

NOTES ON STOMATOPOD CRUSTACEA FROM SERIBU ISLANDS  
AND ADJACENT WATERS WITH A DESCRIPTION  
OF A NEW SPECIES <sup>1)</sup>

by

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ABSTRACT

The stomatopod fauna of Seribu Islands, Jakarta Bay, and adjacent waters is still poorly known. This study reveals the existence of 30 species in this area. A new species belonging to *Oratosquilla* is described. Records of distribution for those species are based on the material collected from this area only.

IKHTISAR

Fauna stomatopoda Pulau Seribu, Teluk Jakarta, dan perairan sekitarnya masih sangat sedikit diketahui. Tiga puluh jenis, termasuk satu jenis baru marga *Oratosquilla*, dibicarakan dalam karangan ini. Catatan daerah sebaran untuk jenis-jenis tersebut hanya didasarkan pada material yang dikumpulkan dari daerah ini.

INTRODUCTION

The stomatopod fauna of Seribu Islands, Jakarta Bay, and adjacent waters is still poorly known. However, some species have been described by some workers, viz., DE MAN (1887) described *Protosquilla brooksii* (now *Chorisquilla brooksii*) which was collected from Edam Island, Jakarta Bay; HOLTHUIS'S type of *Gonodactylus lenzi* (now *Haptosquilla lenzi*) was collected from Jakarta Bay; SUNIER'S (1918) material for his publication on the stomatopod collection of the "Vischerij Station at Batavia" (now Lembaga Oseanologi Nasional) was partly collected from Jakarta Bay. Unfortunately these particular specimens are no

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- <sup>1)</sup> Contribution of the Lembaga Oseanologi Nasional, Lembaga Ilmu Pengetahuan Indonesia.  
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longer in existence. The present study is based mainly on the existing collection of the Lembaga Oseanologi Nasional (LON = National Institute of Oceanology), with additional specimens from the Institute of Sea Fisheries Research, Jakarta, and the Bogor Zoological Museum, National Biological Institute, Indonesian Institute of Sciences. A total of 30 species of 14 genera belonging to 3 families have been recorded from the area, among those, a new species of *Oratosquilla* is described.

#### METHODS

Measurements of the specimens are given in millimeters (mm). The total length (TL) is measured from tip of rostrum to posterior end of telson along the midline. The carapace length (NL) is also measured along the midline, excluding the rostrum. The count of teeth of the raptorial dactylus always includes the terminal tooth. The Corneal Index (CI) is calculated as carapace length/cornea width x 100 (MANNING 1966).

The records of distribution for the species discussed in this paper are based on the material collected from Seribu Islands and adjacent waters only. The so-called adjacent waters include the offshore waters of the eastern part of South Sumatera, northern part of Sunda Strait, islands situated at southern part of Bangka, and Jawa Sea north of West Jawa. These waters are very close to Seribu Islands and therefore the stomatopod fauna in these waters may have similar composition.

The synonymies herein used are restricted to KEMP (1913), SUNIER (1918), HANSEN (1929), HOLTHUIS (1941) and MANNING & SERENE (1968). Additional papers will be referred whenever available and necessary.

#### TAXONOMIC ACCOUNT

The species so far known from Seribu Islands and adjacent waters are presented in the following list.

1. *Chorisquilla brooksii* (DE MAN 1887)
2. *Gonodactylus chiragra* (FABRICIUS 1781)
- \* 3. *Gonodactylus demanii* HENDERSON 1893
4. *Gonodactylus falcatus* (FORSKAL 1775)
5. *Gonodactylus platysoma* WOOD-MASON 1895
6. *Gonodactylus smithii* POCOCK 1893

7. *Haptosquilla glyptocerca* (WOOD-MASON 1875)
8. *Haptosquilla lenzi* (HOLTHUIS 1941)
- \* 9. *Odontodactylus cultrifer* (WHITE 1850)
10. *Pseudosquilla ciliata* (FABRICIUS 1787)
11. *Pseudosquilla oculata* (BRULLE 1836)
12. *Acanthosquilla derijardi* MANNING 1969
13. *Lysiosquilla maculata* (FABRICIUS 1793)
14. *Alima hyalina* LEACH 1817
15. *Anchisquilla fasciata* (DE MAN 1844)
16. *Carinosquilla lirata* (KEMP & CHOPRA 1921)
- \* 17. *Carinosquilla multicarinata* (WHITE 1847)
18. *Clorida latreillei* EYDOUX & SOULEYET 1841
19. *Cloridopsis scorpio* (LATREILLE 1825)
20. *Harpiosquilla harpax* (DE HAAN 1844)
21. *Harpiosquilla raphidea* (FABRICIUS 1798)
- \* 22. *Oratosquilla gonypetes* (KEMP 1911)
- \* 23. *Oratosquilla holochista* (KEMP 1911)
24. *Oratosquilla inornata* (TATE 1883)
25. *Oratosquilla interrupta* (KEMP 1911)
26. *Oratosquilla jakartensis* new species
27. *Oratosquilla nepa* (LATREILLE 1825)
28. *Oratosquilla quinquedentata* (BROOKS 1886)
29. *Oratosquilla tweediei* MANNING 1971
- \* 30. *Oratosquilla woodmasoni* (KEMP 1911)

