

Marine and estuarine crabs of Digha coast

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Abstract

Digha coastal zone provides very potential habitat for several varieties of marine and estuarine crabs. A total of 65 species of marine crabs belonging to 36 genera and 13 families were recorded from the area under study. These includes 24 species under 19 genera were recorded for the first time. The Systematic taxonomic accounts for all the species with their detailed distribution and synonymies were provided. Observations were also made that among all these species only 5 portunid crabs are being exploited for the purpose of food by the coastal communities in the locality, hence a sizable regulation is needed for sustainable management of fisheries.

Keywords: Digha, Coastal zone, Communities, Marine crabs and Sustainable management

Introduction

Digha (West Bengal) is situated close to the Gangetic mouth (Lat. 21° 36' N; Long. 87° 30' E) on the northern east coast of India. Its coastal length is about 250 m. This coastal area provides an unique habitat of shallow muddy beach with high sedimentation composed of sand grains mixed with variable proportions of silt, input from the Ganges. This stretch provides two major fish landing centres ie. Digha Mohana and Shankarpur, where all sorts of commercial activities of fishes are being performed.

The earliest record of marine crab of the West Bengal state date back to Milne Ed.H. (1837) Henderson (1893) and Alcock's monumental works (1894-1901). Subsequently Kemp and Sewell (1912), Kemp (1919), dealt with the families Ocypodidae and Hymenosomatidae. Balss (1957) compiled genera and families of the marine crab of the world. Further Guinot (1977a, b, 1978, 1979) brought out a catalogue of Herbs't specimens was subsequently published by Sakai (1999). Most recently Ng et al., (2008) had published an annotated check list of extant brachyuran crabs of the world. In context to the crabs of coastal areas of Bengal Chopra (1933, 1935), Chopra and Das (1930, 1937), Hora (1935) and Chhappgar (1957) studied the crab fauna of Sandheads, Gangetic delta and of lower Bengal. Most comprehensive account on crabs of west Bengal brought out by Maya Deb (1998). Goswami (1992) and Ramakrishna et al., (2003) published information on marine invertebrates including crab fauna

of Digha coast. Mitra et al., (2010) reported 20 species from Subernarekha Estuary (Balasore: Odisha) close to the coastal beaches of Digha. In a recent publication by Yennawar & Tuddu (2014) reported 12 species of marine crabs from Digha coast. Further Srivastava (in press) recently reported 51 crab species, including 15 new records to digha and adjoining coastal areas.

Material and Methods

Crab specimens were collected from the fish landing centers of Shankarpur (21°38.214' N, 87°34.706' E), Digha Mohana (21°37.843'N, 87°32.827') beach trawling sites of Junput (21°43.226' N, 87°49.751' E) fishing area, Udaipore (21°36.648' N, 87°29.089'E) and Talsari (21°36.403' N, 87°23.385' E) beaches. The present study also include materials previously collected by various survey parties of Marine Aquarium & Regional Center, Zoological survey of India, Digha. All the freshly collected specimens were photographed and preserved by the method adopted by the method adopted by Tweede's (1936, 1937). Material examined were deposited in Marine Aquarium & Regional Center, Zoological survey of India, Digha.

Specimen identification is based on the work of De Grave et al., (2009), followed after Bowman and Abele(1982). Current taxonomic status of each species was verified from the checklist of Ng et al. (2008) and world Register of marine species (WoRMS).

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Result and Discussion

A total of 240 crab specimens were examined during the present study consisting of 65 species under 36 genera of 13 families (Table I). Of these, 24 species have been recorded for the first time from Digha coast [indicated by on aserix (*) mark]. A systematic list and account of all the marine crabs of Digha is provided. Besides, photographs were provided for some interesting species (Plate 1).

The present study reveals that the study area provides a very potential habitat for several varieties of marine and esturine crabs. Among all these 65 species, only 5 portunid crabs (all belonging to family portunidae) viz. are exploited for the purpose of food by the coastal communities in the locality. A sizable regulation is needed for the exploitation of these 5 species for sustainable management of fisheries.

Table 1. List and distribution of marine crabs in digha coast

Sl.No	Name of the species	Talsari	Udaipore	Digha and Digha Mohana	Shan-karpur	Junput
1	<i>Lauridromia dehaani</i> (Rathbun,1923)*	+				
2	<i>Dorippoides facchino</i> (Herbst,1785)			+	+	
3	<i>Calappa lophos</i> (Herbst,1782)*			+	+	
4	<i>Calappa pustulosa</i> Alcock,1896*	+		+	+	
5	<i>Ashtoret lunaris</i> (Forskål,1775)			+		
6	<i>Matuta planipes</i> Fabricius,1798	+	+	+	+	+
7	<i>Matuta victor</i> Fabricius,1781	+	+	+	+	
8	<i>Arcania septemspinosa</i> (Fabricius,1787)*			+	+	+
9	<i>Ixa cylindrus</i> (Fabricius,1777)*					+
10	<i>Ixa inermis</i> Leach,1817			+		
11	<i>Philyra globus</i> H.Milne Edwards,1837*					+
12	<i>Leucosia sima</i> Alcock,1896*				+	
13	<i>Seulocia rhomboidalis</i> (De Haan,1841)*	+			+	
14	<i>Doclea ovis</i> (Fabricius,1787)	+		+		
15	<i>Doclea muricata</i> (Herbst,1787)*			+	+	
	<i>Doclea hybrida</i> (Fabricius,1798)			+		
16	<i>Doclea canalifera</i> Stimpson,1857			+		
18	<i>Phalangipus indicus</i> (Leach,1815)*			+		+
19	<i>Parthenope longimanus</i> (Linnaeus,1758)*			+	+	
20	<i>Cryptopodia angulata</i> H.Milne Edwards & Lucas,1841*			+		
21	<i>Charybdis (Charybdis) affinis</i> Dana,1852			+	+	
22	<i>Charybdis (Charybdis) callianassa</i> (Herbst,1789)*			+		+
23	<i>Charybdis (Charybdis) feriata</i> (Linnaeus,1758)	+	+	+	+	
24	<i>Charybdis (Charybdis) lucifera</i> (Fabricius,1798)*				+	
25	<i>Charybdis (Charybdis) miles</i> (de Haan,1835)		+	+	+	
26	<i>Charybdis (Charybdis) natator</i> (Herbst,1794)		+			
27	<i>Charybdis (Charybdis) orientalis</i> Dana, 1852			+		
28	<i>Charybdis (Charybdis) rostrata</i> (A.MilneEdwards,1861)*			+	+	
29	<i>Charybdis (Charybdis) variegata</i> (Fabricius,1798)*			+		
30	<i>Charybdis (Goniohellenus) vadorum</i> Alcock,1899*	+				
31	<i>Thalamita prymna</i> (Herbst,1803)*	+				
32	<i>Portunus (Portunus) pelagicus</i> Linnaeus,1758.	+	+	+	+	
33	<i>Portunus (Portunus)sanguinolentus</i> (Herbst,1783)	+	+	+		
34	<i>Scylla serrata</i> (Forskål,1775)	+	+	+	+	
35	<i>Scylla tranquebarica</i> (Fabricius,1798)			+		
36	<i>Podophthalmus vigil</i> (Fabricius,1798)*			+	+	
37	<i>Demania splendida</i> Laurie,1906*			+	+	
38	<i>Liagore rubromaculata</i> (De Haan,1835)		+	+	+	

39	<i>Halimede tyche</i> (Herbst,1801)*				+	
40	<i>Menippe rumphii</i> (Fabricius,1798)*			+	+	
41	<i>Myomenippe hardwickii</i> (Gray,1831)*			+		
42	<i>Metopograpsus messor</i> (Forskål,1775)	+				
43	<i>Pachygrapsus porpinquus</i> De Man,1908			+		
44	<i>Varuna litterata</i> (Fabricius,1798)			+		
45	<i>Metaplex crenulata</i> (Gerstaecker,1856)		+			
46	<i>Metaplex intermedia</i> de Man,1888			+		
47	<i>Sesarmoides kraussi</i> (De Man,1887)			+		
48	<i>Sesarmoides longipes</i> (Krauss,1843)			+		
49	<i>Episesarma mederi</i> (H.Milne Edwards,1853)			+		
50	<i>Ocypode ceratophthalmus</i> (Pallas,1772)	+		+		
51	<i>Ocypode macrocera</i> H.Milne Edwards,1852	+		+	+	
52	<i>Uca (Austruca)Lactea</i> (de Haan,1835)			+		
53	<i>Uca (Tubuca)Rosea</i> (Tweedie,1937)			+		
54	<i>Uca (Tubuca)acuta</i> (Stimpson,1858)			+		
55	<i>Uca (Austruca) annulipes</i> (H.Milne Edwards,1837)			+		
56	<i>Uca (Austruca) dussumieri</i> (H.Milne Edwards,1852)			+		
57	<i>Uca (Paraleptuca) triangularis</i> (A. Milne Edwards,1873)	+		+	+	
58	<i>Dotilla intermedia</i> de Man,1888			+		
59	<i>Dotilla blanfordi</i> Alcock,1900			+		
60	<i>Macrophthalmus (Macrophthalmus) brevis</i> (Herbst,1804)			+	+	
61	<i>Macrophthalmus (Mareotis) depressus</i> Rüppell,1830					
62	<i>Macrophthalmus pectinipes</i> Guerin,1839			+		
63	<i>Macrophthalmus (Macrophthalmus) sulcatus</i> H.MilneEdwards,1852			+		
64	<i>Macrophthalmus (Macrophthalmus)transverses</i> (Latreille,1817)			+	+	
65	<i>Raninoides personatus</i> Henderson,1888*			+		

: New record to Digha coast; '+'-present

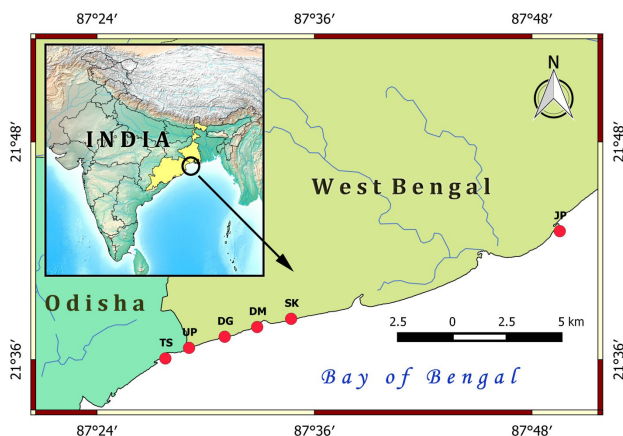


Figure 1. Map of Digha coast showing collection sites: 1. Junput 2. Shankarpur 3. Digha Mohana 4. Udaipore and 5.Talsari.

Systematic Account

Phylum &
Subphylum : CRUSTACEA Pennant, 1777
Class : MALACOSTRACA Latreille, 1806
Subclass : EUMALACOSTRACA Grobben, 1892
Order : DECAPODA Latreille, 1803
Suborder : PLEOCYEMATA Burkenroad, 1963
Infraorder : BRACHYURA Latreille, 1803
Superfamily : DROMIOIDEA de Haan, 1833
Family : DROMIIDAE de Haan, 1833
Subfamily : Dromiinae De Haan, 1833

