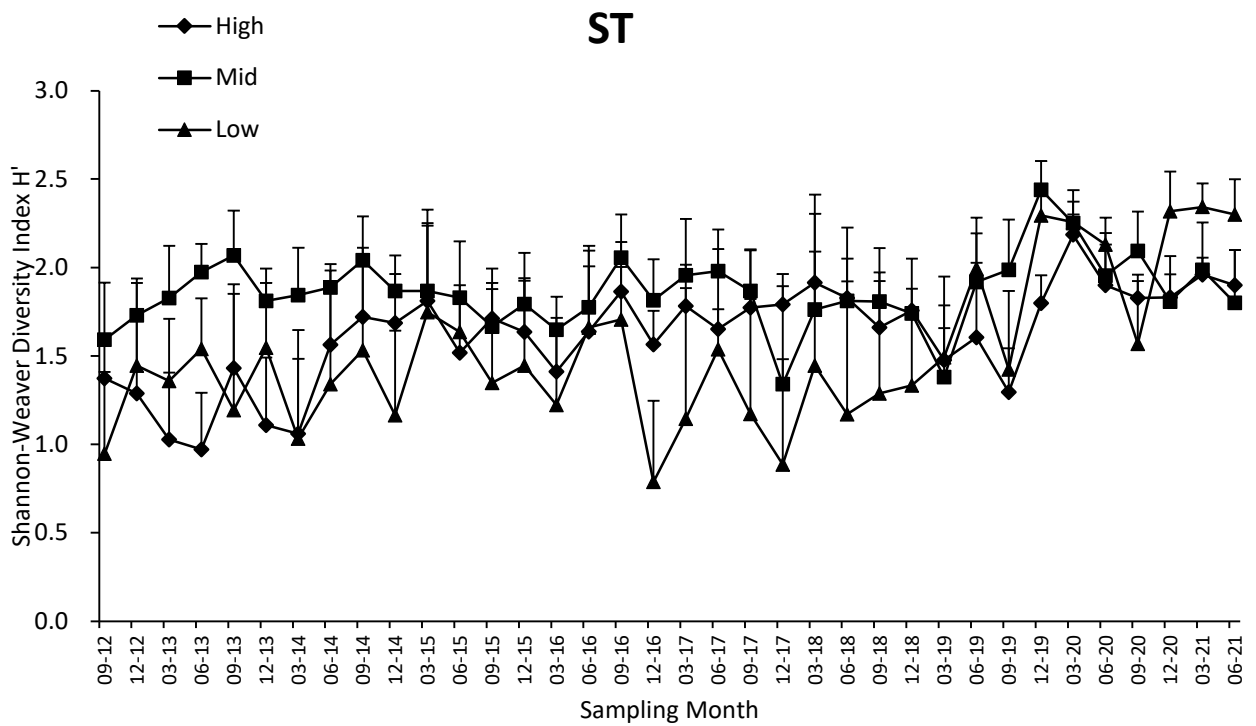


Figure 3.17 (Cont'd) Temporal changes of mean number of species, mean density, Shannon-Weaver Diversity Index (H') and Pielou's Species Evenness (J) (mean + SD) at every tidal level in sampling zone ST

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



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

No.	Sub.	GPS coordinate		Record of prosomal width (mm)					
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
Sampling site TC3 (Search hour = 3 hrs)				<i>Carcinoscorpius rotundicauda</i>					<i>Tachypleus tridentatus</i>
1	M	22°17'004"N	113°55'036"E						50.74 39.26
2	S	22°17'005"N	113°55'035"E	50.33	56.67	36.28			51.69 40.54
3	S	22°17'006"N	113°55'034"E	42.23	57.56				59.23
4	S	22°17'007"N	113°55'037"E	33.07				38.24	39.74 46.59
5	S	22°17'008"N	113°55'035"E	42.98	57.66				43.55
		No. of ind.		8					9

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 ST (Search hour = 3 hrs)</u>				<i>Carcinoscorpius rotundicauda</i>								<i>Tachypleus tridentatus</i>						
1	S	22°17'009"N	113°55'032"E	43.55														
2	M	22°17'010"N	113°55'030"E	44.64	41.02	39.89	30.00	39.00					52.31	48.94	43.12	30.50	50.22	46.33
3	S	22°17'011"N	113°55'030"E	33.28	51.73	47.42							47.70	52.75	51.66	59.80		
4	S	22°17'013"N	113°55'029"E	37.36	32.54	58.95	41.20	51.33					31.72	36.25	43.82	53.63	38.10	
5	S	22°17'013"N	113°55'031"E	43.69														
6	S	22°17'014"N	113°55'030"E										57.18					
7	M	22°17'015"N	113°55'031"E	41.60	55.48	45.38	57.93	37.45	46.81	38.38	31.68	34.05	37.52	53.49	47.08	50.00	52.94	46.07
8	S	22°17'018"N	113°55'030"E										46.00					
9	S	22°17'023"N	113°55'032"E										54.21					
No. of ind.				24								24						