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\*) Not represented in the collection.

#### GONODACTYLIDAE GIESBRECHT 1910

##### **Chorisquilla brooksii** (DE MAN 1887)

*Protosquilla brooksii* DE MAN 1887: 579, pi. 22, fig. 8. — MANNING & SERENE 1968: 114 (listed).

*Gonodactylus brooksii* KEMP 1913: 189-190. HOLTHUIS 1941: 290-292.

*Chorisquilla brooksii* MANNING 1969 a: 159 (in key). — MOOSA 1973: 4.

**Material.** — 1 ♂ 26.98 mm; Sebaru Besar Isl.; coral and sand; coll. M. K. Moosa, 6/4/1968; cat. no. S. 353. — 1 ♀ 27.24 mm; between Burung Isl. and Tikus Isl.; coll. Kasijan R., 27/8/1972; cat. no. S. 872.

**Type locality.** — Edam Island, Jakarta Bay.

**Previous record.** — Known only from Edam Island (DE MAN 1887).

### **Gonodactylus chiragra** (FABRICIUS 1781)

*Squilla chiragra* FABRICIUS 1781: 515.

*Gonodactylus chiragra* KEMP 1913: 155 -162, pi. 9, fig. 107.

SUNIER 1918: 13-14. — HANSEN 1926: 24-26. — HOLTHUIS 1941: 277-281.

MANNING & SERENE 1968: 114 (listed). — MOOSA 1973: 7-8.

**Material.** — 1 ♀ 44.26 mm; Sakit Isl.; coll. Kasijan R., 28/10/1964; cat. no. S. 303. — 1 ♀ 76.62 mm; data as above; coll. Sapri D., 8/12/1963; cat. no. S. 308. — 1 ♂ 40.18 mm; Pemagaran Isl.; coll. Kasijan R., 28/3/1962; cat. no. S.309. — 2 ♂♂ 26.80-37.22 mm, 2 ♀♀ 18.10-25.04 mm; Jakarta Bay; cat. no. S. 340-343. — 3 ♂♂ 35.18-38.16 mm; west coast of Sebaru Besar Island; coral boulder; coll. Sapri D., 7/4/1968; cat. no. S. 347-349. — 2 ♂♂ 31.58-35.50 mm; Lancang Kecil Isl.; coll. M.K. Moosa, 7/3/1970; cat. no. S. 351-352. 1 a 36.68 mm, 1 ♀ 36.02 mm; data as above; cat. no. S. 354 - 355. — 2 <♀s 26.48 - 35.68 mm, 1 ♀ 34.22 mm, and 1 juvenile; data as above; cat. no. S. 358-363. — 4 ♀♀ 24.70 - 43.48 mm; Untung Jawa Isl.; coll. M. K. Moosa, 31/12/1963; cat. no. S. 368-371. — 2 ♂♂ 35.86-39.46 mm; Sebaru Besar Isl.; dead coral; coll. M.K. Moosa, 6/4/1968; cat. no. S. 372 - 373. — 1 ♂ 24.56 mm, 1 ♀ 33.12 mm; Petundang Isl.; coll. Kasijan R., 8/8/1961; cat. no. S. 374-375. — 1 ♀ 33.42 mm; Ayer Isl.; dead coral; coll. Subagjo S., 3/3/1971; cat. no. S. 377. — 6 ♂♂ 16.66 - 34.24 mm, 6 ♀♀ 13.24-38.24 mm; Ayer Isl.; coll. M.K. Moosa, 27/5/1971; cat. no. S. 378-390. — 16 ♂♂ 16.28-36.32 mm, 13 ♀♀ 15.52-41.28 mm, 1 juvenile; data as above; cat. no. S. 423 - 452. — 2 ♀♀ 17.20 -18.58 mm; data as above; cat. no. S. 456 - 457. — 1 ♂ 23.58 mm, 1 ♀ 22.84 mm; Ayer Isl.; coll. Kasijan R., 24/12/1971; cat. no. S. 610-611. — 2 ♂♂ 30.68-92.04 mm, 4 ♀♀ 18.46-89.02 mm; between Burung Isl. and Tikus Isl.; coll. Kasijan R., 27/8/1972; cat. no. S. 878-883. — 5 ♂♂ 16.72-45.44 mm, 7 ♀♀ 30.50-71.22 mm; Kongsi Isl.; sand flat; coll. M.K. Moosa, 28/6/1973; cat. no. S. 1183-1192.