1. *Lauridromia dehaani* (Rathbun,1923)*

Superfamily : DORIPPOIDEA Macleay, 1838
Family : DORIPPIDAE Macleay, 1838

- Subfamily : DORIPPINAE Macleay, 1838
2. *Dorippoides facchino* (Herbst,1785)
 - Superfamily : CALAPPOIDEA de Haan, 1833
 - Family : CALAPPIDAE de Haan, 1833
 - Subfamily : CALAPPINAE de Haan, 1835
 3. *Calappa lophos* (Herbst,1782)*
 4. *Calappa pustulosa* Alcock,1896*
 - Family : MATUTIDAE de Haan, 1835
 - Subfamily : MATUTINAE de Haan, 1835
 5. *Ashtoret lunaris* (Forskål,1775)
 6. *Matuta planipes* Fabricius,1798
 7. *Matuta victor*(Fabricius,1781)
 - Superfamily : LEUCOSIOIDEA Samouelle, 1819
 - Family : LEUCOSSIDAE Samouelle, 1819
 - Subfamily : EBALIINAE Samouelle, 1819
 8. *Arcania septemspinosa* (Fabricius,1787)*
 9. *Ixa cylindrus* (Fabricius,1777)*
 10. *Ixa inermis* Leach,1817
 11. *Philyra globus* (Fabricius,1775)*
 - Subfamily : LEUCOSIINAE Samouelle, 1819
 12. *Leucosia sima* Alcock,1896*
 13. *Seulocia rhomboidalis*(de Haan,1841)*
 - Superfamily : MAJOIDEA Samouelle, 1819
 - Family : Epialtidae Samouelle, 1819
 - Subfamily : PISINAE Dana, 1851
 14. *Doclea ovis* (Fabricius,1787)
 15. *Doclea muricata* (Fabricius, 1787)*
 16. *Doclea hybrida* (Fabricius,1798)
 17. *Doclea canalifera* Stimpson,1857
 18. *Phalangipus indicus* (Leach,1815)*
 - Superfamily : PARTHENOPOIDEA MacLeay, 1838
 - Family : PARTHENOPIDAE MacLeay, 1838
 - Subfamily : PARTHENOPINAE MacLeay, 1838
 19. *Parthenope longimanus* (Linnaeus,1758)*
 20. *Cryptopodia angulata* H.Milne Edwards & Lucas,1841*
 - Superfamily : PORTUNOIDEA Rafinesque, 1815
 - Family : PORTUNIDAE Rafinesque, 1815
 - Subfamily : THALAMITINAE Rafinesque, 1815
 21. *Charybdis (Charybdis) affinis* Dana,1852
 22. *Charybdis (Charybdis) callianasa* (Herbst,1789)*
 23. *Charybdis (Charybdis) feriata* (Linnaeus,1758)
 24. *Charybdis (Charybdis) lucifera* (Fabricius,1798)*
 25. *Charybdis (Charybdis) miles* (De Haan,1835)
 26. *Charybdis (Charybdis) natator* Herbst,1794
 27. *Charybdis (Charybdis) orientalis* Dana,1852
 28. *Charybdis (Charybdis) rostrata* (A. Milne Edwards, 1861)*
 29. *Charybdis (Charybdis) variegata* (Fabricius,1798)*
 30. *Charybdis (Goniohellenus) vadorum* Alcock,1899*
 31. *Thalamita prymna* (Herbst,1803)*
 - Subfamily : PORTUNINAE, Rafinesque, 1815
 32. *Portunus (Portunus) pelagicus* (Linnaeus,1758)
 33. *Portunus (Portunus) sanguinolentus* (Herbst,1790)
 34. *Scylla serrata* (Forskål,1775)
 35. *Scylla tranquebarica* (Fabricius,1798)
 - Subfamily : PODOPHTHALMINAE Dana, 1851
 36. *Podophthalmus vigil* (Fabricius,1798)*
 - Superfamily : XANTHOIDEA MacLeay, 1838
 - Family : XANTHIDAE MacLeay, 1838
 - Subfamily : XANTHINAE MacLeay, 1838
 37. *Demania splendida* Laurie,1906*
 - Subfamily : ETISINAE Ortmann, 1893
 38. *Liagore rubromaculata*(De Haan,1835)
 - Superfamily : PILUMNOIDEA Alcock, 1898
 - Family : GALENIDAE Alcock, 1898
 - Subfamily : HALIMEDINAE, Alcock, 1898
 39. *Halimede tyche* (Herbst,1801)*
 - Superfamily : ERIPHIOIDEA MacLeay, 1838
 - Family : MANIPPIDAE Ortmann, 1893
 - Subfamily : MENIPPINAE Ortmann, 1893
 40. *Menippe rumphii* (Fabricius,1798)*
 41. *Myomenippe hardwickii* (Gray,1831)*
 - Superfamily : GRAPSIDOIDEA Mac Leay, 1838
 - Family : GRAPSIDAE Mac Leay, 1838
 42. *Metopograpsus messor* (Forskål,1775)
 43. *Pachygrapsus porpinquus*(De Man,1908)
 - Family : VARUNIDAE H.Milne Edwards, 1853
 - Subfamily : VARUNINAE H.Milne Edwards, 1853
 44. *Varuna litterata* (Fabricius,1798)
 - Subfamily : CYCLOGRAPSIDAE H.Milne Edward, 1853
 45. *Metapla xcrenulata* (Gerstaecker,1856)
 46. *Metaplex intermedia* de Man,1888
 - Family : SESARMIDAE Dana, 1851
 47. *Sesarmoides kraussi* (de Man,1887)
 48. *Sesarmoides longipes* (Krauss,1843)
 49. *Episesarma mederi* (H.Milne Edwards,1853)
 - Superfamily : OCYPODOIDEA Rafinesque, 1815
 - Family : OCYPODIDAE Rafinesque, 1815
 - Subfamily : OCYPODINAE Rafinesque, 1815
 50. *Ocypode ceratophthalmus* (Pallas,1772)
 51. *Ocypode macrocera* (H.Milne Edwards,1852)
 - Subfamily : UCINAE Dana, 1851
 52. *Uca (Austruca) lactea* (De Haan,1835)
 53. *Uca (Tubuca) rosea* (Tweedie,1937)
 54. *Uca (Tubuca) acuta*(Stimpson,1858)

55. *Uca (Austruca) annulipes* (H.Milne Edwards,1837)
 56. *Uca (Tubuca) dussumieri* (H.Milne Edwards,1852)
 57. *Uca (Austruca) triangularis* (A. Milne Edwards,1873)
 Family : DOTILLIDAE Stimpson, 1858
 Subfamily : DOTILLINAE Stimpson, 1858
 58. *Dotilla intermedia* de Man,1888
 59. *Dotilla blanfordi* Alcock,1900
 Family : MACROPHTHALMIDAEDana, 1851
 Subfamily : MACROPHTHALMINAE Dana, 1851
 60. *Macrophthalmus (Macrophthalmus) brevis* (Herbst, 1804)
 61. *Macrophthalmus (Mareotis) depressus* Rüppell,1830
 62. *Macrophthalmus pectinipes* Guerin,1839)
 63. *Macrophthalmus (Macrophthalmus) sulcatus* H.Milne Edwards, 1852
 64. *Macrophthalmus (Macrophthalmus) transversus* (Latreille, 1817)
 Superfamily : RANINOIDEA De Haan, 1839
 Family : RANINIDAE De Haan, 1839
 Subfamily : RANINOIDINAE Lörenthey & Beurlen, 1929
 65. *Raninoides personatus* Henderson,1888*

Systematic Account

1. *Lauridromia dehaani* (Rathbun, 1923)*

1923 *Dromia dehaani* Rathbun, *Proc.biol.Soc. Washington*, **36**: 68.

2005. *Lauridromia dehaani*: Dev Roy and Bhadra S., *Zool. Surv. India, State Fauna Series5: Fauna of Andhra Pradesh* (Pt 5): 369.

Material examined: 1ex. Talsari, 16.iii.1997, Coll. Marc, Zsi, Digha, Reg. no. (A-4368).

Diagnosis: Carapace relatively wider to its length, median rostral tooth distinct on dorsal surface, anterolateral margin with 4 acute teeth, last tooth directed upward. Pereopode with

2 to 3 and dactyli with 16-20 minute spines on flexor margin.

Distribution : India : Andhra Pradesh, Karnataka, Kerala (Trivendrum), Odisha (Gopalpur coast), Tamil Nadu (Gulf of Mannar, Parangipettai coast), West Bengal. *Elsewhere*: China, Gulf of Aden, Hongkong, Indonesia, Japan, Maldives, Nansha Islands, Pakistan, Red sea, South Africa and Taiwan.

Remarks: This species is reported new to this area.

2. *Dorippoides facchino* (Herbst, 1785)

1785. *Cancer facchino* Herbst, *Versuch. Naturgesch. Krabben Krebse*, **1**(2): 190, pl.11, Figure 68.

1896. *Dorippe facchino* Alcock, *J.Asiat. Soc. Bengal*, **65**(2): 278.

1969. *Dorippe (Dorippoides) facchino* Serène and Romimohtarto, *Mar. Res. Indonesia*. 9 : 4, 8, figs. 2, 6, 11, 16 A-D, pls. 1C, 3D.

1981. *Dorippoides facchino* Manning and Holthuis, *Smith Contrib. Zool.*, **306**: 30.

1990. *Dorippoides facchino* Holthuis and manning, *Researches on Crustacea, Special No.*, **3**: 49, figs.19-25.

2005. *Dorippoides facchino*: Dev Roy and Bhadra S., *Zool. Surv. India, State Fauna Series 5: Fauna of Andhra Pradesh* (Pt 5): 374.

Material examined: 3exs., Digha Mohana, 16.iv.2014, Coll. O. P. Srivastava (Reg.no.A-4303-4305); 6exs., Shankarpur, 20.v.2014, Coll. O. P. Srivastava (Reg.no. A-4319, 4322 and 4323).

Diagnosis: Carapace broader than long, its anterolateral border finely granulated, all the regions are distinct. Chelepedes heteromerus and the larger one is granulated whereas smaller one is carinated.

Distribution: India: Andaman Island, Andhra Pradesh (Krishna, Nellore, Visakhapatnam), Karnataka (Mangalore beach), Odisha (Devi river, Gopalpur coast), Tamil Nadu (Chennai, Gulf of Mannar, Tranquebar) and West Bengal (Digha, Shankarpur). *Elsewhere*: China, Gulf of Oman,Indonesia,HongKong, Japan, Mergui Archipelago, Malaysia, Persian Gulf, Singapore, Sri lanka, Thailand and Vietnam.

3. *Calappa lophos* (Herbst, 1782)*

(Plate 1, Figure 1)

1782. *Cancer lophos* Herbst, *Versuch. Naturgesch. Krabben Krebse*, **1**(2): 201, pl.13, Figure 77.

1896. *Calappa lophos* Alcock. *J.Asiat. Soc. Bengal*, **65**(2): 144.

1991. *Calappa lophos* Dev Roy and Nandi, *J Indian soc. Coastal agric. Res.*, **9**(1/2): 73.

1997. *Calappa lophos* Galil, In: A. Crosnier (ed.), *Résultats des Campagnes MUSORSTOM*, Vol.18. *Mém. Mus. natn. Hist. nat.*, 176: 302, Figure 16, 17a, 20a, 32,35c.

2005. *Calappa lophos*: Dev Roy and Bhadra S, *Zool. Surv. India, State Fauna Series5: Fauna of Andhra Pradesh* (Pt 5):379.

Material examined: 4exs., Digha Mohana, 16.iv.14, Coll. O. P. Srivastava (Reg.no.A-4302); 1ex., Shankarpur, 20.v.2014, Coll. O. P. Srivastava (Reg.no.A-4281) .

Diagnosis: Carapace very smooth with some tubercles in post frontal region; frontal lobes acute at apex. Clypeiform well developed no spine in the middle of posterior border of carapace. Pterygostomium region occupied with hairs.

Distribution: India: Andhra Pradesh (East Godavari, Nellore, Visakhapatnam), Gujarat, Karnataka (Karwar), Kerala, Odisha (Gopalpur coast), Lakshadweep, Maharashtra (Mumbai coast) Puducherry, Tamil Nadu (Chennai: Gulf of Mannar), Tranquebar and West Bengal (Digha, Shankarpur, Hugli, Sunderbans). *Elsewhere*: Australia, China, Gulf of Oman, Japan, Medagaskar, Reunion maritius, Sri lanka, Singapore, Indonesia, South Africa and Taiwan.

Remarks: This species is reported new to this area.

4. *Calappa pustulosa* (Alcock, 1896)* (Plate 1, Figure 2)

1896. *Calappa pustulosa* Alcock, *J. Asiat. Soc. Bengal*, **65**(2): 147, pl. 6, Figure 1.

1897. *Calappa pustulosa* Alcock and Anderson, *Illustr. Zool. Investigator*, *Crust.* Part 5: pl. 28, Figure 1.

2005. *Calappa pustulosa*: Dev Roy and Bhadra S, *Zool. Surv. India, State Fauna Series 5: Fauna of Andhra Pradesh* (Pt 5): 380.

Material examined: 2exs. Digha Mohana, 16.iv.14, Coll. O.P.Srivastava (Reg.no.A-4300) ; 4 exs. Shankarpur, 20.v.2014, Coll. O. P. Srivastava (Reg.no.A-4313, 4315, 4317); 1ex. Talsari, 16.iv.2014, Coll. O. P. Srivastava (Reg. no.A-4309).

Diagnosis: Carapace not smooth but having bullous tubercles in seven parallel rows, frontal lobe blunt, its anterolateral border smooth whereas posterior border is bounded on either side by a faint demarcation. Pterygostomium region having a growth of hairy structure.

Distribution: India: Andhra Pradesh, (Visakhapatnam), Lakshadweep, Odisha (Gopalpur coast), and West Bengal (Digha, Shankarpur, Talsari, Sunderban). *Elsewhere*: Japan.

Remarks: This species is reported new to this area.

5. *Ashtoret lunaris* (Forskål, 1775)

1775. *Cancer lunaris* Forskal, *Desc. Anini.* : 91(part).

1896. *Matuta banski* Alcock, *J. Asiat. Soc Bengal.* **65**(2): 158.

1994. *Ashtoret lunaris*: Galil and Clark, *Zool. Verh. Leiden*, 294: 5, figs. a-b, pl. Ia-b.

2005. *Ashtoret lunaris*: Dev Roy and Bhadra S, *Zool. Surv. India, State Fauna Series 5: Fauna of Andhra Pradesh* (Pt 5): 382.

Material examined: 1ex. Shankarpur, 20.v.2014, Coll. O. P. Srivastava (Reg.no.A-4312); 3exs. Digha Mohana., 03.ii.2015, Coll. O. P. Srivastava (Reg. no. A-4342).

Diagnosis: Minute red dots spread over the dorsal surface of carapace, a strong tubercle present on the postero lateral border of the carapace, little below the lateral epibranchial spine. Frontal lobe straight.

Distribution: India: Andhra Pradesh (East Godavari), Odisha (Gopalpur coast) and West Bengal (Digha, Shankarpur). *Elsewhere*: Aden, Australia, Indonesia, Malaysia, New Guinea, Philippines, Red Sea and Singapore.

6. *Matuta planipes* (Fabricius, 1798)

1798. *Matuta planipes* Fabricius, *Ent. Syst. Suppl.*: 369.

1957a. *Marilla planipes* Chhapgar, *J. Bombay nat. Hist. Soc.*, **54**(2): 406 pl. 2, figs. d-f.