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)					
2	30-40	horizontal line	22°17'005"N	113°55'035"E	A horizontal strand of seagrass bed nearby the seaward side of mangrove area at tidal level 2.0 m above C.D.
12	40-50	horizontal line	22°17'005"N	113°55'035"E	A horizontal strand of seagrass bed nearby the seaward side of mangrove area at tidal level 1.5m above C.D.
30	50-60	horizontal line	22°17'007"N	113°55'034"E	A horizontal strand of seagrass bed nearby the seaward side of mangrove area at tidal level 1.5m above C.D.
3	30-40	horizontal line	22°17'008"N	113°55'034"E	A horizontal strand of seagrass bed nearby the seaward side of mangrove area at tidal level 1.5m above C.D.
50	70-80	horizontal line	22°17'004"N	113°55'037"E	A horizontal strand of seagrass bed nearby the seaward side of mangrove area at tidal level 1.5m above C.D.
30	60-70	horizontal line	22°17'003"N	113°55'38"E	A horizontal strand of seagrass bed nearby the seaward side of mangrove area at tidal level 1.5m above C.D.
42	90-100	horizontal line	22°17'002"N	113°55'38"E	A horizontal strand of seagrass bed nearby the seaward side of mangrove area at tidal level 2m above C.D.
48	70-80	horizontal line	22°17'002"N	113°55'38"E	A horizontal strand of seagrass bed nearby the seaward side of mangrove area at tidal level 1.5m above C.D.
300	50-60	horizontal	22°17'008"N	113°55'033"E	A horizontal strand of seagrass bed nearby the seaward side of mangrove

		line	22°17'008"N	113°55'033"E	area at tidal level 1.5m above C.D.
54	70-80	horizontal	22°17'001"N	113°55'038"E	A horizontal strand of seagrass bed nearby the seaward side of mangrove area at tidal level 1.5m above C.D.
		line	22°17'001"N	113°55'038"E	
2	30-40	horizontal	22°17'005"N	113°55'035"E	A horizontal strand of seagrass bed nearby the seaward side of mangrove area at tidal level 2.0 m above C.D.
		line	22°17'005"N	113°55'035"E	
12	40-50	horizontal	22°17'005"N	113°55'035"E	A horizontal strand of seagrass bed nearby the seaward side of mangrove area at tidal level 1.5m above C.D.
		line	22°17'005"N	113°55'035"E	

ST *Zostera Japonica* (search hour = 3 hrs)

45	70-80	horizontal	22°17'010"N	113°55'032"E	A horizontal strand of seagrass bed nearby the seaward side of mangrove area at tidal level 2.0 m above C.D.
		line	22°17'010"N	113°55'032"E	

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

0.8	50-60	horizontal	22°17'017"N	113°55'030"E	A horizontal strand of seagrass bed nearby the seaward side of mangrove area at tidal level 1.5 m above C.D.
		line	22°17'017"N	113°55'030"E	
2.7	50-60	horizontal	22°17'017"N	113°55'030"E	A horizontal strand of seagrass bed nearby the seaward side of mangrove area at tidal level 1.5 m above C.D.
		line	22°17'017"N	113°55'030"E	
32	70-80	horizontal	22°17'017"N	113°55'030"E	A horizontal strand of seagrass bed nearby the seaward side of mangrove area at tidal level 1.5 m above C.D.
		line	22°17'017"N	113°55'030"E	
1.8	40-50	horizontal	22°17'017"N	113°55'030"E	A horizontal strand of seagrass bed nearby the seaward side of mangrove area at tidal level 1.5 m above C.D.
		line	22°17'017"N	113°55'030"E	
20	90-100	horizontal	22°17'015"N	113°55'030"E	A horizontal strand of seagrass bed nearby the seaward side of mangrove area at tidal level 1.5 m above C.D.
		line	22°17'015"N	113°55'030"E	
950	80-90	horizontal	22°17'013"N	113°55'029"E	A horizontal strand of seagrass bed nearby the seaward side of mangrove area at tidal level 1.5 m above C.D.

