ON SOME CRABS (DECAPODA-BRACHYURA) FROM THE LACCADIVE ARCHIPELAGO

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EARLIER investigations on the brachyuran fauna of the Maldive and Laccadive Archipelagos were initiated by Alcock (1895, 1896, 1898, 1899, 1899b and 1900); who recorded 43 species of crabs belonging to 9 families. Subsequently, Borradaile (1903 and 1906) reported 191 species including 27 already described by Alcock; which brought up the total record from this region to 207 species. The present account deals with 36 species of which 5 have hitherto not been described from these regions. Of the above 5 species (indicated by a single asterisk in the list given below) 4 are not known from the Indian peninsula. Another 11 species (denoted by double asterisks) have been previously reported from the Maldives but not from the Laccadives. Out of the 36 species reported in this paper, 29 species have been collected from Minicoy and the rest from Kavarathy, Amenidivi and Bitra Islands.

Part of the material was kindly handed over to me by Dr. S. Jones, who collected them in 1958 during a cruise to the Laccadive Islands. Additional material was collected in the year 1961 by Messrs. P. T. Thomas, and Alimanickfan from Minicoy and by Mr. P. M. Sayeed from the Laccadive and Amenidive Islands.

The following is the list of species reported in this paper:

Family: PORTUNIDAE
1. **Thalamita tenuipes** Borradaile.
2. *T. integra* Dana.
5. *Charybdis (Goniosupradens) obtusifrons* Leene.

Family: GRAPSIDAE
8. *Geograpsus crinipes* (Dana).

Family: OCYPODIDAE

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Family: XANTHIDAE
13. *C. convexus* (Forskal).
15. *C. bellus* (Dana).
16. **Platypodia anaglypta** (Heller).
17. *Zoeymus aeneus* (Linnaeus).
18. *Daira perlata* (Herbst).
19. *Actaea cavipes* (Dana).
22. **Cymo quadrilobatus** Miers.
23. **Pilumnus vesperilus** Fabricius.

Family: MAIIDAE
30. **Huenia proteus** de Haan.
31. **Tylocarcinus styx** (Herbst).
32. **Schizophrys aspera** (Milne-Edwards).
33. **Micippa phillyra** (Herbst).

Family: PARTHENOPIDAE
34. *Parthenope horrida* Fabricius.

Family: CALAPPIDAE
35. **Matuta banksii** Leach.

Family: PORTUNIDAE

*Thalamita tenuipes* Borradaile

*Thalamita tenuipes*, Borradaile, 1903, p. 204.

*Material*: 3 males and 2 females; the largest of the males 20 mm. long and 30 mm. broad.

*Locality*: Minicoy.

*Remarks*: The species can easily be distinguished from *T. prymna* by the presence of the spiny inner end of the infra-orbital border, the acute tip of which in one case is worn out but retains a small blunt projection. The dactylus of the walking legs has broad reddish bands alternating with narrow white bands.

The species is distinguished from *T. prymna* by the nature of the first male pleopod (Fig. 1, A) due to the presence of bristles on the inner border also.
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Distribution: Goidu and Goifurfehendu in Maldive Archipelago (Borradaile). The present report extends its distribution into the Laccadive Archipelago also.

Thalamita integra Dana

Thalamita integra, Alcock, 1899, p. 85.

Material: An ovigerous female 16 mm. long and 25 mm. broad.
Locality: Minicoy.

Distribution: The species has so far not been reported from these islands. The species is known from East Africa and Red sea to Fiji.

Thalamita admete (Herbst)

Thalamita admeta, Alcock, 1899, p. 82.
T. admeta, Stephenson and Hudson, 1957, p. 320.

Material: 1 immature male 17 mm. long and 29 mm. broad.
Locality: Minicoy.

Distribution: Goidu, Fadifolu, S. Mahlos, North Male, Mahlos and Minicoy (Borradaile). The species is also known from East Africa, Red Sea to Japan, Hawaii and Fiji (Stephenson and Hudson).