1976. *Matuta planipes* Sakai, *Crabs of Japan and the Adjacent Seas*: 141. Pl. 44, Figure 2.

1991. *Mattila planipe*: Dev Roy and Nandi. *J. Indian Soc. Coastal agric. Res.*, 9(1/2): 72.

1994. *Matuta planipes*: Galil and Clark, *Zool. Verh., Leiden*, 294: 35, pl. 12a-b, figs. 6c-d.

2005. *Matuta planipes*: Dev Roy and Bhadra S, *Zool. Surv. India, State Fauna Series5: Fauna of Andhra Pradesh* (Pt 5): 384.

Material examined: 2exs., Junput, 14.xi.2014, Coll. O.P.S (Reg. no. A-4339).

Diagnosis: Carapace with reddish dots forms smaller circles on the anterior half and narrow loops on the posterior half of the carapace. Front having straight horizontal lobes laterally placed and marginally notched rostrum medially.

Distribution: India: Andhra Pradesh (Nellore), Maharashtra (Mumbai, Bassein, Deogad coast), Odisha (Chilka Lake, Gopalpur coast, Mahanadi Delta), Tamil Nadu (Chennai, Parangipettai coast) and West Bengal (Digha, Junput, Mouth

of River Hugli, Sundarbans). *Elsewhere*: Australia, China, Japan, Java, Myanmar, Pakistan and Thailand.

7. *Matuta victor* (Fabricius, 1781)

1781. *Cancer victor* Fabricius, *Species Insectorum Exhibentes*, 2: 502.

1896. *Matuta victor* Alcock, *J. Asiat. Soc. Bengal*, 65(2): 60.

1994. *Matula victor*: Galil and Victor, *Zool. Verh. Leiden*, 294: 39, figs. 7a-b, pl. 13 a-b.

1997. *Matuta victor*: Ng and Huang, *Zoological Studies*, 36(4): 264, figs. 1G-H and 2A-B.

2005. *Matuta victor*: Dev Roy and Bhadra S, *Zool. Surv. India, State Fauna Series 5: Fauna of Andhra Pradesh* (Pt 5): 384.

Material examined: 1ex. Shankarpur, 20.v.2014, Coll: O.P.S (Reg.no.A-4290).

Diagnosis: Carapace having minute red dots, mid-palm of the chelipeds with two prominent tubercles where as the surface of palm is smooth except its lower border, dactylus very strong in male.

Distribution: India: Andaman Islands, Andhra Pradesh (East Godavari, Guntur, Nellore, Srikakulam, Visakhapatnam), Maharashtra (Ratnagiri, Malabar), Odisha (Mahanadi Delta), Tamil Nadu (Hare Island, Krusadai Island, Kutikal Point, Chennai, Tuticorin; Puducherry) and West Bengal (Gangetic Delta, Sundarbans, Shankarpur, Digha, Talsari, Udaipore). *Elsewhere*: Australia, China, Comoros, Feejee, Gulf of Aden, Gulf of Oman, Hong Kong, Indonesia, Japan, Madagascar, Myanmar, Mozambique, New Caledonia, New Hebrides, Norfolk, Pakistan, Peninsular Malaysia, Philippines, Red Sea, Singapore, Somalia, Sri Lanka, Taiwan, Tanzania, Thailand

8. *Arcania septemspinosa* (Fabricius, 1787)* (Plate 1, Figure 3)

1787. *Cancer septemspinosa* Fabricius, *Mantissa Ins.*, 1: 325.

1798. *Leucosia septemspinosa* Fabricius, *Ent. Syst. Suppl.*: 351.

1896. *Arcania septemspinosa* Alcock, *J. Asiat. Soc. Bengal*, 65(2): 265.

1980. *Arcania septemspinosa* Hill, In: B.S. Morton and C. K. Tseng (eds.), *The Marine Flora and Fauna of Hong Kong and southern China*: 201, pl. 4C.

1989. *Arcania septemspinosa* Chen, In: J. Forest (ed.), *Résultats des Campagnes MUSORSTOM*, Vol.5. *Mém.Mus natn.Hist.* (A), 144: Figure 9 a-i, pl.2, Figure 6.

2005. *Arcania septemspinosa*: Dev Roy and Bhadra S, *Zool. Surv. India, State Fauna Series5: Fauna of Andhra Pradesh* (Pt 5): 390.

Material examined: 3exs., Digha Mohana, 16.iv.14, Coll. O.P.S. (Reg. no. A-4284); 1exs., Shankarpur 20.v.2014, Coll. O.P.S. (Reg. no. A-4311); 1 ex., Junput, 11.vi.2014, Coll. O.P.S. (Reg. no. A-4327), 2exs., Digha, 19.ix.2014, Coll. O.P.S. (Reg. no. A-4331).

Diagnosis: Carapace rhomboidal shaped, broader than long having fine granules on its surface; its anterior border have seven spines wherein lateral spines are directed forwards or backwards, posterior border of carapace with four small spine. Chelipeds slender and symmetrical, more than double the length of carapace. The upper border of palm slightly shorter to movable finger.

Distribution: India: Andaman Island, Andhra Pradesh (East Godavari, Krishna, Nellore, Prakasam, Visakhapatnam), Odisha (Gopalpur coast, Mahanadi Delta), Tamil Nadu (Chennai), Gujarat

(Gulf of Kachcha), and West Bengal (Digha, Shankarpur, Junput). *Elsewhere*: Australia, China, Hong Kong, Japan, Malay Archipelago, Persian Gulf, Red Sea and South Africa.

Remarks: This species is reported new to this area.

9. *Ixa cylindrus* (Fabricius, 1777)* (Plate 1, Figure 4)

1777. *Cancer cylindrus* Fabricius, *Mantissa Ins.*, 1: 323.

1896. *Ixa cylindrus* Alcock, *J. Asiat. Soc Bengal*, 65(2): 271.

1933a. *Ixa cylindrus* Chopra, *Rec. Indian Mus.*, 35(1): 45, text-Figure 6.

Material examined: 1ex. Junput, 11.vi.2014, Coll. O.P.S (Reg.no.A-4408).

Diagnosis: Carapace deeply grooved having granules on its surface, highly developed pubescent; its lateral processes thick. Mouth cavity triangular and exognathus

Distribution: India: Andaman Islands (Port Blair), Andhra Pradesh (Visakhapatnam), Tamil Nadu (Palk Strait), West Bengal (Sandy belt of coastal areas of Digha Junput). *Elsewhere*: East coast of Africa, Singapore and Sri Lanka.

Remarks: This species is reported new to this area.

10. *Ixa inermis* Leach, 1817

1817. *Ixa inermis* Leach, *Zoot. Miscell.* III: 26.

1933. *Ixa inermis* Chopra, *Rec. Ind. Mus.*, 35 :48.

1998. *Ixa intermis*: Deb M, *Zool. Surv. India, State Fauna Series 3: Fauna of West Bengal, Part 10* :363.

Material examined: None. Based on earlier report.

Diagnosis: Carapace broad and rhomboidal in shape. Lateral process short and thick at the base, gradually narrowed towards end; its surface covered with granules. The branchial region is separated by a deep median groove.

Distribution: India: Odisha and West Bengal (Sandheads of Digha). Elsewhere: Persian Gulf, Red Sea of N. Australia and Zanzibar.

11. *Philyra globus* (H. Milne Edwards, 1837)*

1888. *Philyra globosa* De Man 1888, *Journ. Linn. Soc. London, Zool*, vol. 22, p. 202.

1896. *Philyra globulosa* Alcock, *J. Asiat. Soc. Bengal*, 65(2): 245.

1950. *Philyra globulosa*: Barnard, *Ann. S. Afr. Mus.*, 38: 383, figs. 72, k-n.

2005. *Philyra globulosa*: Dev Roy and Bhadra S, *Zool. Surv. India, State Fauna Series 5: Fauna of Andhra Pradesh (Pt 5)*: 399.

Material examine: 1ex., Junput, 14.xi.2014, Coll: O.P.S. (Reg. no. A-4388).

Diagnosis: Carapace somewhat circular, strong and covered with vesicular granules; its margins bounded by beaded line. Front covered with furr, and marginally notched in the middle.

Sixth segment of male abdomen bears a large tubercle.

Distribution: India: Andaman Islands, Andhra Pradesh (East Godavari, Guntur, Krishna), Kerala, Odisha (Gopalpur coast), Tamil Nadu and West Bengal (Sandhead at mouth of River Hugli, Junput and Digha). Elsewhere: Gulf of Thailand, Indonesia, Persian Gulf, Pakistan and South Africa,

Remarks: This species is reported new to this area.

12. *Leucosia sima* (Alcock, 1896)*

(Plate 1, Figure 5)

1896. *Leucosia sima* Alcock, *J. Asiat. soc. Bengal*, 65(2): 227.

1990. *Lecosia sima*: Kazmi & Tirmizi, *Crustaceana*, 58(1):20.

Material examined: 1 ex., Shankarpur, 20.v.2014, Coll: O.P.S. (Reg.no.A-4379).

Distribution: India: Gujarat (Gulf of Kuchcha) and West Bengal (Shankarpur).

Remarks: This species reported new to this area.

13. *Seulocia rhomboidalis* (De Haan, 1841)*

(Plate 1, Figure 6)

1841. *Seulocia rhomboidalis*, De Haan, 134, pl.33, Figure 5.

1933. *Leucosia rhomboidalis*: Chopra, *Rec. Ind. Mus.*, 35: 32.

Material examined: 1ex., Talsari, 19.xii.2014, Coll: O. P. S. (Reg.no.A-4389); 1ex., Shankarpur, 20.v.2014, Coll: O.P.S. (Reg. no. A-4378).

Diagnosis: The adult size of the crab is small; carapace convex shaped. The front is subparallel and broad. Antero lateral border of carapace is smooth its surface below the edge is granular. The inner surface of hand bears two rows of granule.

Distribution: India: Andamans and coromandal coastal belt and Odisha (Talsari) and West Bengal (Sandheads of all coastal areas of Shankarpur). Elsewhere: Japan and Lanka to Hongkong.

Remarks: This species is reported new to this area.

14. *Doclea ovis* (Fabricius, 1787)

1787. *Cancer ovis* Fabricius, *Mantissa Ins.*, 1: 324

1895. *Doclea ovis* Alcock, *J. Asiat. Soc. Bengal*, 64(2): 227

1986. *Doclea ovis*: Wagner, *BuLL.Mus. Natn. Hist.*, 8: 897, figs. 1- 4, pIs.1, 2.

Material examined: 1ex., Shankarpur, 20.v.2014, Coll: O.P.S (Reg.no.A-4325); 2 exs., Digha Mohana, 05.iii.2015, Coll:O.P.S. (Reg.no.A-4347); 1 ex., Talsari, 05.vii.2014, Coll:O.P.S. (Reg.no.A-4351).

Diagnosis: Carapace thickly covered with small hairy structure, its surface is smooth. Pterygostomial region is longitudinally grooved. Antero-lateral border with four tubercles - first one is smallest and fourth one is the largest.

Distribution: India: Andhra Pradesh (Godavari, Krishna, Nellore, Visakhapatnam), Odisha (Devi river, Gopalpur coast, Talsari), Tamil Nadu (Gulf of Mannar,

Puducherry) and West Bengal (Sandheads at mouth of River Hugli, Talsari, Digha, Shankarpur). *Elsewhere*: Archipelago, Arakan coast, China, Gulf of Thailand, Hong kong, Mauritius, Madagascar, Mergui Singapore, Vietnam and West Malay Peninsula.

15. *Doclea muricata* (Fabricius, 1787)*

(Plate 1, Figure 7)

1787. *Cancer muricatus* Fabricius, *Mantissa Ins.*, 1:324.

1895. *Doclea muricata* Alcock, *J. Asiat. Soc. Bengal*, 64(2): 230.

1986. *Doclea muricata* Wagner, *Bull. Mus. Natn. Hist. nat. Paris, ser. 4, 8: 911, figs. 16-19, pI. 5.*

2005. *Doclea muricata*: Dev Roy and Bhadra, *Fauna of Andhra Pradesh, State Fauna Series, 5: (Part 5): 405- ZooI. Surv. India.*

Material examined: 4exs., Digha, 19.ix.2014, Coll.O.P.S (Reg.no.A-4332).

Diagnosis: Carapace longer than its breadth; bears eight spines on its median line and two spines are present on the branchial region; anterolateral border of carapace bears small tubercles. Chelepedes slender in both the sexes.

Distribution: India: Andhra Pradesh (Pukkala Peta), Kerala (Cochin Harbour), Puducherry, Maharashtra (Ratnagiri), Ponicherry, Tamil Nadu (Chennai, Palk Strait) and West Bengal (Digha). *Elsewhere*: Indonesia, Malaysia, Myanmar, South Africa and Sri Lanka.

Remarks: This species is reported new to this area.

16. *Doclea hybrida* (Fabricius, 1798)

1798. *Inachus hybridus* Fabricius, *Entom. Syst. Suppl.*: 355.

1895. *Doclea hybrida* Alcock, *J. Asiat. Soc. Bengal*, 64(2): 231.

1977. *Doclea hybrida* Kantha Bai and Rao, *Newsl. Zool. Surv. India*, 3(6): 370.