		line	22°17'012"N	113°55'029"E	area at tidal level 1.5 m above C.D.
80	50-60	horizontal	22°17'011"N	113°55'030"E	A horizontal strand of seagrass bed nearby the seaward side of mangrove
		line	22°17'011"N	113°55'030"E	area at tidal level 1.5 m above C.D.
1	50-60	horizontal	22°17'017"N	113°55'030"E	A horizontal strand of seagrass bed nearby the seaward side of mangrove
		line	22°17'017"N	113°55'030"E	area at tidal level 1.5 m above C.D.
2	50-60	horizontal	22°17'017"N	113°55'030"E	A horizontal strand of seagrass bed nearby the seaward side of mangrove
		line	22°17'017"N	113°55'030"E	area at tidal level 1.5 m above C.D.
400	70-80	horizontal	22°17'010"N	113°55'032"E	A horizontal strand of seagrass bed nearby the seaward side of mangrove
		line	22°17'010"N	113°55'032"E	area at tidal level 1.5 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	Phyllodocida	Nereidae	<i>Perinereis</i> sp.
Animalia	Annelida	Polycheata	Phyllodocida	Nereididae	<i>Nereididae</i> spp.
Animalia	Annelida	Polycheata	Sabellida	Sabellidae	<i>Sabellidae imbricatus</i>
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	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	Glauconomidae	<i>Glauconome chinensis</i>
Animalia	Mollusca	Bivalvia	Venerida	<i>Veneridae</i>	<i>Anomalocardia squamosa</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>
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>

Kingdom	Phylum	Class	Order	Family	Species
Animalia	Mollusca	Gastropoda	Neogastropoda	Muricidae	<i>Thais clavigera</i>
Animalia	Mollusca	Gastropoda	Neotaenioglossa	Littorinidae	<i>Nodilittorina radiata</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	Trochida	Tegulidae	<i>Chlorostoma argyrostomum</i>
Animalia	Mollusca	Gastropoda		Lottiidae	<i>Patelloida pygmaea</i>
Animalia	Mollusca	Polyplacophora	Chitonida	Ischnochitonidae	<i>Lepidozona</i> spp.
Animalia	Nemertea				<i>Nemertea</i> spp.
Animalia	Platyhelminthes				<i>Platyhelminthes</i> sp.
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

Jun 2021 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	
Ba	<i>Balanus amphitrite</i>			1				2		1				2		2						8
Bi	<i>Barbatia virescens</i>	3				2		2				2		1		1		2				13
Bi	<i>Brachidontes variabilis</i>	1		1				2								1						5
Bi	<i>Glauconome chinensis</i>			1		2				2		2		4				3		1		15
Bi	<i>Saccostrea cucullata</i>	41		38		40		29		35		24		33		20		36		34		330
Bi	<i>Xenostrobus atratus</i>	4		3		6		6		5		5				6		4				39
C	<i>Gaetice depressus</i>					1				1		1				1				2		6
C	<i>Hemigrapsus penicillatus</i>					1						1		1								3
C	<i>Metopograpsus latifrons</i>			2		1				1				1		2		1				8
C	<i>Pagurus dubius</i>									1												1
G	<i>Batillaria multiformis</i>	8		7		6		9		8		8		10		7		11		5		79
G	<i>Batillaria zonalis</i>	6		7		7		6		5		5		8		10		3		8		65
G	<i>Cellana toreuma</i>																	1				1
G	<i>Chlorostoma argyrostomum</i>					2				2		3		1		5				4		17
G	<i>Clithon faba</i>							1		2		4		3		2						12
G	<i>Littoraria articulata</i>							2				6		5								13
G	<i>Lottia dorsuosa</i>	2		2				2		1		2		4		4		6		3		26
G	<i>Lottia luchuana</i>							6														6

G	<i>Lunella coronata</i>		5	2		2	3	3		5	5	25
G	<i>Lunella granulata</i>		4	4		5	3	3		3	5	27
G	<i>Monodonta labio</i>	15	14	16	20	20	21	20	14	13	20	173
G	<i>Nipponacmea concinna</i>		3	4		3		2	5			17
G	<i>Nodilittorina radiata</i>	3			4						3	10
G	<i>Patelloida pygmaea</i>	1							6		3	10
G	<i>Pirenella asiatica</i>				1			1		1		3
P	<i>Sabellidae imbricatus</i>								1			1
Po	<i>Lepidozona spp.</i>										2	2
Sp	<i>Siphonosoma sp.</i>					1	1			1	1	4
											Total	919