Thalamita cooperi Borradaile

Thalamita cooperi, Borradaile, 1903, p. 206.
Stephenson and Hudson, 1957, p. 331.

Material: A male 6 mm. long and 9 mm. broad.
Locality: Minicoy.

Remarks: The first male pleopod (Fig. 1, B) in this species is characteristic and differs distinctly from all the known species. It is a stout appendage which near the tip bends outwards and ends bluntly, with thick short bristles along the border. Subterminally on the ventral side of the appendage is a patch of simple bristles.

Distribution: Goidu, Hulule, and Minicoy (Borradaile); Queensland (Stephenson and Hudson).
Charybdis (Goniosupradens) obtusifrons Leene

Charybdis (Goniosupradens) obtusifrons, Leene, 1938, p. 140.

Material: One female 30 mm. long and 47 mm. broad.

Locality: Minicoy.

Remarks: The specimen agrees in all details with the description given by Leene, except for the left natatory leg, all other appendages are missing.
Distribution: The species has previously been recorded from Red Sea, Japan and Djeddah. This is the first record of this species from the Indian waters.

*Portunus granulatus* (Milne-Edwards)

*Neptunus (Achelous) granulatus*, Alcock, 1899, p. 45.

*Borradaile, 1903, p. 208.*


Material: A male 18 mm. long and 25.5 mm. broad.

Locality: Minicoy.

Remarks: The median frontal lobes are distinctly separate, 2nd, 4th and 6th antero-lateral teeth are subequal and smaller than 3rd, 5th and 7th which are also subequal.

Distribution: Haddumati, Suvadiva, Felidu, South Nilandu, Male, Kolumadulu, Miladumadulu and Mahlos in Maldives (Borradaile). The present report extends its distribution to the Laccadives also. The species is known from Red Sea to Hawaii.

Family: GRAPSIDAE

*Grapsus tenuicrustatus* (Herbst)

*Grapsus grapsus*, Alcock, 1900, p. 392.

*Grapsus maculatus gracilipes*, Tesch, 1918, p. 72.


Material: A large female 62 mm. long and 66 mm. broad.

Locality: Minicoy.

Remarks: Banerjee (1960) mentions that all Indo-Pacific forms should be called by the name *G. tenuicrustatus*. He enumerates the differences between *G. tenuicrustatus* and *G. grapsus*; the latter according to him is restricted in distribution to Atlantic and West American region. Of the five distinguishing characters, he considers the ridge on the epistome as very characteristic and constant in the two species. (1) But the single large specimen in the present collection has a very faint ridge on the epistome, which is continuous and at the inner end converges posteriorly towards the median line. (2) The front in this specimen is half as wide as deep. (3) There is only one short ridge on the carapace between the last transverse ridge and the ridge anterior to it. (4) The postero-lateral part of the carapace has a wrinkled appearance due to the presence of broad longitudinal ridges. The foregoing description indicates that the specimen agrees with *G. grapsus* in characters (1) and (2), whereas in the characters (3) and (4) it agrees with *G. tenuicrustatus*.
Since only a single specimen is available it has provisionally been referred to the latter species.

Distribution: Laccadives (Alcock). Has a wide distribution in the Indo-Pacific region from Red Sea and east coast of Africa to Japan, Australia, Polynesian Islands and Hawaii (Banerjee).

Geograpsus crinipes (Dana)

Geograpsus crinipes, Alcock, 1900, p. 396.
Borradaile, 1903, p. 67.
Banerjee, 1960, p. 163.

Material: One male 48 mm. long and 57 mm. broad.

Locality: Minicoy.

Distribution: Laccadives (Alcock); Minicoy (Borradaile): The species is also known from Red Sea to Japan, Samoa and Hawaii.

Percnon planissimum (Herbst)

Liolophus planissimum, Alcock, 1900, p. 439.
Leiolothis planissimum, Borradaile, 1903, p. 432.
Percnon planissimum, Tesch, 1918, p. 130.

Material: One immature male 8.5 mm. long and 6 mm. broad.

Locality: Minicoy.