2005. *Doclea hybrida*: Dev Roy and Bhadra, *Zool. Surv. India State Fauna Series 5: Fauna of Andhra Pradesh (Part 5):406 pI. 1, Figure 7.*

Material examined: 1 ex., Digha Mohana, 16.iv.2014, Coll: O.P.S. (Reg.no.A-4383); 5 exs., Digha mohana, 05.iii.2015, Coll: O.P.S. (Reg. no. A-4324 &4346); 1ex., Shankarpur, 17.ii.2015, Coll. O.P.S. (Reg. no. A-4344).

Diagnosis: Carapace medium sized, gloomy, longer than broad. Antero-lateral borders bear tubercles. Chelipeds almost as long as the carapace and rostrum; palm very enlarged.

Distribution: India: Andhra Pradesh (East Godavari, Nellore), Kerala, Maharashtra, Tamil Nadu and West Bengal (Bay of Bengal, Digha, Shankarpur). *Elsewhere*: Sri Lanka.

17. *Doclea canalifera* Stimpson, 1857

1857. *Doclea canalifera* Stimpson. *Proc. Acad. Nat. Sci. Philad*: 217

1935. *Doclea canalifera*: Chopra. *Rec. Ind. Mus.*, 37: 469

Material examined: 1ex. Digha Mohana, 16.iv.2014, Coll: O.P.S. (Reg.no.A-4299).

Diagnosis: A long spine present on the cardiac region of the carapace, hairy structure carapace bears tubercles also on its median line. Four large spines present on the anterolateral border of the carapace and a very minute spine on the mouth cavity.

Distribution: India: Kerala, Odisha, Tamil Nadu and West Bengal (Digha). *Elsewhere*: Gulf of Siam, Hongkong, Indo Pacific and Singapore.

18. *Phalangipus indicus* (Leach, 1815)*

1815. *Egeria indica* Leach, *Zool. Miscell.*, 2: 40, pI. 73.

1895. *Egeria arachnoides* Alcock, *J. Asiat. Soc., Bengal*, 64 (2): 223.

1973. *Phalangipus indicus*: Griffin, *J. nat. Hist*, 7: 179. figs. 2a; 4a, b; 6e; 9a.b.

Material examined: 1ex. Junput, 11, vi.2014, Coll: O.P.S. (Reg.no.A-4314).

Diagnosis: Branchial region with tubercles on the dorsal side, protogastric region usually with a pair of tubercles or spines near first mesogastric spine; suborbital lobe usually small and slender, suborbital lobe in a form of very blunt tubercle. Cheliped of male smooth except for terminal spine on merus; ischium of third maxilliped generally without lobe at base of lateral ridge; male first pleopod long, distally outwardly curved.

Distribution: India: Andhra Pradesh (Visakhapatnam), Tamil Nadu (Gulf of Mannar) and West Bengal (Digha coast and Junput). *Elsewhere*: Malay Peninsula and Thailand.

Remarks: This species is reported new to this area.

19. *Parthenope longimanus* (Linnaeus, 1758)*

(Plate 1, Figure 8)

1758. *Cancer longimanus* Linnaeus, *Mus. Ludovici Ulrici*: 441.

1895. *Lambrus longimanus* Alcock, *J. Asiat. Soc. Bengal*, **64**(2): 260.

2001. *Parthenope (Parthenope) longimanus*: Dev Roy and Bhadra, *Zool. Surv. India Estuarine Ecosystem Series4*: Fauna of Godavari Estuary: 39.

2005. *Parthenope longimanus*: Dev Roy and Bhadra S, *Zool. Surv. India, State Fauna Series5 : Fauna of Andhra Pradesh (Pt 5)* : 412.

Material examined: 4exs. Digha Mohana, 05.iii.2015, Coll: O.P.S. (Reg. no. A-4370, 4349); 2exs., Shankarpur, 20.v.2014, Coll: O.P.S. (Reg. no. A-4320 & A-4391).

Diagnosis: Carapace pentagonal, its surface rough with fine granules and tubercles of different size. Rostrum short and tri-lobed. Chelipeds long, more massive to ambulatory legs.

Distribution: India: Andaman Islands, Andhra Pradesh (West Godavari), Odisha (Gopalpur coast), Puducherry, Tamil Nadu and West Bengal (Digha, Shankarpur). *Elsewhere*: Australia, Ambon, Gulf of Celebes, Japan, Java, Mauritius, Moluccas, Myanmar, New Guinea, Philippines, Singapore, Sri Lanka, Taiwan and Thailand.

Remarks: This species is reported new to this area.

20. *Cryptopodia angulata* H. Milne Edwards & Lucas, 1841*

(Plate 1, Figure 9)

1841. *Cryptopodia angulata* Lucas, *Arch. Mus. Hist. Nat., Paris, sér.1, 2:481*, pI. 28, figs 16-19.

1895. *Cryptopodia angulata* Alcock, *J. Asiat. Soc. Bengal*, **64**(2): 282.

1975. *Cryptopodia angulata* Davie and Turner, *Mem. Qd. Mus.*, **38**(2): 450, Figure 1 E, F; 2 A, B.

1998. *Cryptopodia angulata* Chiong and Ng, *Raffles BuLL. Zool.***46** (1): 181, figs. 16 A-C, 17 A-E, 21 A.

2005. *Cryptopodia angulata*: Dev Roy and Bhadra S, *Zool. Surv. India, State Fauna Series5: Fauna of Andhra Pradesh (Pt 5)*: 414.

Material examined: 1ex., Shankarpur, 20.v.2014, Coll: O.P.S. (Reg.no.A-4377).

Diagnosis: Carapace pentagonal, broad and convex, its corners ends in curved spines. Anterolateral and posterolateral border bear one spine. Chelipeds strong and unequal, palm crenated.

Distribution: India: Andhra Pradesh (Prakasam), Gujarat (Gulf of Kachch and Malabar coast), Odisha

(Gopalpur coast) and West Bengal (Sandheads at mouth of the River Hugli, Shankarpur). *Elsewhere*: Australia, Bangladesh, Indonesia, Malaysia, Pakistan, Sri Lanka and Thailand.

Remarks: This species is reported new to this area.

21. *Charybdis (Charybdis) affinis* Dana, 1852

1852. *Charybdis affinis* Dana, *Proc. Acad. nat. Sci. Philad.*, **6**: 85 and *U. S. Explor. Exped. Crust.*, **13** (1): 286, pI. 17, figs. 12a-c.

1899. *Charybdis (Goniosoma) affinis* Alcock, *J. Asiat. Soc. Bengal*, **68**(2): 56.

1937. *Charybdis (Goniosoma) affinis* Shen, *Bull. Raffles Mus.*, **13**: 119.

2015. *Charybdis (Charybdis) affinis* Dana: Davie, P. Accessed through: *World Register of Marine Species* at <http://marinespecies.org/aphia.php?p=taxdetails&id=378406> on 07-10-2015

Material examined: 1ex., Shankarpur, 20.v.2014, Coll: D. Ray., Reg. no. (A-4287); 7exs., Digha Mohana, 16. iv.2014, Coll: O.P.S. (Reg.no.A-4308); 2exs., Digha, 03. ii.2015, Coll.O.P.S. (Reg.no.A-4354).

Diagnosis: Carapace and chelipeds soft, cardiac region having transverse ridges. Anterior border of arm bears three spine and upper surface of five spines respectively. Sixth male abdominal segment curved.

Distribution: India: Andhra Pradesh (Guntur, Krishna and Visakhapatnam), Karnataka (Suratkal, Mangalore), Odisha (Balasore, Chandipur, Mahanadi, Puri), Tamil Nadu (Parangipettai coast) and West Bengal (Bakkhali, Digha, Shankarpur). *Elsewhere*: Akyab, China, Hong Kong, Indonesia, Malaysia and Singapore.

22. *Charybdis (Charybdis) callianassa* (Herbst, 1789)*

1789. *Cancer callianassa* Herbst, *Versuch. Naturgesch. Krabben Krebse*, **3**(2):45 pI. 54, Figure 7.

1899. *Charybdis (Goniosoma) callianassa* Alcock, *J. Asiat. Soc. Bengal*, **68**(2): 57.

1935. *Charybdis (Goniosoma) callianassa* Chopra, *Rec. Indian Mus.* **37**(4):489 pI. 9, Figure I, text-Figure 11a-b.

1961. *Charybdis (Charybdis) callianassa*: Stephenson, *Aust. J. mar. Freshwat. Res.* **12** (1): 116.

Material examined: 3exs., Junput, 02.vi.2014, Coll: O.P.S.(Reg.no.A-4326); 1ex., Digha, 18.ii.1998, Coll : O.P.S.(Reg.no.A-4297).

Diagnosis: Carapace soft and convex with granular

ridge on its cardiac region; first antero-lateral tooth notched and last one spine-like; the edges of all the teeth finely serrated. Two spines present on the anterior border of arm of cheliped. Palm with three spines.

Distribution - : India: Andhra Pradesh (East Godavari, Guntur, Krishna, Prakasarn, Srikakulam),

Gujarat, Maharashtra, Odisha (Gopalpur coast), Tamil Nadu (Chennai, Parangipettai coast) and West Bengal (Sandheads, Sundarbans, Digha, Junput). *Elsewhere*: Australia, China, Gulf of Thailand, Hong Kong, Indonesia, Japan, Malay Archipelago, Pakistan, Philippines, Singapore and South Africa.

Remarks: This species is reported new to this area.

23. *Charybdis (Charybdis) feriata* (Linnaeus, 1758)

1758. *Cancerferiatus* Linnaeus, Syst. Nat. (10th ed.), 1: 627.

1899. *Charybdis (Goniosoma) crucifera* Alcock, J. Asiat. Soc. Bengal, 68(2): 51.

1976. *Charybdis (Charybdis) feriata*: Dev Roy and Bhadra, Zool. Surv. India Estuarine Ecosystem Series 4: Fauna of Godavari Estuary: 43.

Material examined: 1ex., Shankarpur, 20.v.2014, Coll: O.P.S. (Reg.no.A-4310); 2exs., Digha, 19.ix.2014, Coll: O.P.S. (Reg.no.A-4334); 1ex., Udaipore, 08.v.2015, Coll: O. P. S. (Reg.no.A-4355).

Diagnosis: Carapace with longitudinal bands. Five spines present on the anterolateral border of the carapace. First antero-lateral spine truncated whereas second to fourth very broad, last one is tipped. Fingers of the chelipeds almost as long as to palm. Sixth male abdominal segment much broader than length with little curved.

Distribution: India: Andaman and Nicobar island, Andhra Pradesh (East Godavari, Guntur, Visakhapatnam) Gujarat (Gulf of Kachch), Odisha (Baleswar, Gopalpur coast, Mahanadi estuary, Puri), Kerala (Travancore coast), Maharashtra (Deogad coast), Tamil Nadu (Gulf of Mannar, Palk Bay, Parangipettai coast, Pulicat Lake) and West Bengal (Digha coast, Shankarpur, Udaipore, Sundarbans). *Elsewhere*: Australia, Bangladesh, China, East coast of Africa, Hong Kong, Japan, Madagascar, Malaya Peninsula, Pakistan and Singapore.

24. *Charybdis (Charybdis) lucifera* (Fabricius, 1798)*

1798. *Portunus Lucifer* Fabricius, Ent. Syst. Suppl.: 364.

1894. *Goniosoma luciferum* Alcock and Anderson, J. Asiat. Soc. Bengal, 63(2): 201.

1899. *Charybdis (Goniosoma) quadrimaculata*, Alcock, J. Asiat. Soc. Bengal, 68(2): 54.

1938. *Charybdis (Charybdis) lucifera* Leene, Siboga Expeditie Monogr., Leiden, 39C: 57, figs. 23-25.

Material examined: 1 ex., Shankarpur, 20.v.2014, Coll: O.P.S. (Reg.no.A-4321).

Diagnosis: Carapace broad. Two large white spots present on either side of branchial region of carapace. Antero-lateral teeth six number. Chelipeds subequal, palm with five spines. Margin of sixth male abdominal segment parallel or slightly divergent in two-thirds of their extent.

Distribution: India: Andhra Pradesh (Guntur, Visakhapatnam), Kerala (Cochin harbour, Vembanad Lake, Malabar coast), Maharashtra (Deogad coast (District Ratnagiri), Tamil Nadu (Parangipettai coast) and West Bengal (Shankarpur). *Elsewhere*: Australia, Japan, Java, Sri Lanka and Thailand.

Remarks: This species is reported new to this area.

25. *Charybdis (Charybdis) miles* (De Haan, 1835)

1835. *Portunus (Charybdis) miles* De Haan, Fauna Japan. Crust. 41.

1976. *Charybdis (Charybdis) miles* Sakai, crabs of Japan & adjacent Seas: 358

Material examined: 1ex., Udaipore, 10.x.2014, Coll: O.P.S. (Reg.no.A-4387); 1ex., Digha, 19.ix.2014, Digha Mohana, 05 Coll: O.P.S. (Reg.no.A-4335); 1ex., Digha Mohana, 05.iii.2015, Coll: O.P.S. (Reg.no.A-4352); 1ex., Shankarpur, 17.ii.2015, Coll: O.P.S. (Reg.no.A-4343).

Diagnosis: Entire animal covered with soft hairs. First tooth of the antero lateral sides of carapace notched; the anterolateral teeth are very sharp. Cheliped slender.

Distribution: India: West Bengal (South 24 Parganas, Digha, Shankarpur, Udaipore). *Elsewhere*: Gulf of Martaban, Hongkong, Nagasaki, Sagami Bay, Tokyo.

26. *Charybdis (Charybdis) natator* (Herbst, 1794)

1794. *Cancer natator* Herbst, Versuch. Naturgesch. Krabben Krebse, 2(5): 156, pl. 40, Figure I.