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

Jun 2021 Sampling Zone TC1

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				2		4						10
Bi	<i>Barbatia virescens</i>	3		2				1					3	3		2		2			3	19
Bi	<i>Brachidontes variabilis</i>	1		2										2							2	7
Bi	<i>Glauconome chinensis</i>	2						3		2		2				2		1				12
Bi	<i>Saccostrea cucullata</i>	35		46		38		37		43		45		37		42		40			43	406
Bi	<i>Xenostrobus atratus</i>	6		4		4		4		6		4				2		5			6	41
C	<i>Gaetice depressus</i>	1		1				2						2		2						8
C	<i>Hemigrapsus penicillatus</i>			1									1	1							1	4
C	<i>Metopograpsus latifrons</i>	2		1						2						1		1				7
G	<i>Batillaria multiformis</i>	8		7		6		5		5		7		8		4		6			4	60
G	<i>Batillaria zonalis</i>	4		7		3		6		4		7		6		3		7			5	52
G	<i>Chlorostoma argyrostomum</i>			4						5						2					2	13
G	<i>Clithon faba</i>	3						2					4			1		3				13
G	<i>Clithon retropictus</i>									6				2		2						10
G	<i>Littoraria articulata</i>	5		5				1				4				4					4	23
G	<i>Lottia dorsuosa</i>	5				3						4		2		4		2			2	22
G	<i>Lunella coronata</i>			5		3		5				5						4			1	23

G	<i>Lunella granulata</i>			6	3	4	3	2	4	5	3	30	
G	<i>Monodonta labio</i>	18	22	10	24	19	22	23	18	15	19	190	
G	<i>Nerita squamulata</i>		2		1			3			1	7	
G	<i>Nipponacmea concinna</i>	3		2	3		3	4	5	2		22	
G	<i>Nodilittorina radiata</i>			1		5	4		3		3	16	
G	<i>Patelloida pygmaea</i>	1			1			4		1		7	
G	<i>Pirenella asiatica</i>	1	1				1	1			1	1	6
P	<i>Nereididae</i> spp.		1	1		1			1	2		6	
Po	<i>Lepidozonia</i> spp.					4		2			2	8	
Sp	<i>Siphonosoma</i> sp.		1		2		1					4	
Sp	<i>Sipunculus nudus</i>			1			1			1		3	

Total 1029

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

Jun 2021 Sampling Zone TC1

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>					2												2				4
Bi	<i>Barbatia virescens</i>			3		3		2		3		4		2		2					4	23
Bi	<i>Brachidontes variabilis</i>	2		2		3				3		2		3		4		3		1		23
Bi	<i>Glauconome chinensis</i>	3						3				4				1		2				13
Bi	<i>Saccostrea cucullata</i>	38		42		40		43		35		33		46		37		45		42		401
Bi	<i>Xenostrobus atratus</i>	4		5		6		4		3		2		4						6		34
C	<i>Gaetice depressus</i>											1				2						3
C	<i>Hemigrapsus penicillatus</i>													1				1				2
C	<i>Metopograpsus latifrons</i>			1				1				1								1		4
C	<i>Pagurus dubius</i>							1		1										1		3
Cn	<i>Diadumene lineata</i>					2									2							4
G	<i>Batillaria multiformis</i>	8		6		7		8		5		6		8		10		10		6		74
G	<i>Batillaria zonalis</i>	4		9		5		9		5		8		7		3		7		7		64
G	<i>Chlorostoma argyrostomum</i>	2				2				5						4						13
G	<i>Clithon retropictus</i>			4		3		3				3		6						3		22
G	<i>Littoraria articulata</i>	6		5		4		4				5		5		2				2		33
G	<i>Lottia dorsuosa</i>					4		3		3				4				4				18
G	<i>Lottia luchuana</i>	5																		5		10

G	<i>Lunella coronata</i>	5	2	5	3	3	4	5		27		
G	<i>Lunella granulata</i>	6	5	4	5	4	5			29		
G	<i>Monodonta labio</i>	18	15	22	19	21	19	23	25	25	16	203
G	<i>Nerita lineata</i>		2	3	2	3	2					12
G	<i>Nerita polita</i>		2	3	4	4	2	3	5			23
G	<i>Nerita squamulata</i>	3		5		5					4	17
G	<i>Nipponacmea concinna</i>	5		5	5		2				2	19
G	<i>Nodilittorina radiata</i>		3	3			2	6				14
G	<i>Patelloida pygmaea</i>		4	3	4	3	5	2			1	22
P	<i>Nereididae</i> spp.			1	2			1			1	5
P	<i>Perinereis</i> sp.		1		3					1		5
P	<i>Sabellidae imbricatus</i>	1		1			1	1		1		5
Po	<i>Lepidozonia</i> spp.				2							2
Sp	<i>Siphonosoma</i> sp.		1		1			1				3
Sp	<i>Sipunculus nudus</i>	1						1				2