**Previous records.** — This species is the most common among the coral reefs inhabiting stomatopods in the area. It has been recorded from Damar Kecil Isl. (Alkmaarr Isl.), Jaga Utara Isl. (Noordwachter Isl.), Nyamuk Kecil. Isl. (Enkhuisen Isl.), and from various localities around Seribu Isl. (SUNIER 1918; HOLTHUIS 1941).

### **Gonodactylus demanii** HENDERSON 1893

*Gonodactylus demanii* HENDERSON 1893: 455, pi. 11, figs. 23, 24.

KEMP 1913: 164 -165, pi. 9, figs. 108 - 111. — HOLTHUIS 1941: 282 - 284, fig. 8. —

MANNING & SERENE 1968: 114 (listed).

**Remarks.** — This species is not represented in the collection and known only from Edam Island (DE MAN 1887 as *Gonodactylus* n. sp.).

***Gonodactylus falcatus* (FORSKAL 1775)**

*Gonodactylus graphurus* DE MAN 1887: 573.

*Gonodactylus glabrous* KEMP 1913: 167-169, pi. 9, fig. 113.

*Gonodactylus falcatus* HOLTHUIS 1941: 284 - 288, fig. 9 a. — MANNING & SERENE 1968: 114 (listed). — MOOSA 1973: 8.

**Material.** — 1 ♀ 37.58 mm with a gastropod attached; Untung Jawa Isl.; under coral boulder; coll. M.K. Moosa, 31/12/1963; cat. no. S. 082. — 1 ♀ 13.74 mm; Sebaru Besar Isl.; under coral boulder; coll. M.K. Moosa, 7/4/1968; cat. no. S. 083. — *Is* 30.22 mm; Lancang Kecil Isl.; dead coral; coll. M. K. Moosa, 7/3/1970; cat. no. S. 084. — 2 ♀ ♀ 54.52 - 55.28 mm; Dualsl.; under coral boulder; coll. Sapri D., 27/11/1965; cat. no. S. 095-096. — 2 ♂ ♂ 16.30-21.88 mm, 1 ♀ 40.48 mm; Ayer Isl.; coral boulder; coll. M.K. Moosa, 29/7/1971; cat. no. S. 453 - 455. — 2 ♀ ♀ 29.92-38.34 mm; Sakit Isl.; coll. M.K. Moosa, 8/12/1963; cat. no. S. 557-558. — 1 ♂ 32.22 mm, 1 ♀ 38.36 mm with 2 gastropods attached; Ayer Isl.; coll. M.K. Moosa, 30/8/1971; cat. no. S. 570 - 571. — 1 ♀ 21.50 mm; Rawa Saban fishmarket; coll. Sudarmo, 26/8/1971; cat. no. S. 607. — 1 ♂ 31.94 mm with 2 gastropods attached, 1 ♀ 37.90 mm; Ayer Isl.; corals; coll. M.K. Moosa, 27/11/1971; cat. no. S. 614-615. — 1 ♂ 29.04 mm, 1 ♀ 36.72 mm; between Burung Isl. and Tikus Isl.; coll. Kasyan R., 27/8/1972; cat. no. S. 876 - 877.

**Remarks.** — Three of the specimens have gastropod molluscs attached on their ventral surfaces. Boediman (*pers. comm.*) has identified the gastropods as *Caledoniella montrouzieri* SOWERBIE 1869. ROSEWATER (1969, as mentioned by MANNING 1969 c) observed that the larger female of this gastropod attached to *Gonodactylus* from Madagascar on the posterior ventral surface, while the smaller male attached on the anterior part. HOLTHUIS (1941) mentioned the presence of gastropod attached on the ventral surface of *Gonodactylus chiragra* from Indonesia with sacs of eggs of different stages of development. The specimens from Seribu Island show that the larger gastropods with sacs of eggs are always on the posterior part of the stomatopod. The eggs sacs contain eggs with different stages of development.