1899. *Charybdis (Goniosoma) natator* Alcock, J. Asiat. Soc. Bengal, 68(2): 61.

1976. *Charybdis (Charybdis) natator* Sakai, Crabs of Japan and the Adjacent Seas: 360.

Material examined: 1ex. Udaipore, 10.x.2014, Coll: O.P.S. Reg.no.A-4336.

Diagnosis: Front with six dentation cut, bluntly rounded. First anterolateral tooth truncated whereas last one is reduced. Chelipeds having transverse squamiform tubercles, more prominent on palm. Sixth male abdominal segment as long as broad.

Distribution: India: Andhra Pradesh (East Godavari, Krishna, Visakhapatnam), Gujarat (Okha), Kerala (Trivandrum), Puducherry, Tamil Nadu (Gulf of Mannar, Chennai, Palk Bay, Parangipettai coast and West Bengal (Udaipore). *Elsewhere:* Australia, Southern coast of China, Hong Kong, Japan, Madagascar, Malay Archipelago, Philippines, Red Sea, Singapore, South Africa, Sri Lanka and Taiwan

27. *Charybdis (Charybdis) orientalis* Dana, 1852

1852. *Charybdis orientalis* Dana, U.S.N. Proc. Acad. nat. Sci. Philad., 5 : 247-254.

1861. *Goniosoma orientalis* A. Milne Edwards, *Etudes zoologiques sur les Crustacés récents de la famille des Portuniens*. Arch. Mus. Natn., paris, sér.1, 10:383.

1899. *Charybdis (Goniosoma) orientalis* Alcock, Id. No.4 *Brachyura Cyclometopa*. Part 2. The families *Portunidae, cancridae and Corystidae* J. asiat. Soc. Bengal 68 (2):63.

1976. *Charybdis (Charybdis) orientalis* Sakai, *The crabs of Japan and adjacent Seas* Kodansha Ltd, Tokyo, 362, pl.128, Figure 2.

Material examined: 1ex. Digha Mohana, 16.iv.14, Coll: O.P.S. (Reg.no.A-4307).

Diagnosis: Carapace little broad, its anterolateral border bears 6 unequal spines, 2nd spine is rudimentary. Posterior border of the carapace forms a distinct curve with its lateral border.

Distribution: India: Andaman Island, Gujarat (Gulf of Kachchh), Maharashtra (Mumbai), Tamil Nadu (Gulf of Mannar) and West Bengal (Digha). *Elsewhere:* Australia, East coast of Africa, Japan, Madagascar, Philippines and Sri Lanka.

28. *Charybdis (Charybdis) rostrata* (A. Milne Edwards, 1861)*

1861. *Goniosoma rostratum* A. Milne Edwards, *Arch Hist. nat. Paris, sér, 1, 10:* 379,385, pl. 35, Figure 2.

1899. *Charybdis (Goniosoma) rostrata* Alcock, *J. Asiat. Soc. Bengal*, 68(2): 59.

1991. *Charybdis rostrata*: Dev Roy and Nandi, *J. Indian Soc. Coastal agric. Res.*, 9(112) : 71.

2001. *Charybdis (Charybdis) rostrata*: Dev Roy and Bhadra, *Zool. Surv. India Estuarine Ecosystem Series 4: Fauna of Godavari Estuary*: 44.

Material examined: 1ex. Shankarpur, 20.v.2014, O.P.S.(Reg.no.A-4289).

Diagnosis: Two mid frontal teeth are very prominent. First anterolateral tooth is very sharp and last one is rudimentary. The sixth segment of male abdomen is little broader and curved.

Distribution: India: Andhra Pradesh (Krishna, West Godavari), Odisha (Chandipur), Tamil Nadu: Gulf of Mannar, Chennai and West Bengal (Digha, Shankarpur, Kolkata, River Hugli, Sundarbans). *Elsewhere:* Indonesia, Gulf of Martaban, Mergui Archipelago, Sri Lanka and Thailand.

Remarks: This species is reported new to this area.

29. *Charybdis (Charybdis) variegata* (Fabricius, 1798)*

1798. *Portunus variegatus* Fabricius, *Ent. Syst. Suppl.*: 364.

1976. *Charybdis (Charybdis) variegata* Sakai, *Crabs of Japan and adjacent Seas*: 359.

Material examined: 3exs. Digha Mohana, 16.iv.14, Coll: O.P.S. (Reg.no.A-4306 and A-4369).

Diagnosis: Carapace very broad; last spine of the antero-lateral border twice as long as any of the others. Front cut into 6 pointed teeth of which the middle two are the most prominent.

Distribution: India: Tamil Nadu, West Bengal (Digha, South 24 Parganas). *Elsewhere:* Archipelago, Hongkong, Japan, Malay Red Sea and Persian Gulf.

Remarks: This species is reported new to this area.

30. *Charybdis (Goniohellenus) vadorum* Alcock 1899* (Plate 1, Figure 10)

1899. *Charybdis (Goniohellenus) hoplites var vadorum* Alcock. *J. Asiat. Soc. Bengal* 68: 67

1935. *Charybdis (Goniohellenus) vadorum* Chopra, *Rec. Ind. Mus.* 37: 493.

Material examined: From earlier record.

Diagnosis: The carapace flat depressed and covered with short fine hairs. Regions well defined and areolated. The length of the carapace half or slightly more than half of its greatest breadth.

Distribution: India: Andhra Pradesh, West Bengal (South 24 Parganas) and Odisha (Talsari). *Elsewhere:* Arakan Coast, Gulf of Oman and Persian Gulf.

Remarks: This species is reported new to this area.

31. *Thalamita prymna* (Herbst, 1803)*

1803. *Cancer prymna* Herbst, *Versucheiner Naturgeschichte der krabben und krebse, nebst einersystematischen Beschreibung ihrer verschiedenen Arten*, 41, pl.57, Figure 2.

1834. *Thalamita prymna* H.Milne Edwards, *Histoire naturelle des Crustaces comprenant l'anatomie, la physiologie et la classification de ces animaux*, Paris, 461.

1976 *Thalamita prymna* Sakai, *The crabs of Japan and adjacent Seas* Kodansha Ltd, Tokyo, 372, pl.131, Figure 1.

2000 *Thalamita prymna*: Deb Roy M.K. & A.K.Das, *Rec. Zool.Sur.India, Occ. Paper No.* 185:42.

Material examined: 1ex., Talsari, 05.vii.2014, Coll: O.P.S. (Reg.no.A-4381).

Diagnosis: Carapace Hexagonal, Its antero-lateral border demarcated into five teeth, Fourth one is rudimentary, Crest of basal antennal segment with moderate spines. Chelipeds are very stout and unequal.

Distribution: India: Andaman and Nicobar Island, Odisha (Talsari), Tamil nadu (Chennai, Palk Bay, Gulf of Manar) and West Bengal. *Elsewhere:* Australia, Japan, Marshall Island, New Caledonia, Pakistan, Red sea, Samoa, South Africa, and Tonga Island.

Remarks: This species is reported new to this area.

32. *Portunus (Portunus) pelagicus* (Linnaeus, 1758)

1758. *Cancer pelagicus* Linnaeus, *Syst. Nat.* 10th, ed., 1: 626.

1899. *Neptunus pelagicus*: Alcock, *J. Asiat. Soc. Bengal*, 68(2): 34.

2001. *Portunus pelagicus*: Dev Roy Bhadra, *Zool. Surv. India Estuarine Ecosystem Series 4: Fauna of Godavari Estuary*: 41.

Material examined: 2exs., Digha Mohana., 16. iv.14., Coll:O.P.S. (Reg.no.A-4285); 1ex., Udaipore, 10.x.2014, Coll: O.P.S. (Reg.no.A-4337); 2exs., Shankarpur, 22.viii.2014, Coll: O.P.S.(Reg.no.A-4329).

Diagnosis: Dorsal surface of carapace with whitish and

bluish small granules. A spine present on the posterior border of arm of chelipede, palm bears three spines.

Distribution: India: Andhra Pradesh (East Godavari, Guntur, Krishna, Nellore, Prakasam, West Godavari), North and South Andamans, Gujarat (Gulf of Kachchh), Karnataka (Coondapore, Karwar, Malpe, Udipi), Kerala (Travancore), Maharashtra (Mumbai), Odisha (Chilka Lake, Gopalpur coast), Tamil Nadu (Gulf of Mannar, Palk Bay) and West Bengal (Digha, Shankarpur, Udaipore, Sundarbans). *Elsewhere:* Australia, East and South coasts of Africa, Hong Kong, Japan, Mergui Archipelago, New Zealand, Persian Gulf New Caledonia, Philippines, Singapore, Sri Lanka, Red Sea.

33. *Portunus (Portunus) sanguinolentus* (Herbst, 1790)

1790. *Cancer sanguinolentus* Herbst, *Versuch. Naturgesch. Krabben Krebse*, 1(2):161 pl. 8, figs. 56, 57.

1899. *Neptunus sanguinolentus* Alcock, *J. Asiat. Soc. Bengal*, 68(2): 32.

2001. *Portunus sanguinolentus*: Dev Roy and Bhadra, *Zool. Surv. India Estuarine Ecosystem Series 4: Fauna of Godavari Estuary*: 42.

2013 *Portunus (Portunus) sanguinolentus*: Dev Roy M. K. and S.Rath, Chapter In: *Estuaries of India (Biodiversity, Ecology, Conservation and Management NBI .Pg.47-58*

Material examined: 1 ex., Digha Mohana, 16.iv.14, Coll: O.P.S. (Reg.no.A-4338).

Diagnosis: Carapace marked, with three blood-red spots on its surface. Posterior border of arm of chelipeds with no spine; a single spine on palm just behind the finger-joint.

Distribution: India: Andaman and Nicobar Islands, Andhra Pradesh (East Godavari, Guntur, Krishna, Nellore, Prakasam, Srikakulam, West Godavari, Visakhapatnam), Odisha (Gopalpur coast), Goa (Zuari estuary), Karnataka (Karwar, Mangalore), Kerala (Travancore), Maharashtra (Deogad coast (Ratnagiri), Tamil Nadu (Palk Bay, Pulicat Lake), West Bengal (Sundarbans, Digha). *Elsewhere:* Australia, East Africa Malaysia, Hong Kong, Japan, New Zealand, Persian Gulf, Philippines, Red Sea, Sri Lanka and Taiwan.

34. *Scylla serrata* (Forskål, 1775)

1775. *Cancer serratus* Forskål, *Descr. Anim.*:90.

1899. *Scylla serrata* Alcock, *J. Asiat. Soc. Bengal*, **68**(2): 27.

1998. *Scylla serrata* Keenan, Davie and Mann, *Raffles Bull. Zool.*, **46**(1) : 228, figs. 7 A, 8A, 9A, 10.

2001. *Scyllaserrata*: Dev Roy and Bhadra, *Zool. Surv. India Estuarine Ecosystem Series 4: Fauna of Godavari Estuary*: 40.

2013 *Scylla serrata*: Dev Roy M. K. and S. Rath, Chapter In: *Estuaries of India (Biodiversity, Ecology, Conservation and Management)* NBI .Pg.47-58

Material examined: 3exs. Digha, 19.ix.2014, Coll: O.P.S. Reg.no.A-4333.

Diagnosis: Frontal lobes high, bluntly pointed with concave margins. Antero-lateral teeth narrow, outer margin straight or slightly concave. Chelipeds and legs marked with polygonal pattern in both sexes.

Distribution: India: Andaman and Nicobar Islands, Andhra Pradesh (East Godavari, Guntur, Krishna, Nellore, Prakasam, Srikakulam, West Godavari, Visakhapatnam), Odisha (Gopalpur coast), Fiji, Goa (Zuari estuary), Karnataka (Karwar, Mangalore), Kerala (Travancore), Maharashtra (Mumbai), Mauritius, Tamil Nadu (Palk Bay, Pulicat Lake), West Bengal (Sundarbans, Digha). *Elsewhere*: Australia, East Africa Malaysia, Hong Kong, Indonesia, Japan, New Zealand, Persian Gulf, Philippines, Red Sea, and Taiwan.

35. *Scylla tranquebarica* (Fabricius, 1798)

1798. *Portunus tranquebaricus* Fabricius, *ENT. Syst. Suppl.*: 366.

1998. *Scylla tranquebarica* Keenan, Davie and Mann, *Raffles Bull. Zool.*, **46**(1): 230, figs. 7B, 8B, 9B,

2013. *Scylla tranquebarica*: Dev Roy M. K. and S. Rath, Chapter In: *Estuaries of India (Biodiversity, Ecology, Conservation and Management)*, NBI .Pg.47-58.

Material examined: From earlier record.

Diagnosis: Frontal lobes rounded. Antero-lateral teeth broad, outer margin convex. Polygonal pattern weak on the chelipeds and first two pair of legs but strongly marked in last two pair in both the sexes; polygonal pattern absent on male abdomen but variable on female.

Distribution: India: Andhra Pradesh (Krishna, Nellore, Visakhapatnam), Tamil Nadu (Parangipettai coast), West Bengal (Digha). *Elsewhere*: Malaysia, Pakistan, Philippines and Singapore.

36. *Podophthalmus vigil* (Fabricius, 1798)* (Plate 1, Figure 11)

1798. *Portunus vigil* Fabricius, *Ent. Syst. Suppl.*: 363.