Total 1136

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

Jun 2021 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	
Ba	<i>Balanus amphitrite</i>			4						2										3		9
Bi	<i>Barbatia virescens</i>	1		2		3								2		4						12
Bi	<i>Brachidontes variabilis</i>	2		1		4		4		2						1		3		4		21
Bi	<i>Glaucanome chinensis</i>	2				4		2		2				3								13
Bi	<i>Saccostrea cucullata</i>	45		36		31		33		42		41		38		37		45		43		391
Bi	<i>Xenostrobus atratus</i>			4		6		4										6				20
C	<i>Gaetice depressus</i>	1		1						1				2								5
C	<i>Hemigrapsus penicillatus</i>					1								1								2
C	<i>Metopograpsus latifrons</i>			2		2																4
C	<i>Metopograpsus quadridentatus</i>																			1		1
C	<i>Parasesarma bidens</i>			1						1												2
Cn	<i>Diadumene lineata</i>																			3		3
G	<i>Batillaria multiformis</i>	23		14		18		24		19		21		22		20		17		20		198
G	<i>Batillaria zonalis</i>	10		15		8		12		14		12		7		6		5		9		98
G	<i>Clithon retropictus</i>			3				6				4				2						15
G	<i>Littoraria articulata</i>			4		6						6		6						4		26
G	<i>Lottia dorsuosa</i>	6		4								4		5		2		5				26
G	<i>Lunella coronata</i>	3				3		7								4						17

G	<i>Lunella granulata</i>	5		4	4				5	3		21
G	<i>Monodonta labio</i>	14	25	29	18	24	26	21	16	28	19	220
G	<i>Nerita squamulata</i>		2		2		2				4	10
G	<i>Nipponacmea concinna</i>	3			3	5			2	6		19
G	<i>Nodilittorina radiata</i>	2			4	7		3	2	7		25
G	<i>Patelloida pygmaea</i>		2	2			3		3	5		15
G	<i>Pirenella asiatica</i>			2	1		1		1		1	6
G	<i>Pirenella incisa</i>			1					1			2
Ne	<i>Nemertea</i> sp.				1						1	2
Po	<i>Lepidozona</i> spp.							3				3
Sp	<i>Siphonosoma</i> sp.	1				1		1			1	4
											Total	1190

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

Jun 2021 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				2						3		2				11
Bi	<i>Barbatia virescens</i>			4		3		4		2		2		3		2				2		22
Bi	<i>Brachidontes variabilis</i>	4		2		4		1				4						2		4		21
Bi	<i>Glaucanome chinensis</i>	2						2		3		1				1				2		11
Bi	<i>Saccostrea cucullata</i>	37		32		30		41		36		45		39		37		40		40		377
Bi	<i>Xenostrobus atratus</i>			6		4		6		5		3		6				4				34
C	<i>Gaetice depressus</i>					1				2				1				1				5
C	<i>Hemigrapsus penicillatus</i>	1																				1
C	<i>Metopograpsus latifrons</i>					1		1				1				1				1		5
G	<i>Batillaria multiformis</i>	9		8		10		5		8		7		8		7		9		10		81
G	<i>Batillaria zonalis</i>	15		16		16		18		16		22		20		17		10		12		162
G	<i>Clithon faba</i>			3												3						6
G	<i>Clithon retropictus</i>	3		2				5		4		4		3						4		25
G	<i>Littoraria articulata</i>									2		1		5				2				10
G	<i>Lottia dorsuosa</i>	4		3		3				2						4		3		2		21
G	<i>Lunella coronata</i>	2		4		5						2		3		2		3				21
G	<i>Lunella granulata</i>	4		5		3				3		4		3								22
G	<i>Monodonta labio</i>	19		24		17		22		23		17		18		15		15		10		180

G	<i>Nipponacmea concinna</i>		2		2	2	2	4	1	2		15
G	<i>Nodilittorina radiata</i>	5		4	2	2					3	16
G	<i>Patelloida pygmaea</i>			2	3	4						9
G	<i>Pirenella incisa</i>		1	1								2
Ne	<i>Nemertea</i> spp.			1			2				1	4
Po	<i>Lepidozona</i> spp.	1							2			3
Sp	<i>Siphonosoma</i> sp.		1	1	1	1					1	5
Sp	<i>Sipunculus nudus</i>			1				1				2
											Total	1071