Distribution: Laccadives (Alcock). Borradaile mentions that it has a very wide distribution in these islands. The species is also known from Mauritius, Amirante Islands, east coast of Africa, South Africa, Indo-Pacific (Barnard).

Family: OCYPODIDÆ

Ocypoda ceratophthalma (Pallas)

Ocypoda ceratophthalma, Alcock, 1900, p. 345.
Tesch, 1918, p. 36.
Borradaile, 1903, p. 67, 96.

Ocypode ceratophthalmus, Barnard, 1950, p. 86.

Material: 21 males, 12 females and 13 juveniles.
Locality: Kavarathy and Amenidive Islands.

Distribution: Maldive Islands and Minicoy (Borradaile). The species is also known from Mauritius, east coast of Africa, South Africa, Red Sea, Indo-Pacific (Barnard).

*Ocypoda cordimana* Desmarest

*Ocypoda cordimana*, Alcock, 1900, p. 349.

Borradaile, 1903, p. 67, 96.

*Ocypode cordimanus*, Barnard, 1950, p. 84.

Material: 3 males and a female which is the largest, 21 mm. long and 24 mm. broad.

Locality: Kavarathy Island.

Distribution: Laccadives (Alcock); Minicoy and Maldives (Borradaile). The species is also known from Mauritius, east coast of Africa, South Africa, and Red Sea to Japan (Barnard).

Family: XANTHIDAE

*Carpillus convexus* (Forskal)

*Carpillus convexus*, Alcock, 1898, p. 80.

Borradaile, 1903, p. 261.

Barnard, 1950, p. 205.

Material: One male 28 mm. long and 39 mm. broad.

Locality: Minicoy.

Remarks: The first male pleopod (Fig. I,C) is a stout almost straight appendage which has a rounded tip. Along the inner border are a number of spinules of varying size.

Distribution: Fadifolu, Male, North Male, and Minicoy (Borradaile). The species is also known from Mauritius, Red Sea, east coast of Africa, South Africa, Indo-Pacific (Barnard).

*Carpilius maculatus* (Linnaeus)

*Carpilius maculatus*, Alcock, 1898, p. 79.

Borradaile, 1903, p. 261.

Barnard, 1950, p. 203.
Material: A large male 85 mm. long.

Locality: Minicoy.

Remarks: Two pairs of additional blotches, a pair in front and a pair behind the transverse row of three blotches in the middle of the carapace are noticed.

Distribution: Minicoy, Maldives (Borradaile).

*Carpilodes tristis* Dana

*Carpilodes tristis*, Alcock, 1898, p. 82.


Material: An ovigerous female 13.5 mm. long and 23 mm. broad and a male.

Locality: Minicoy.

Remarks: The ground colouration of the carapace varies in the two sexes, in the female it is brownish in colour, whereas in the male it is whitish. A distinct reddish band is clearly visible on the antero-lateral border of the carapace immediately behind the orbit. The legs have alternate bands of white and red colour.

The first male pleopod (Fig. I, D) is distinctly curved near the tip towards the outer side, with a rounded tip. Near the tip and also at the tip, there are more than a dozen long bipinnate hairs, which have enlarged tips. Preceding these bipinnate hairs, on the inner side are a few large spines, their size increasing distally.

Distribution: Andamans and Nicobar (Alcock). This is the first record of the species from Laccadive Islands.

*Carpilodes bellus* (Dana)


Material: Two males and an ovigerous female which is 4 mm. long and 6 mm. broad.

Locality: Minicoy.

Distribution: This is the first record of the species from the Laccadive Islands. The species has been known from Mauritius, South Africa, Indo-Pacific (Barnard).

*Platypodia anaglypta* (Heller)

*Lophactea anaglypta*, Alocck, 1898, p. 102.

Borradaile, 1903, p. 258.


Material: A male 10.5 mm. long and 16 mm. broad.
Locality: Minicoy.

Remarks: The dark colouration of the fixed finger extends to a major part of the palm—towards the proximal end as well as upwards.