2001. *Podophthalmus vigil*: Dev Roy and Bhadra, *Zool. Surv. India Estuarine Ecosystem Series 4: Fauna of Godavari Estuar*: 44.

Material examined: 6exs., Digha Mohana, 16.iv.14, Coll: O.P.S. (Reg.no.A-4301&4348); 3exs., Shankarpur, 20.v.2014, Coll: O.P.S. (Reg.no.A-4316, A-4318, A-4353).

Diagnosis: Carapace broad with granular surface; regions well defined. Front very narrow, T-shaped. Palm of chelipeds having three spines; both outer and inner surfaces of palm sharply ridged. Second to fourth pair of legs granular.

Distribution: India: Andhra Pradesh (Nellore, Prakasam, West Godavari, Visakhapatnam), Cochin, Odisha (Gopalpur coast), Tamil Nadu (Ennore estuary, Gulf of Mannar, Pulicat Lake) and West Bengal (Digha, Shankarpur). *Elsewhere*: Australia, Hawaii, Japan, Madagascar, Malay Peninsula, Philippines, Red Sea, Singapore and Taiwan.

Remarks: This species is reported new to this area.

37. *Demania splendida* Laurie, 1906* (Plate 1, Figure 12)

1906. *Demania splendida* Laurie, *Ceylon Pearl Oyster Fisheries, Supplementary Reports*: 397, pI. 1, Figure 8 and p I.2, Figure 1.

1989. *Demania splendida* Davie, *Mem. Qd. Mus.*, **27**(2): 123, figs. 1, 2 and 3a-c.

Material examined: 8 exs., Digha Mohana, 16. iv.2014, Coll : O.P.S. (Reg.no.A-4359,4380); 3exs., Shankarpur, 20.v.2014, Coll : O.P.S. (Reg.no.A- 4371-A4372).

Diagnosis: Carapace somewhat pentagonal, regions well developed. Front beyond the orbitals and deeply notched. Chelipeds symmetrical, fingers stout, upper borders of merus, carpus and propodus ridged. Male abdomen with seven segments, sixth segment almost twice the length than rest five preceding segments.

Distribution: India: Andhra Pradesh (Visakhapatnam), Tamil Nadu (Gulf of Mannar) and West Bengal (Digha, Shankarpur). *Elsewhere*: East and West Australia, Madagascar and Sri Lanka.

Remarks: This species is reported new to this area.

38. *Liagore rubromaculata* (de Haan, 1835)

1835. *Cancer (Liagore) rubromaculata* De Haan, *Fauna Japan. Crust.*: 49

1935. *Liagore rubromaculata* Chopra, *Rec. Ind. Mus.* 37: 508.

Material examined: 6 exs., Digha Mohana, 16. iv.14, Coll: O.P.S. (Reg. No. Reg.no.A-4282,4350); 2 exs, Udaipore, 20.i.2015, Coll: O.P.S. (Reg.no.A-4340).

Diagnosis: Carapace transversely oval to quadrilateral shape, stout with smooth surface. Entire antero lateral borders of the carapace sharp and divided into four blunt lobes. Front broad and faintly bilobed.

Distribution: India: West Bengal (Digha, Shankarpur and Udaipore). *Elsewhere*: China, Japan, Hongkong and Persian Gulf.

39. *Halimede tyche* (Herbst, 1801)*

1801. *Cancer tyche* Herbst, *Crabben and Krebse*, III, A.2: 35

1893. *Halimede thrustoni* Henderson, *J. Linn. Soc. London* 5: 360.

1935. *Halimede tyche* Chopra, *Rec. Ind. Mus.* 37: 505.

Material examined: 1 ex, Shankarpur, 22.viii.2014, Coll: O.P.S. (Reg.no.A-4409)

Diagnosis: Carapace broad, somewhat hexagonal and covered with fine, short tuft of hair. Two frontal lobes finely granulated. Two bulky tubercles present on each hepatic region. Orbits dorsally placed with large eyes. The anterolateral border of carapace bears three teeth. The chelipeds stout, subequal, outer surfaces of wrists and palms covered with flattened tubercles.

Distribution: India: Krusadi Island, Tuticorin and West Bengal (Sandheads, Shankarpur). *Elsewhere*: Gulf of Siam and Hongkong.

Remarks: This species is reported new to this area.

40. *Menippe rumphii* (Fabricius, 1798)*

1798. *Cancer rumphii* Fabricius. *Ent. Syst. Suppl.*: 336.

1898. *Menippe rumphii* Alcock. *J. Asiat. Soc. Bengal.* 67(2): 178.

1998. *Menippe rumphii*: Deb. *Zool. Surv. India, State Fauna Series 3: Fauna of West Bengal. Part 10*: 373.

Material examined: 9 exs. Shankarpur, 22.viii.2014, Coll: O.P.S. (Reg.no.A-4373-76&A-4383-4386).

Diagnosis: Carapace broad, slightly convex, surface

pitted. Front broad and bilobed. Antero-lateral borders of the carapace cut into four lobes (excluding the outer orbital angle), posterior two lobes are slightly prominent. Chelipeds massive and unequal. Both the borders of carpus, propodus and dactylus of leg joints hairy but those of the last two segments being denser. Carapace, chelipeds and legs reddish.

Distribution: India: Andhra Pradesh (Viaskhapatnam), Karnataka (Dharieswar, Karwar, Sirur), Kerala (Travancore coast), Lakshadweep, Nicobars, Tamil Nadu (Gulf of Mannar, Tranquebar) and West Bengal (Digha, Shankarpur, Sandheads). *Elsewhere*: Mergui Archipelago, Pakistan, Penang, Persian Gulf, Sri Lanka, Tavoy and Sumatra.

Remarks: This species is reported new to this area.

41. *Myomenippe hardwickii* (Gray, 1831)*

1831. *Myomenippe hardwickii* Gray, *Zool. Miscell., London*: 39-41.

1898. *Menippe (Myomenippe) granulose* Alcock, *J. Asiat. Soc. Bengal*, 67(2): 179.

1957. *Myomenippe hardwicki* Chhapgar, *J. Bombay nat. Hist. Soc.*, 54(2): 432.

1998. *Menippe hardwicki*: Deb, *Zool. Surv. India, State Fauna Series 3: Fauna of West Bengal, Part 10*: 373.

Material examined: 1 ex., Digha Mohana, 03.i.2015, Coll: O.P.S. (Reg. no. A-4390).

Diagnosis: Carapace broad, regions well defined, covered with large vesiculous granules. Front broad and bilobed. Antero-lateral spines four. Chelipeds unequal, Carapace and chelipede's legs are red in colour.

Distribution: India: Andhra Pradesh (East Godavari, Guntur, Visakhapatnam), Gujarat (Port Okha), Maharashtra (Mumbai), Tamil Nadu and West Bengal (Sandheads, Sundarbans, Digha). *Elsewhere*: Akyab, Bangladesh, East coast of Africa, Indonesia, Mergui Archipelago and Singapore.

Remarks: This species is reported new to this area.

42. *Metopograpsus messor* (Forskål, 1775)

1775. *Cancer messor* Forskål, *Desc. Anim.*: 88.

1900. *Metopograpsus messor* Alcock, *J. Asiat. Soc. Bengal*, 69(2): 397.

1960. *Metopograpsus messor* Banerjee, *Temminckia*, 10: 174, figs. 4 h, i and 5 c.

Material examined: 7exs. Talsari, 05.vii.2014, Coll: O.P.S.(Reg.no.A-4382).

Diagnosis: Carapace and front broad. Chelipeds unequal. Terminal segment of male abdomen triangular.

Distribution: India: Andaman and Nicobar Islands, Andhra Pradesh (East Godavari, West Godavari, Krishna, Visakhapatnam), Gujarat (Okha, Umarsadi), Karnataka (Coondapore), Maharashtra (Mumbai, Malabar coast), Odisha (Talsari), Tamil Nadu (Parangipettai coast) and West Bengal (North and South 24 Parganas, Midnapore). *Elsewhere:* Australia, Bangladesh, Madagascar, Myanmar, Pakistan, Red Sea, Suez Canal and Sri Lanka.

43. *Pachygrapsus propinquus* de Man, 1908

1908. *Pachygrapsus propinquus* de Man, *Rec. Ind. Mus.*, Calcutta 2 (3): 216.

1918. *Pachygrapsus propinquus* Tesch, *Siboga Exped.* 2: 216 XXXIXC: 76.

2013 *Pachygrapsus propinquus*: Dev Roy M.K. and S.Rath, Chapter In: *Estuaries of India (Biodiversity, Ecology, Conservation and Management NBI)*.Pg.47-58

Material Examined: None. Based on earlier report.

Diagnosis: A single transverse ridge present in between the orbit and lateral part of cervical groove.

Distribution: India: Odisha and West Bengal (Digha coast). *Elsewhere:* U.S.A.

44. *Varuna litterata* (Fabricius, 1798)

1798. *Cancer liueratus* Fabricius, *Entom. Syst. Suppl.*: 342.

1900. *Varuna litterata* Alcock, *J. Asiat. Soc. Bengal*, **69**(2): 40 I.

2001. *Varuna litterata*: Dev Roy and Bhadra, *Zool. Surv. India Estuarine Ecosystem Series 4: Fauna of Godavari Estuary*: 49.

2010. *Varuna litterata*: Mitra et al. *Rec.zool.Surv.India, Occ. Paper No.* 343.

Material examined: None. Based on earlier report.

Diagnosis: Carapace with a H-shaped groove in the middle, surface marked with pits. Antero-lateral borders curved and cut into three spines. Front broa and slightly deflexed. Inner surface of palm granular whereas outer surface marked with some fine parallel lining.

Distribution: India: Andhra Pradesh (East Godavari, Krishna, Visakhapatnam), Kerala (Trivandrum), Maharashtra (Mumbai), Odisha (Chilka Lake, Cuttak, Puri), Tamil Nadu

(Gulf of Mannar, Chennai, Palk Bay) and West Bengal (Sundarbans, Digha coast). *Elsewhere:* Australia, Bangladesh, East Africa, Hong Kong, Japan, Myanmar, New Guinea, New Zealand, Philippines and Singapore.

45. *Metaplax crenulata* (Gerstaecker, 1856)

1856. *Rhaconotus crenulatus* Gerstaecker, *Arch. Naturgesch. Jahrg.* **22** (1): 142.

1900. *Metaplax crenulata* Alcock, *J. Asiat. Soc. Bengal*, **69**(2): 435.

2001. *Metaplax crenulata*: Dev Roy and Bhadra, *Zool. Surv. India Estuarine Ecosystem Series 4: Fauna of Godavari Estuary*: 48.

2010. *Metaplax crenulata*: Mitra et al. *Rec.zool.Surv.India, Occ. Paper No.* 343.

Material examined: 7exs, Udaipore, 10.x.2014, Coll: O.P.S. (Reg.no.A-4410).

Diagnosis: Carapace prominent and deeply grooved. Front deflexed. Anterolateral borders cut into five very prominent teeth. Chelipeds unequal, but equal in the same sex. Abdomen consisting of seven separate segments in both sexes, sixth segment squarish in male.

Distribution: India: Andaman Islands, Andhra Pradesh (West Godavari), Odisha (Mahanadi estuary) and West Bengal (Sundarbans East coast, Udaipore). *Elsewhere:* Mergui Archipelago, Malay Peninsula and Thailand.

46. *Metaplax intermedia* de Man, 1888

1888. *Metaplax intermedius* de Man. *J. Linn. Soc. Zool.*, **22**: 166, pl. 11, figs. 7 - 9.

1900. *Metaplax intermedia* Alcock, *J. Asiat. Soc. Bengal*, **69**(2): 435.

2001. *Metaplax intermedia*: Dev Roy and Bhadra, *Zool. Surv. India Estuarine Ecosystem Series 4: Fauna of Godavari estuary*: 48.

Material examined: 1ex., Digha, 18.ii.1998, Coll: O.P.S. (Reg.no.A-4411).

Diagnosis: The anterolateral border of the carapace cut into 5 or 6 small even teeth at its inner end. Chelipeds unequal in male; dactylus hooked with a prominent lobe. Male abdomen consisting of seven distinct segments.

Distribution: India: Andhra Pradesh (Godavari Delta), Odisha (Chandipur) and West Bengal (Digha, Sunderban). *Elsewhere:* Myanmar.

47. *Sesarmoides kraussi* (De Man, 1887)

1887. *Sesarma kraussi* de Man, *Zool. Jahrb. Syst.* 2: 652
 1936. *Sesarma kraussi* Tweedie. *Bull. Reiff Mus.* (12): 51
 2013 *Sesarmoides kraussi*: Dev Roy M. K. and S. Rath,
 Chapter In: *Estuaries of India (Biodiversity, Ecology,
 Conservation and Management NBI .Pg.47-58.*
Material examined: None. Based on earlier report.
Diagnosis: Carapace length equal to its width at the
 antero-lateral angles, but much lengthy at posterior end.
 Third pair of legs more than three times the length of
 carapace. Lateral borders of carapace cut into two teeth.
 A row of sharp granules are present on the outer surface
 of fixed finger.

Distribution: India: Andaman and Nicobar Is. and
 West Bengal (East coast estuary), *Elsewhere*: Natal (S.
 Africa) and Seychelles.