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

Jun 2021 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>					3		3		2												8
Bi	<i>Anomalocardia squamosa</i>			1				2								2						5
Bi	<i>Barbatia virescens</i>	3				2				4	3	4	2			2		2		2		22
Bi	<i>Brachidontes variabilis</i>	2		3		4		2		2								2				15
Bi	<i>Glaucanome chinensis</i>									1			1		2		1			2		7
Bi	<i>Isognomon isognomum</i>			1		1		1				3	2				1					9
Bi	<i>Saccostrea cucullata</i>	38		40		46		34		36		40		43		45		36		38		396
Bi	<i>Xenostrobus atratus</i>			5		4				6	5	6								6		32
C	<i>Gaetice depressus</i>	1				1						2								2		6
C	<i>Hemigrapsus penicillatus</i>			1								1										2
C	<i>Metopograpsus latifrons</i>			1		1										1						3
C	<i>Pagurus dubius</i>									1		1										2
Cn	<i>Diadumene lineata</i>														1							1
G	<i>Batillaria multiformis</i>	11		9		6		6		8				6		4		6		5		61
G	<i>Batillaria zonalis</i>	8		3		7		6		10				9		8		5		9		65
G	<i>Clithon retropictus</i>					2		3						4		3		5				17
G	<i>Littoraria articulata</i>	3		4		2						3						3				15
G	<i>Lottia dorsuosa</i>	4		4				5								4		6		3		26

G	<i>Lunella coronata</i>			4	2	3	4		2		3	18
G	<i>Lunella granulata</i>			3	4	3	5		3		5	23
G	<i>Monodonta labio</i>	18	22	19	15	23	21	17	16	28	25	204
G	<i>Nipponacmea concinna</i>	5	5									10
G	<i>Nodilittorina radiata</i>							3		2		5
G	<i>Patelloida pygmaea</i>				2			3		3	2	10
G	<i>Pirenella incisa</i>			1		1			1		1	4
P	<i>Sabellidae imbricatus</i>				1			1				2
Po	<i>Lepidozona spp.</i>					2						2
Sp	<i>Siphonosoma sp.</i>	1	1		1			1			1	5
Sp	<i>Sipunculus nudus</i>							1				1
											Total	976

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

Jun 2021 Sampling Zone TC3

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>	1		1		4				2		1		3				1				13
Bi	<i>Brachidontes variabilis</i>			1		1		2						1				2		5		12
Bi	<i>Glaucanome chinensis</i>			3						1							1				1	6
Bi	<i>Saccostrea cucullata</i>	20		13		45		63		15		8		39		21		16		22		262
Bi	<i>Xenostrobus atratus</i>	3				8												2				13
C	<i>Gaetice depressus</i>					1		1														2
C	<i>Metopograpsus latifrons</i>							1												1		2
C	<i>Pagurus dubius</i>							1				1					1			2		5
G	<i>Batillaria multiformis</i>	5				1		2		2				3				1		8		22
G	<i>Batillaria zonalis</i>	1		5		3		1						2		6				5		23
G	<i>Clithon oualaniensis</i>									2		1								2		5
G	<i>Clithon retropictus</i>	1				2						3		2		1		1				10
G	<i>Littoraria articulata</i>	5		3										2						6		16
G	<i>Lunella coronata</i>	1				2		2		4				3		3		5		2		22
G	<i>Lunella granulata</i>	2						1		2		2				3				1		11
G	<i>Monodonta labio</i>	10		3		5		15		9		18		20		5		6		8		99
G	<i>Nerita chamaeleon</i>													1						1		2
G	<i>Nerita polita</i>	1												2								3

G	<i>Nerita squamulata</i>				1				1	
G	<i>Nipponacmea concinna</i>	3		1			2		6	
G	<i>Nodilittorina radiata</i>							1	1	
G	<i>Patelloida pygmaea</i>	2	6		2			9	1	20
G	<i>Pirenella incisa</i>								2	2
G	<i>Thais clavigera</i>	1						1		2
P	<i>Nereididae</i> spp.			1					2	3
P	<i>Perinereis</i> sp.	1			1				1	4
P	<i>Sabellidae imbricatus</i>		1					1		3
PI	<i>Platyhelminthes</i>								1	1
									Total	571

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, PI: 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