The first male pleopod (Fig. 1, E) towards the tip smoothly curves outwards and has a pointed tip. Subterminally along the inner border is a tuft of very long, simple hairs preceded by a few spinules; along the outer border are a few smaller spinules irregularly arranged.

Distribution: Hulule, Malé (Borradaile). The present report extends its distribution into the Laccadive islands also.

*Zozymus aeneus* (Linnaeus)

*Zozymus aeneus*, Alcock, 1898, p. 104.
Borradaile, 1903, p. 258.

Material: One female 40 mm. long and 62 mm. broad.

Locality: Bitra Island.

Remarks: An abnormality is noticed in the specimen in having only three teeth along the antero-lateral border of the carapace on the right side; whereas there are four normal teeth on the left side; in consequence the last two teeth on the right side are broader than those on the left.

Distribution: Laccadives (Alcock). Male and Minicoy (Borradaile). The species is also known from Mauritius, east coast of Africa, South Africa, Indo-Pacific (Barnard).

*Daira perlata* (Herbst)

*Daira perlata*, Alcock, 1898, p. 155.
Borradaile, 1903, p. 258.

Material: A female 38 mm. long and 54 mm. broad.

Locality: Minicoy.

Distribution: Laccadive reefs (Alcock); Minikoi and Golfurfehendu Atolls (Borradaile).

*Actaea cavipes* (Dana)

*Actaea cavipes*, Alcock, 1898, p. 147.
Borradaile, 1903, p. 258.
Material: A male 4.5 mm. long and 7 mm. broad.

Locality: Minicoy.

Remarks: The fronto-orbital border is decidedly more than half the greatest breadth of the carapace. The first antero-lateral lobe of the carapace is hardly recognisable due to its confluence with the outer orbital lobe. Fingers are pointed.

The first male pleopod (Fig. I, F) curves near the distal end towards the outer side, a part of the distal end being uniformly thick and finger like. Along the inner border and subterminal in position is a tuft of long simple hairs. Along the outer border and on the ventral side near the distal end are a few spinules.

Distribution: Minicoy (Borradaile). The species is also known from Mauritius, Red Sea, east coast of Africa, South Africa, Indo-Pacific (Barnard).

**Leptodius sanguineus** (Milne-Edwards)

Xantho (*Leptodius*) sanguineus, Alcock 1898, p. 119.

*Leptodius sanguineus*, Borradaile, 1903, p. 252.

Material: Two males, the larger of the two 22.5 mm. long and 37 mm. broad.

Locality: Minicoy.

Distribution: Laccadives (Alcock), Goifurfehendu (Borradaile).

**Chlorodopsis spinipes** (Heller)


Borradaile, 1903, p. 261.

Material: One juvenile 9 mm. long and 13 mm. broad.

Locality: Minicoy.

Remarks: The outer angle of front is not spiny. The merus of cheliped has about 4 to 6 spines on its posterior border.

Distribution: Male and Minicoy (Borradaile).

**Cymo quadrilobatus** Miers

*Cymo quadrilobatus*, Alcock, 1898, p. 175.

Borradaile, 1903, p. 257.

Material: One male and an ovigerous female 18 mm. long and 20 mm. broad.

Locality: Minicoy.
Remarks: The first male pleopod (Fig. I, G) is a large appendage curved outwards with a spatulate, flat and rounded tip which is slightly twisted. Along the outer border, near the tip are a few long bipinnate hairs preceded by large spinules. Along the inner border are a large number of small spinules.

Distribution: Male, Goifurfehendu, Fadifolu (Borradaile). The present report extends its distribution to the Laccadives also.

Pilumnus vespertilio Fabricius

Pilumnus vespertilio, Alcock, 1898, p. 192.
Borradaile, 1903, p. 245.
Barnard, 1950, p. 263.

Material: A juvenile 6 mm. long and 8 mm. broad.

Locality: Minicoy.

Distribution: Hulule, Male, Funadu, Velu and Miladumadulu (Borradaile). The present report extends its distribution to the Laccadives also. The species is known from Mauritius, east coast of Africa, South Africa, Indo-Pacific (Barnard).