48. *Sesarmoides longipes* (Krauss, 1843)

1843. *Sesarma longipes* Krauss, *Sudafr. Crust.* : 44
 1986. *Sesarma longipes*: Chakraborty, *Chaudhury & Deb,*
J. Bengal Nat. Hist. Soc. 5: 63.
Material examined: None. Based on earlier report.
Diagnosis: Carapace length equal to its width. It is
 much lengthy near the 2nd pair of leg. The length of 3rd
 pair of leg is two and half time lengthy to carapace. A
 tooth present on the lateral border of carapace.

Distribution: India: Andaman and Nicobar Is. and
 West Bengal. *Elsewhere*: Natal (S. Africa) and Seychelles.

49. *Episesarma mederi* (H.M. Edwards, 1853)

1853. *Episesarma mederi* H. Milne Edwards, 1853,
Archives du Muséum national d'Histoire naturelle,
 Paris, 7: 145-192, pls 9-16.
 2011. *Episesarma mederi*: S. Rath and M.K. Deb Roy, *Rec.*
zool. Surv. India: 111(Part-1): 47-61.

Material examined: None. Based on earlier report.
Diagnostic Characters: Carapace squarish, flat and
 covered with hairy structure. A single tooth present on
 its lateral side.

Distribution: India: Andhra Pradesh, Maharashtra
 and West Bengal (Digha). *Elsewhere*: China, Pakistan,
 Philippines Singapore and Thailand.

50. *Ocypode ceratophthalmus* (Pallas, 1772)

1772. *Cancer ceratophthalmus* Pallas, *Spicilegia Zool.*, 9 :
 83, pl. 5, Figure 7.
 1900. *Ocypoda ceratophthalma* Alcock, *J. Asiat. Soc.*
Bengal, 69(2): 345.
 2001 *Ocypode ceratophthalma*: Dev Roy and Bhadra,
Zool. Surv. India Estuarine Ecosystem Series 4: Fauna
of Godavari Estuary: 50.

Material examined: 3exs, Digha Mohana, 03.vii.2015,
 Coll: O.P.S. (Reg. no. A-4298).

Diagnosis: Carapace squarish, with fine granules;
 regions not demarcated. Front narrow and deflexed
 with rounded edge. Antero-lateral border projected little
 outwards. Chelipeds unequal, inner arm with a strong
 spine; palm compressed. Leg joints long and stout. In
 both the sexes, abdomen consisting of seven separate
 segments, sixth segment longer than broad in male.

Distribution: India: Andaman Islands (North, Middle
 and South Andamans), Andhra Pradesh (West Godavari,
 Visakhapatnam), Gujarat, Karnataka (Karwar, Sirur),
 Lakshadweep, Maharashtra (Mumbai), Nicobars,
 Odisha (Chandipur, Chilka Lake, Talsari), Tamil Nadu
 (Gulf of Mannar, Pulicat Lake) and West Bengal (Digha
 Mohana). *Elsewhere*: Australia, East coast of Africa, China,
 Indonesia, Hawaii, Japan, Malay Peninsula, Madagascar,
 Maldives, Mauritius, Sandwich Island, Singapore, Tahiti
 and Sri Lanka.

51. *Ocypode macrocera* H. Milne Edwards, 1837

1837. *Ocypode macrocera* H. Milne Edwards, *Hist. Nat.*
Crust. 2: 49.
 1900. *Ocypoda macrocera* Alcock, *J. Asiat. Soc. Bengal*,
 69(2): 347.
 1998. *Ocypode macrocera*: Deb, *Zool. Surv. India, Estuarine*
Ecosystem Series 3: Mahanadi Estuary: 149.

Material examined: 1ex., Talsari, 05.vii.2014, Coll.
 O.P.S. (Reg. no. A-4328).

Diagnosis: Carapace squarish, slightly convex,
 with uniformly smaller granules. Granules of external
 maxillipeds less prominent. Fingers broad, spatulate and
 lamellar. Anterior surface of propodus of first two pair of
 legs conspicuously with brushes of hair.

Distribution : India: Andhra Pradesh (East Godavari,
 Krishna, Nellore, Srikakulam, Visakhapatnam), Odisha

(Bhitarkonica, Gopalpur coast, Chilka lake, Mahanadi estuary), Tamil Nadu (Palk Bay, Gulf of Mannar, Puducherry), West Bengal (Bakkhali, Sagar, Sundaraban). *Elsewhere*: Gulf of Thailand and Myanmar

52. *Uca (Austruca) Lactea* (De Haan, 1835)

1835. *Ocypode (Gelasimus) lacteus* De Haan, *In: Siebold, Fauna japon. (Crust)*: 54. pl. 15, Figure 5.

1900. *Gelasimus annulipes* Alcock, *J. Asiat. Soc. Bengal.* 69(2): 353.

1900. *Gelasimus lacteus* Alcock, *J. Asiat. Soc. Bengal.* 69(2): 355.

1975. *Uca (Celuca) lactaea* Crane, *Fiddler Crabs of the World*: 292.

1995. *Uca (Celuca) lactaea annulipes* Bairagi, *Zool. Sur. India Estuarine Ecosystem Series, Part 2: Hugli Matla Estuary*: 273.

2001. *Uca lactea*: Dev Roy and Bhadra, *Zool. Surv. India Estuarine Ecosystem Series 4: Fauna of Godavari Estuary*: 51.

Material examined: None. Based on earlier report.

Diagnosis: Carapace subquadrilateral, much broader than long, regions not clearly defined. Antero-lateral borders almost straight, dorso-lateral border extended beyond the level of second pair of walking leg. Chelipeds remarkably unequal in male, equal in female; outer surface of chelipeds smooth; upper border of palm about half the length of dactylus, inner surface with an oblique tuberculate ridge; dactylus hook-like, compressed; pollex little curved upwards, truncated at tips due to the presence of an enlarged tooth. Merus of last pair of legs markedly slender. Male abdomen consisting of seven distinct segments.

Distribution: India: Andaman and Nicobar Islands, Andhra Pradesh (East Godavari, Guntur, Nellore, Vizianagarum), Odisha (Chilka Lake, Gopalpur beach, Mahanadi estuary), Gujarat (Okha), Karnataka (Karwar), Kerala (Travancore), Maharashtra (Mumbai, Kolak, Umarsadi), Puducherry, Tamil Nadu (Gulf of Mannar, Chennai, Parangipettai coast, Pichavaram, Pulicat Lake) and West Bengal (Digha coast). *Elsewhere*: Australia, China, East Africa, Indonesia, Japan, Mergui Archipelago, Malay Peninsula, Madagascar, Mauritius, New Caledonia, New Guinea, Pakistan, Persian Gulf, Philippines, Red Sea, Ryukyu Island, Singapore, South Africa and Thailand.

53. *Uca (Tubuca) rosea* (Tweedie, 1937)

1937. *Gelasimus roseus* Tweedie, *Bull. Raffles Mus. Singapore*.13: 145

1895. *Gelasmusacutus* de Man, *Zool. Jahrb, Syst.* 8: 485-609

1937. *Uca manii* Chopra & Das, *Rec.Indian Mus. Calcutta*, 39: 422.

1954. *Uca rosea* Tweedie, *Bull. Raffles Mus.* 13: 145 1975. *Uca (Deltuca) rosea* Crane, *Fiddler crabs of the world*: 29

1988. *Uca (Deltuca) rosea* Bairagi & Misra, *J. Bombay Nat. Hist. Soc.*,85 :449.

Material examined: None. Based on earlier report.

Diagnosis: Front narrow, median groove deep, distinct; fronto-orbital edge oblique; antero external angle acute, strong, directed outward. Dorsolateral margins finely serrate, convergent. Upper orbital edge tuberculate, lower edge finely crenulate, orbital floor low, smooth. Merus of male chela adorned with clustered tubercles distally, ventral edge tuberculate. Outer surface of palm covered with small tubercles and smaller granules covered the inner surface between the ridges. Outer side of entire dactylus traversed by two grooves. Finger tips forceps like because of large granules on opposable edges.

Distribution: India: West Bengal (Coast of West Bengal, Sundarban Mangrove Swamp, Digha coast). *Elsewhere*: Malay, Mergui, Siam and Singapore.

54. *Uca (Tubuca) acuta* (Stimpson,1858)

1858. *Gelasimusacutus* Stimpson, *Proc. Ac. Nat. Sci. Philad.* : 99

1986. *Uca acuta acuta*: Deb, Chakraborty & Choudhury, *J. Bengal Natu. Hist. Soc.*, 5: 59

Material examined: None. Based on earlier report.

Diagnosis: Carapace very convex, regions well demarcated. Front extremely narrow. Upper surfaces of the wrist and palms covered with fine granules; upper and lower borders of large palm well defined and two oblique granular crests present on the inner surface of palm. Fingers broad, thin; one enlarge tooth present near the tips which give forceps like grip to the fingers when closed. The merus of the last pair of leg also distinctly foliaceous.

Distribution: India: Andaman Island, West Bengal (Sundarbans, Bay of Bengal, Digha coast). *Elsewhere:* Karachi and Mergui.

55. *Uca (Austruca) annulipes* (H. Milne Edwards, 1837)

1837. *Gelasimus annulipes* H. Milne. Edwards, *Hist. Natu. Crustes*, Paris, 1: 55

1975. *Uca (Celuca) Lactea annulipes* Crane, *Fiddler Crabs of Worl.d:* 299

Material examined: None. Based on earlier report.

Diagnosis: Antero lateral angles of carapace very sharp. Front between the eye stalks measured about one fifth or so of the maximum width of carapace. Outer surfaces of the large male cheliped joints smooth, lower border of palm obscurely marginate. Fingers are not very broad and leave a wide gap when closed, tip of dactylus sharp, hook like and the tip of finger is notched.

Distribution: India: Andaman Island, East and West coasts of India, West Bengal (coastal range of Bay of Bengal, Digha coast). *Elsewhere:* East coast of Africa, Mergui Archipelago, Philippines to Madagascar and Singapore.

56. *Uca (Austruca) dussumieri* (H. Milne Edwards, 1852)

1852. *Gelasimus dussumieri* H. Milne Edwards, *Annis. Sci. nat. (Zool.).ser*, 3, 18: 148, pI. 4, Figure 12.

1900. *Gelasimus dussumieri* Alcock, *J. Asiat. Soc. Bengal*, 69(2): 361.

1995. *Uca (Deltuca) dussumieri spinata*, Bairagi, *Zool. Surv. India Estuarine Ecosystem Series, Part2: Hugli Matla Estuary:* 273.

1998. *Uca dussumieris dussumieri* Deb, *Zool. Surv. India State Fauna Series, 3: Fauna of West Bengal, Part10:* 398.

1982. *Uca dussumieri* George and Jones, *Rec. West. Atm. Mus. Suppl.* No. 14: 31, figs. 19a, 20a, 39ag and 55e.

2000. *Uca dussumieri* Dev Roy and Das, *Rec. zool. Surv. India, Occ. Paper* No. 185: 119. pI. 4. Figure 6 and pI. 14. figs. 3,4.

Material examined: None. Based on earlier report.

Diagnosis: Carapace strongly convex from front to back, regions ill-defined. Anterolateral angle acute, slightly directed upward. Antero-lateral margins short. Front extremely narrow and deflexed downwards.

Chelipeds unequal; major cheliped with two distinct long grooves runs throughout the length on its outer surface and a similar groove on outer pollex; minor cheliped with few long dense setae dorsally; anterior border of dactylus with dense setae whereas ventral margin of pollex with less hairs. Abdomen in both the sexes consisting of seven distinct segments.

Distribution : Andaman & Nicobar Islands, Andhra Pradesh (Visakhapatnam), Gujarat (Gulf of Kachchh), Maharashtra (Mumbai), Odisha and West Bengal (Sundarbans, Digha coast). *Elsewhere:* Australia, China, Caroline Islands, East Indies, Hong Kong, Indonesia, Japan, Madagascar, Mergui Archipelago, Malay Peninsula, New Guinea, New Caledonia, Philippines, Palau Island, RyuKyu Island, Singapore, Solomon Islands and Thailand.

57. *Uca (Paraleptuca) triangularis* (A. milne- Edwards, 1873)

1873. *Gelasimus triangularis* A. Milne- Edwards, *Nouv. Archs. Mus. Hist. nat, Paris, (N.S.)*, 9: 275.

1900. *Gelasimus triangularis* Alcock. *J. Asiat. Soc. Bengal*, 69(2): 356.

1975. *Uca (Celuca) triangularis* Crane, *Fiddler Crabs of the World:* 290, 610, pI. 38K-L, Figure 24J, 32N-O, 68C.

1995. *Uca (Celuca) triangularis:* Bairagi, *Zool. Surv. India Estuarine Ecosystem Series, Part 2. Hugli Matla Estuary:* 274.

1998. *Uca triangularis:* Bengali Deb, *Zool. Surv. India, Slate Fauna Series 3: Fauna of West Bengal, Part 10:* 398.

1982. *Uca triangularis:* George and Jones, *Rec. West. Aust. Mus. Suppl.* No. 14: 77, figs. 4a, Sa. 52a- f, 58c.

Material examined: None. Based on earlier report.

Diagnosis: Carapace clearly hexagonal and strongly convex, regions not demarcated. Its surface covered with very minute granules. Antero-lateral angles strongly acute, antero-lateral margins not seen whereas dorso-lateral margin strongly convergent towards posterior end. In major cheliped, all the margins of arm and wrist serrated and dactylus longer than palm. In minor cheliped, dactylus and pollex relatively longer and slenderer.