Jun 2021 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	
Ba	Balanus amphitrite																				4	4
Bi	Barbatia virescens	5		2		3				1		2						1				14
Bi	Ruditapes philippinarum			2						1						1					3	7
Bi	Brachidontes variabilis				1					2											3	6
Bi	Glauconome chinensis	1								2												3
Bi	Saccostrea cucullata	26		16		10		65		24		33		29		17		31		28		279
Bi	Xenostrobus atratus	4		7				5		6		2									12	36
C	Gaetice depressus	1		1																		2
C	Metopograpsus latifrons																1					1
G	Batillaria multiformis	10		6		7		2		34		6						11		29		105
G	Batillaria zonalis	2		4				8		8				10		5		1		13		51
G	Clithon oualaniensis				1												2					3
G	Clithon retropictus				5			2		1											3	11
G	Littoraria articulata	6				12						8				2		4				32
G	Lottia dorsuosa				4							2		2								8
G	Lunella coronata	1		3		2		3		2		5				1				2		19
G	Lunella granulata				2			1				2		3								8
G	Monodonta labio	18		22		15		38		31		20		8		27		42		16		237

G	Nipponacmea concinna	2		5	1		3	11
G	Patelloida pygmaea	1		2			1	4
G	Pirenella incisa		1		1	1		3
Pl	Platyhelminthes		1				1	2
Po	<i>Lepidozona</i> spp.	1					1	2
Sp	Siphonosoma sp.		3		1		1	6
Total								854

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

Jun 2021 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	Balanus amphitrite					2														6	2	8
Bi	Barbatia virescens	5		5		2				3		5				2		2		1		25
Bi	Anomalocardia squamosa		1																		1	2
Bi	Ruditapes philippinarum				2										1							3
Bi	Brachidontes variabilis															1						1
Bi	Glauconome chinensis						1															1
Bi	Saccostrea cucullata	62		22		43		20		65		18		35		24		49		53		391
Bi	Xenostrobus atratus	5		8		2				6				4		3		8		2		38
C	Gaetice depressus	1				3				1						2		1				8
C	Metopograpsus latifrons	1														1						2
C	Pagurus dubius	2				3						3		1								9
G	Batillaria multiformis			6			4				6					8		3		15		42
G	Batillaria zonalis	4		3			8							5						2		22
G	Clithon oualaniensis	2									1						1			2		6
G	Littoraria articulata	2				3	2	4						11				8		6		36
G	Lottia dorsuosa	3				2	1							8		2						16
G	Lunella coronata	2		1		4	3	5		3			1		2		5		4			30
G	Lunella granulata	1				3	1	2					3		1					2		13

G	Monodonta labio	9	8	23	20	13	8	16	24	15	19	155
G	Nerita lineata	1								1		2
G	Nipponacmea concinna		2								5	7
G	Patelloida pygmaea										1	1
G	Pirenella incisa										1	1
P	Nereididae spp.			1								1
P	Sabellidae imbricatus	1			1	1						3
Sp	Siphonosoma sp.		1		1			1	1	1	1	6
Sp	Sipunculus nudus				1							1
											Total	830

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

Jun 2021 Sampling Zone ST		High tidal level (2.0 m above C.D.)																				
Gp	Taxon	1		2		3		4		5		6		7		8		9		10		Sub-total
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	
Ba	Balanus amphitrite			5				2												4		11
Bi	Barbatia virescens			2										1		1		3		5		12
Bi	Brachidontes variabilis	1				1							1							1		4
Bi	Glauconome chinensis			2						1			1		2		1					7
Bi	Saccostrea cucullata	35		46		12		32		60		38		45		28		24		56		376
Bi	Xenostrobus atratus	7		8				2				6				5		13				41
C	Gaetice depressus			1				1						2								4
C	Metopograpsus latifrons							2						1		2				1		6
C	Pagurus dubius	1		1				2				2				1						7
Cn	Diadumene lineata							1														1
G	Batillaria multiformis	8		12		22		9		25		11		17		25		14		18		161
G	Batillaria zonalis			2		3		5		9		8		4		10		8		3		52
G	Cellana toreuma	2		1						3												6
G	Clithon faba																			1		1
G	Clithon retropictus	1						2				1								2		6
G	Littoraria articulata			2						10								8		5		25
G	Lottia dorsuosa	2				1																3
G	Lunella coronata	1				2		3		3		2		1		5		4		2		23

G	Lunella granulata		2	1	1		2	3	1	2	3	15
G	Monodonta labio	26	32	20	9	17	16	25	25	36	28	234
G	Nerita chamaeleon		1									1
G	Nerita polita	1							1			2
G	Nipponacmea concinna	1		2			1			3	5	12
G	Nodilittorina radiata				8		2	3				13
G	Patelloida pygmaea	1		3			2	4			3	13
G	Pirenella incisa									1	1	2
P	Sabellidae imbricatus			1		1				1		3
P	Nereididae spp.									1	1	2
Po	<i>Lepidozona</i> spp.					1					1	2
Sp	Sipunculus nudus		2					1				3
Sp	Siphonosoma sp.			1	2	2			1	1	1	8
											Total	1056