Trapezia maculata (Macleay)

Trapezia maculata, Alcock, 1898, p. 221.
Trapezia ferruginea var. maculata, Borradaile, 1903, p. 265.

Material: 4 ovigerous females, 4 males, the largest ovigerous female 20 mm. long and 23.5 broad.

Locality: Minicoy.

Distribution: Goifurfehendu, Male, Fadifolu, Suvadiva, South Nilandu, and Minicoy (Borradaile).

Trapezia ferruginea Latreille

Trapezia ferruginea, Alcock, 1898, p. 220.
Borradaile, 1903, p. 264.

Material: 2 ovigerous females and 2 males. The smaller ovigerous female 8 mm. long and 10.5 mm. broad.

Locality: Minicoy.

Distribution: Goifurfehendu, Male, Fadifolu, Addu, South Nilandu, Suvadiva, South Male and Minicoy (Borradaile).
Trapezia cymodoce (Herbst)

Borradaile, 1903, p. 265.

**Material**: 5 males and 4 ovigerous females. The smallest ovigerous female 7 mm. long and 9 mm. broad.

**Locality**: Minicoy.

**Distribution**: Male, Goifurfehendu, Fadifolu, South Nilandu, Suvadiva, Felidu and Minicoy (Borradaile). The species is also known from Ibo, Portuguese East Africa, South Africa, Zanzibar, Red Sea, Indo-Pacific (Barnard).

Tetralia glaberrimma (Herbst)

*Tetralia glaberrimma*, Alcock, 1898, p. 223.
Borradaile, 1903, p. 265.
Barnard, 1950, p. 280.

**Material**: 2 ovigerous females, the smaller of which 6 mm. long and 7 mm. broad; and 2 males.

**Locality**: Minicoy.

**Distribution**: Maldives (Alcock); Goifurfehendu, Fadifolu, Male, Felidu and Minicoy (Borradaile). The species is also known from Ibo, Portuguese East Africa, South Africa, Red Sea, Seychelles, Indo-Pacific (Barnard).

Lybia tessellata (Latreille)

*Melia tessellata*, Borradaile, 1903, p. 250.

**Locality**: Minicoy.

**Remarks**: The ovigerous female carried an anemone in each cheliped whereas the non-ovigerous female is without any anemone.

The first male pleopod (Fig. 11, A, B) is curved near the tip with the sharp pointed tip pointing outwards. Along the inner border are a number of short bipinnate hairs, preceded by a few spinules. Subterminally, on the ventral side another row of short bipinnate hairs are seen, the distal hairs of which are simple and short. Along the outer border are a number of small spinules of varying size.
Distribution: Male, Addu, Goifurfehendu, and Minicoy (Borradaile). The species is also known from Mauritius, South Africa, Seychelles and Hawaiian Island (Barnard).

Fig. 2. Male pleopods of: (A & B) Lybia tessellata. (D) Huentia proteus. (E) Tylocar- cinus styx. (F) Parthenope harria. (C) Carapace of Huentia proteus.

Family: MAIIDAE

Huentia proteus de Haan

Huentia proteus, Alcock, 1895, p. 195.
Laurie, 1906, p. 372.
Barnard, 1950, p. 41.
Material: A male 10.5 mm. long and 10 mm. broad.

Locality: Minicoy.

Remarks: The carapace in this specimen (Fig. II, C) is almost like the figure (XLVII, 1a) given by Borradaile.

The first male pleopod (Fig. II, D) resembles to a great extent that of Menaethius monoceros but has a less enlarged tip.

Distribution: Male, and Kolumadulu. The present report extends its distribution into the Laccadive Islands also. The species is also known from east coast of Africa, South Africa, Indo-Pacific to Australia, China, Japan and Fiji Islands (Barnard).

Menaethius monoceros (Latreille)

Menaethius monoceros, Alcock, 1895, p. 197.
Barnard, 1950, p. 43.