Distribution: India: Andhra Pradesh (East Godavari, Guntur), Puducherry, Tamil Nadu, West Bengal (Sundarbans, Digha coast). *Elsewhere:* Australia, Malaysia and Myanmar.

58. *Dotilla intermedia* de Man, 1888

1888. *Dotilla intermedia* de Man, *J. Linn. Soc. Zool.*, 22: 135, pt. 9, figs. 4-6.
1900. *Dotilla clepsydrodactylus* Alcock, *J. Asiat. Soc. Bengal*, 69(2): 365.
1902. *Dotilla clepsydrodactylus* Alcock and McArdle, *Illustr. Zool. "Investigator" Crust.* Part 10 : pI. 63, figs. 2, 2a.
- 1919a. *Dotilla intermedia* Kemp, *Rec. Indian Mus.*, 16(5): 331, text-figs. 9f, 10 a-f.
1995. *Dotilla intermedia* Bairagi, *Zool. Surv. India Estuarine Ecosystem Series, Part 2, Hugli Matla Estuary*: 278.

Material examined: None. Based on earlier report.

Diagnosis: Carapace broader than long, areolated with deeply cut grooves seems five star shape; bearing four minute tubercles. The Merus of outer maxillipeds almost twice as long as ischium, Outer surfaces of the arm and wrist having minute granules; palm also covered with vesiculous granules at its outer surface; lower surface of palm with two granular ridges running from its proximal part to tip of fixed finger; fingers longer than palm, gradually tapering in to an acute tip and finely denticulate at base. Legs slightly longer than chelipeds,

Distribution: India: Andhra Pradesh (Prakasam, Srikakulam), Odisha (Balassore, Chandipur, Chilka Lake, Mahanadi Delta), Tamil Nadu (Parangipettai coast), West Bengal (Sagar Island, Digha coast). *Elsewhere*: Mergui Archipelago, Tavoy.

59. *Dotilla blanfordi* Alcock, 1900

1900. *Dotilla blanfordi* Alcock and McArdle, *Illustr Zoot. "Investigator" Crust.*, Part 10: pl. 63, figs. 3, 3a.
1919. *Dotilla blanfordi* Kemp, *Rec. Indian Mus.*, 36(5): 330, text-Figure 9c.
1995. *Dotilla blanfordi* Bairagi, *Zool. Surv India, Estuarine Ecosystem Series, Part 2, Hugli Matla Estuary*: 278.
2010. *Dotilla blanfordi*: Mitra et al., *Rec.zool.Surv.India. Occ.Paper No.313*.

Material examined: None. Based on earlier report.

Diagnosis: Carapace broader than long, dorsally areolated with smooth grooves. Outer maxillipeds with very minute granules, merus bigger as ischium. Chelipeds equal to carapace length, fingers slightly longer than palm. Legs little longer than chelipeds, dactylus slightly longer than propodus, and about double the length of propodus.

Distribution: India: Andhra Pradesh (Visakhapatnam), Maharashtra (Mumbai) and West Bengal (South 24 Parganas, Subarnarekha Estuary-near Talsari). *Elsewhere*: Pakistan.

60. *Macrophthalmus (Macrophthalmus) brevis* (Herbst, 1804)

1804. *Cancer brevis* Herbst, *versuch. Naturgesch. Krabben. Krebse*, 3(4) : 9, pI. 6, fig, 4
1852. *Macrophthalmus carinimanus* H. Milne Edwards, *Annl. Sci. nat. (Zool.)*, ser, 3, 18: 156.
1915. *Macrophthalmus brevis* Tesch, *Zool. Meded., Leiden*, 1(3-4): 169, pl. 6, Figure 5.
- 1919b. *Macrophthalmus brevis* Kemp, *Rec. Indian Mus.*, 16(5): 392.
1951. *Macrophthalmus travancorensis* Pillai, *Bull. Cent. Res. Inst. Univ. Travancore*, ser. C, 2(1) : 30, Figure Sa-c,
1998. *Macrophthalmus brevis* Deb, *Zool. Surv. India State Fauna Series 3: Fauna of West Bengal, Part 10*: 293.
1971. *Macrophthalmus (Macrophthalmus) brevis*, Barnes, *Zool. Verh., Leiden*. 115: 4, figs. la-b.

Material examined: 6exs. Shankarpur, 20.v.2014, Coll: O.P.S. Reg.no. A-4288.

Diagnosis: Carapace quadrilateral, regions well defined, gastric, cardiac and intestinal areas timid. Lateral borders straight, slightly curved, cut into three anterolateral teeth. Front extremely narrow and deflexed, Chelipeds 3-4 times to length of carapace. Leg joints long, strong, decorated with hairs; first and last pair small, third largest and fourth shortest. Male abdomen triangular with a broad base, fourth and fifth segments slightly convex or straight.

Distribution: India: Andhra Pradesh (Visakhapatnam), Kerala (Ashtamudi Lake), Puducherry and West Bengal (Sundarbans, Shankarpur). *Elsewhere*: Arakan coast, Archipelago, Celebes, Mauritius, Mergui Singapore and Moluccas.

61. *Macrophthalmus (Mareotis) depressus* Ruppell, 1830

1830. *Macrophthalmus depressus* Rüppell, 24 *Kurzschwanz Krabben Rothen Meeres*: 19. Pl. 4. Figure 6.
1900. *Macrophthalmus depressus* Alcock, *J. Asiat. Soc. Bengal*. 69(2): 380.
2000. *Macrophthalmus (Mareotis) depressus*: Dev Roy and

Das, *Rec. zool. Surv. India. Occ. Paper No.* 185: 133. pI. 5. Figure 4 and pI. 16. figs. 3. 4.

Material examined: None. Based on earlier report.

Diagnosis: Carapace rectangular, broader than long, surface covered with fine granules, epibranchial regions marked with two longitudinal rows of fine granules. Front narrow and deeply furrowed. Anterolateral borders parallel, but angle truncated and cut into two large lobes. Chelipeds unequal but equal in the same sex; outer surface of arm finely granulose, borders denticulate, its inner and outer surfaces covered with close hairs; outer surface of wrist and palm smooth; inner corner of wrist bearing tubercles; upper and lower border of palm granular, inner surface densely hairy; dactylus strongly curved, fixed finger without any large tooth but coarsely denticulated. Legs unarmed with the exception of a subterminal denticle on the anterior border of meropodites, upper and lower border of merii serrated; dactylus long, claw-shaped, thickly hairs.

Distribution: India: Andaman Islands, Andhra Pradesh (Visakhapatnam), Maharashtra (Mumbai), Puduchery, Tamil Nadu (Gulf of Mannar, Palk Bay) and West Bengal. *Elsewhere:* Australia, East coast of Africa, Indonesia, Hawaiian Islands, Madagascar, Mergui Archipelago Persian Gulf, Red Sea, Ryukyu Islands, Samoa and Sri Lanka.

62. *Macrophthalmus pectinipes* Guerin, 1839.

1839. *Macrophthalmus pectinipes* Guerin, *Voy, Favorite*, p. 167, pl. 49.

1900 *Macrophthalmus pectinipes* Alcock, *J. Asiatic Soc. Bengal*, vol. 69 (2), p. 377.

1919 *Macrophthalmus pectinipes*: Kemp, *Rec. Ind. Mus.* vol. 26, p. 385.

1957 *Macrophthalmus pectinipes*: Chhapgar, *Marine Crabs of Bombay State*, p. 50, pl. 14.

1986. *Macrophthalmus pectinipes*: Deb, Chakrabarty & Choudhuri, *J. Bengal Nat. Hist. Soc.* 5: 60.

Material examined: None. Based on earlier report.

Diagnosis: Carapace subcircular in shape, surface with large granules. Lateral sides of carapace distinctly convergent. Anterolateral border with three acute teeth. Chelipeds unequal, Inner angle of wrist, upper proximal edge of palm serrated, palm smooth dactylus has a tooth at its basal end of cutting edge, fingers meet only at tips. Second and third pairs of legs very long and strong. The

anterior edge of all joints and posterior edge of merus only spiny in adults and denticulate in young.

Distribution: India: Maharashtra (Mumbai), Odisha, West Bengal (Sagar Is., Sundabans, Digha). *Elsewhere:* Karachi, Penang and Sind.

63. *Macrophthalmus (Macrophthalmus) sulcatus* A. Milne Edwards, 1852

1852. *Macrophthalmus (Macrophthalmus) sulcatus* A. Milne Edwards, *Ann.Sci.Zool.*,(3)Xviii,p.156.

1992. *Macrophthalmussulcatus*: Goswami B. & Badal Chandra, *J. mar.biol.Ass.India*, 34(1&2): 115- 137

2003 *Macrophthalmus sulcatus*: Ramakrishna et al., *Rec. zool.Surv.India*: 101 (Part 3-4) : 1-23.

Material Examined: None. Based on earlier report.

Diagnosis: Carapace surface studs with fine granules. Anterolateral tooth appear to seen upper border of the orbit hence anterolateral angle of the carapace formed by larger second tooth. The tips of the anterior male abdomen are rounded and bearing hairs. Male chelipeds are larger than female, upper border of the palm in male denticulated.

Distribution: India: West Bengal (Digha coast) and West coast.

64. *Macrophthalmus (Macrophthalmus) transversus* (Latreille, 1817)

1817. *Gonoplax transversus* latreille, *Nouv. Dist. d'hist. nat.*, 13: 237

1919. *Macrophthalmus transversus* Kemp, *Rec. Ind. Mus.*, 16: 386.

2010. *Macrophthalmus transversus*: Mitra et al., *Rec.zool. Surv.India, Occ.Paper No.* 313.

2015. *Macrophthalmus (Macrophthalmus) transversus*: Davie, P. Accessed through: *World Register of Marine Species* at <http://marinespecies.org/aphia>. p = taxdetails id = 378406 on 07- 10-2015

Material examined: None. Based on earlier report.

Diagnosis: Carapace quadrilateral, dorsal surface finely granular, region well defined, front bifid, 1/8 of maximum width of carapace. Eye stalks long projecting well beyond the lateral sides in adults. Upper orbital edge finely crenulate, lower edge sharply denticulate External orbital angles long acute, sharp spine like, behind it two, broad, teeth followed by minute tubercles. On postero

dorsal sides, four sharp spine like tubercles arranged in line parallel to lateral sides of carapace. Upper, anterior edges of arm of cheliped with three and lower edge with one spine. Upper edge of palm spinate, cutting edge of fixed finger with two erect spines and of thumb with one basal sharp tooth only.

Distribution: India: East coast of India, Odisha coasts of Bay of Bengal, Pondichery and West Bengal (Inter-tidal zone talsari). *Elsewhere:* Sumatra and Massouah.

65. *Raninoides personatus* Henderson, 1888*

1888. *Raninoides personatus* Henderson, 'Challenger' *Anomura*: 27

1976. *Raninoides personatus* Sakai, *Crabs of Japan & adj. seas*: 52.

Material examined: 1 ex. Digha Mohana, 05.iii.2015, Coll. O.P.S. (Reg.no.A-4412).

Diagnosis: Carapace oblong, elongate and strongly convex, broader in the middle and narrower towards the end. Surface smooth, regions not demarcated. External orbital angle prolonged into a spine, behind which another strong spine present. Mid frontal tooth large, lateral tooth two in number but small. Carpus of cheliped with two spine on upper distal border and three spines along the lower or inner edge. Dactylus smooth. Fixed finger short, thick broad. cutting edge dentate. Abdomen of both the sexes consists of seven separate joints.

Distribution: India: East Coast of India and West Bengal (Digha, Sandheads). *Elsewhere:* Amboina, Burma, Indonesia, Japan, and Western Australia.

Remarks: This species is reported new to this area.

Summary

A total of Sixty five marine crabs, belonging to 36 genera

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13 families and 10 superfamilies have been recorded from 5 localities namely Junput, Shankarpur, Digha Mohana, Udaipore and Talsari of Digha coast. These includes 24 new record to the Digha coast: *Lauridromia dehaani*, *Calappa lophos*, *Calappa pustulosa*, *Arcania septemspinosa*, *Ixa cylindrus*, *Philyra globus*, *Leucosia sima*, *Seulocia rhomboidalis*, *Doclea muricata*, *Phalangipus indicus*, *Parthenope longimanus*, *Cryptopodia angulata*, *Charybdis (Charybdis) callianassa*, *Charybdis (Charybdis) lucifera*, *Charybdis (Charybdis) rostrata*, *Charybdis (Charybdis) variegata*, *Charybdis (Goniohellenus) vadorum*, *Thalamita prymna*, *Podophthalmus vigil*, *Demania splendid*, *Halimede tyche*, *Menippe rumphii*, *Myomenippe hardwickii*, and *Raninoides personatus*. A systematic list and account is provided for all the crab of digha coast. Among the crabs of digha coast, only 5 portunid species are over exploited as food by the coastal communities. A strict regulation on such type of exploitation is recommended.

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PLATE 1. Interesting crabs of Digha coast 1. *Calappa lophos* (Herbst); 2. *Calappa pustulosa* Alcock; 3. *Arcania septemspinosa* (Fab.); 4. *Ixa cylindrus*(Fab.); 5. *Leucosia sima* Alcock; 6. *Charybdis (Charybdis)lucifera* (Fabricius); 7. *Doclea muricata* (Herbst); 8. *Parthenope longimanus* Linn.; 9. *Cryptopodia angulata* H.M.Edward; 10. *Charybdis vadorum* Alcock; 11. *Podophthalmus vigil*(Fab.); 12. *Demania splendid* Laurie.