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

Jun 2021 Sampling Zone ST		Mid tidal level (1.5 m above C.D.)																				
Gp	Taxon	1		2		3		4		5		6		7		8		9		10		Sub-total
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	
Bi	<i>Barbatia virescens</i>	6		5				3		3				5		3		4		2		31
Bi	<i>Glauconome chinensis</i>	1				2								1				1				5
Bi	<i>Saccostrea cucullata</i>	25		48		56		21		18		33		38		43		27		63		372
Bi	<i>Xenostrobus atratus</i>			3		9		7								13		6		8		46
C	<i>Gaetice depressus</i>			3		2		1			1		1									8
C	<i>Metopograpsus latifrons</i>							1										1				2
C	<i>Pagurus dubius</i>	2		5		2					3				1		1					14
G	<i>Batillaria multiformis</i>	2				4		5						6		12		10		9		48
G	<i>Batillaria zonalis</i>	8		2				3		1		9		14		5				12		54
G	<i>Chlorostoma argyrostomum</i>															1						1
G	<i>Clithon faba</i>			1				1														2
G	<i>Clithon oualaniense</i>																			2		2
G	<i>Clithon retropictus</i>	1													1					1		3
G	<i>Littoraria articulata</i>	2		8		3		12										10		8		43
G	<i>Lottia dorsuosa</i>											2								1		3
G	<i>Lunella coronata</i>	2		2		3		4		4		3		9		3		4		5		39
G	<i>Lunella granulata</i>	1		1		2				3				1		2		2		3		15
G	<i>Monodonta labio</i>	14		19		33		35		42		38		53		21		20		39		314

G	Nerita chamaeleon								1	1
G	Nerita lineata			1			2			3
G	Nerita squamulata	1		1		2		3		7
G	Nipponacmea concinna	3	2		4				3	12
G	Nodilittorina radiata		1	3				5		9
G	Patelloida pygmaea	1					3		2	8
G	Pirenella incisa		1					1	1	3
Ne	Nemertea spp.			1						2
P	Sabellidae imbricatus				1	1			2	4
Sp	Siphonosoma sp.	1						1		5
Sp	Sipunculus nudus			1		1			2	4
Total										1060

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

Jun 2021 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
		Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	Q	C	
Ba	Balanus amphitrite	2		5		1				1				2				4				15
Bi	Anomalocardia squamosa					1						2					1				1	5
Bi	Barbatia virescens	5		3		4		2				3		1		5		4		2		29
Bi	Brachidontes variabilis	3						1								2		1		1		8
Bi	Glauconome chinensis	1				2								3								6
Bi	Saccostrea cucullata	13		26		19		16		8		32		20		17		11		28		190
Bi	Xenostrobus atratus	5		8		2		6				3				10		3		6		43
C	Gaetice depressus	3				1	2			1				1				1			1	10
C	Hemigrapsus penicillatus													1								1
C	Metopograpsus latifrons	1										1										2
C	Metopograpsus quadridentatus							1														1
Cn	Diadumene lineata																	1				1
G	Batillaria multiformis	8		5		6		6		4		5		6		8		12		10		70
G	Batillaria zonalis	5		3		2		5		3		5		6		6		3		5		43
G	Chlorostoma argyrostomum	1								1								1				3
G	Clithon faba	1				1		1												2		5

G	Lottia dorsuosa	2	5	4	2	4	2	3	6		2	30
G	Lunella coronata	2	4	6	5	4	3	2	4	6	3	39
G	Lunella granulata		2	1	3	1		1	2	3	1	14
G	Monodonta labio	10	8	19	13	25	18	10	12	15	26	156
G	Nerita lineata			1			1	1			1	4
G	Nerita squamulata	1		1								2
G	Nipponacmea concinna	3	2	3	4	2		2	2	3	5	26
G	Nodilittorina radiata	2	3					4			2	11
G	Patelloida pygmaea	1	5		2		2	4	3	3	2	22
G	Pirenella incisa				1	1					1	3
Ne	Nemertea spp.				1				1		2	4
P	Sabellidae imbricatus				3		1		2		1	7
Po	<i>Lepidozona</i> spp.				1							1
Sp	Siphonosoma sp.			1		1				1	1	4
Sp	Sipunculus nudus		1					1				2
											Total	757

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