Material: A male and an ovigerous female 13 mm. long (inclusive of rostrum) and 10 mm. broad.

Locality: Minicoy.

Distribution: Male, Fadifolu, Goifurfehendu, and Minicoy (Borradaile). The species is also known from Red Sea, east coast of Africa, South Africa, Mauritius, Indo-Pacific to Australia, China, Fiji, Sandwich Islands (Barnard).

Tylocarcinus styx (Herbst)

Tylocarcinus styx, Alcock, 1895, p. 235.

Material: 4 males.

Locality: Minicoy.

Remarks: The first male pleopod (Fig. II, E) is a straight appendage, which has a transparent triangular expansion on its outer side at the tip.

Distribution: Male, Fadifolu, Goifurfehendu, (Borradaile). The present report extends its distribution into the Laccadive Islands also.

Schizophrys aspera (Milne-Edwards)

Schizophrys aspera, Alcock, 1895, p. 243.
Barnard, 1950, p. 60.
Material: A male 20 mm. long (with rostrum) and 20 mm. broad (inclusive of lateral spines).

Locality: Kavarathy Island.

Distribution: Male, Fadifolu, Felidu, Suvadiva (Borradaile). The present report extends its distribution into the Laccadive Islands also. The species is also known from Indo-Pacific to Japan, Australia and Samoa (Barnard).

Micippa phillyra (Herbst)

Micippa phillyra, Alcock, 1895, p. 249.
Borradaile, 1906, p. 689.

Material: A male 20 mm. long and 16 mm. broad.

Locality: Minicoy.

Remarks: The first male pleopod is short and curved, the tip pointing outwards; near the tip on the ventral side of the appendage are a few short spinules.

Distribution: Hulule, Male, Kolumadulu, South Nilandu, Fadifolu, Suvadiva and North Male (Borradaile). The present report extends its distribution into the Laccadive Islands also.

Family: PARTHENOPIDAE

Parthenope horrida Fabricius

Parthenope horrida, Alcock, 1895, p. 279.
Barnard, 1950, p. 64.

Material: 1 male 45 mm. long and 62 mm. broad.

Locality: Minicoy.

Remarks: The first male pleopod (Fig. II, F) is a stout and straight appendage ending bluntly where the wide opening of the seminal canal is located. The ventral surface of the appendage towards the tip has microscopic spinules.

Distribution: Off Ceylon (Alcock). This is the first record of the species from the Laccadive Islands. The species is also known from Natal, Mauritius, Indo-Pacific (Barnard).

Family: CALAPPIDAE

Matuta banksii Leach

Matuta banksii, Alcock, 1896, p. 158.
Borradaile, 1903, p. 436.
Barnard, 1950, p. 359.
Material: 2 males and 2 females of which 1 is ovigerous 28 mm. long and 41 mm. broad (with spines).

Locality: Kavarathy Island.

Distribution: Hulule, Male (Borradaile). The present report extends its distribution into the Laccadive Islands also. The species is also known from Mauritius, Red Sea, east coast of Africa, South Africa, Indo-Pacific (Barnard).

**Calappa hepatica** (Linnaeus)

Borradaile, 1903, p. 436.

Material: A female 60 mm. broad and 40 mm. long.

Locality: Minicoy.

Distribution: Hulule, Male Atoll, Minicoy (Borradaile). The species is also known from South Africa, east coast of Africa, Red Sea, Mauritius, Madagascar, Indo-Pacific, Australia (Barnard).

**SUMMARY**

Included in the present paper, are 36 species of crabs collected from the Laccadive Archipelago. Of the 36 species in the collection, 5 species are new records for this region.

**ACKNOWLEDGEMENTS**

I wish to express my sincere thanks to Dr. S. Jones, Director, Central Marine Fisheries Research Institute, for permitting me to work out his collection of crabs from the Laccadive Islands and also for all the interests he showed in my work. I am also thankful to Messrs. P. T. Thomas, P. M. Sayeed, and Alimanickfan for making collections of crabs from the Laccadive Islands and making them available for my studies.

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