**Previous records.** — Edam Isl. (DE MAN 1887, as *Gonodactylus graphurus*), Jakarta Bay (HOLTHUIS 1941).

**Gonodactylus platysoma** WOOD-MASON 1895

*Gonodactylus platysoma* WOOD-MASON 1895: 10, pi. 3. figs. 3-9.

MANNING & SERENE 1968: 114 (listed).

*Gonodactylus chiragra* var. *platysoma* KEMP 1913: 162-163.

HOLTHUIS 1941: 281-282.

**Material.** — 1 ♂ 85.82 mm; Ayer Isl.; corals; coll. M.K. Moosa, 26/5/1971; cat. no. S. 376. — 1 ♂ 80.20 mm; data as above; coll. Burhanuddin, 1/12/1971; cat. no. S. 606.

**Previous record.** — None. A new record for the area.

**Gonodactylus smithii** POCOCK 1893

*Gonodactylus smithii* POCOCK 1893: 475-476, pi. 20, fig. 1.

MANNING & SERENE 1968: 114 (listed). — MOOSA 1973: 9.

*Gonodactylus acutirostris* KEMP 1913: 163-164.

**Material.** — 1 ♀ 22.70 mm; Dua Isl.; under coral boulder; coll. M.K. Moosa, 28/11/1968; cat. no. S. 079. — 1 ♀ 22.78 mm; Sakit Isl.; coral boulder; coll. M.K. Moosa, 23/11/1963; cat. no. S. 080. — 1 ♂ 30.84 mm; Panjang Isl., Sunda Strait; coll. Kasijan R., 16/3/1963; cat. no. S. 089. — 1 juvenile; Ayer Isl.; corals; coll. M.K. Moosa, 25/5/1971; cat. no. S. 391. — 1 ♂ 38.18 mm; data as above; coll. M.K. Moosa, 30/11/1971; cat. no. S. 612. — 1 ♂ 31.18 mm, 2 ♀ ♀ 37.14-47.36 mm; between Burung Isl. and Tikus Isl.; coll. Kasijan R., 27/8/1972; cat. no. S. 873-875.

**Previous record.** — None. A new record for the area.

**Haptosquilla glyptocerca** (WOOD-MASON 1875)

*Gonodactylus glyptocercus* WOOD-MASON 1875: 32. — KEMP 1913: 186-187. —

HANSEN 1926: 36. — HOLTHUIS 1941: 289-290.

*Protosquilla cerebralis* DE MAN 1887: 575.

*Protosquilla glyptocerca* MANNING & SERENE 1968: 114 (listed).

*Haptosquilla glyptocercus* MANNING 1969 a: 161 (in key). *Haptosquilla glyptocerca* MOOSA 1973: 9-10.

**Material.** — 3 ♀ ♀ 28.02-31.38 mm; south coast of Sebaru Besar Isl.; under coral boulder; coll. M. K. Moosa, 6/4/1968; cat. no. S. 057-059. — 1 ♀ 18.14 mm; south coast of Petundang Isl.; coll. Kasijan R., 8/8/1961; cat. no. S. 076. — 2 ♀ ♀ 26.68-30.12 mm; south coast of Sebaru

Besar Isl.; coll. M. K. Moosa, 6/4/1968; cat. no. S. 077 - 078. — 1 ♂ 27.58 mm, 3 ♀♀ 24.06 - 24.60 mm; data as above; cat. no. S. 090 - 093. — 13 ♂♂ 14.18-27.34 mm, 17 ♀♀ 13.76-31.38 mm; Ayer Isl.; corals; coll. M.K. Moosa, 28/5/1971; cat. no. S. 392-422. — 1 ♀ 30.18 mm; data as above; coll. Sapri D., 5/10/1970; cat. no. S. 572. — 10 ♂♂ 13.52 -25.86 mm, 15 ♀♀ 18.12-30.68 mm; data as above; coll. M.K. Moosa, 2/12/1971; cat. no. S. 616 - 640. — 1 ♂ 30.82 mm, 3 ♀♀ 30.98 - 34.96 mm; Kongsil. Isl.; sand flat; coll. Sujoto, 29/7/1973; cat. no. S. 1179-1182.

**Previous record.** — Edam Island, Jakarta Bay (DE MAN 1887).

### **Haptosquilla lenzi** (HOLTHUIS 1941)

*Gonodactylus glaber* KEMP 1913: 184, pi. 10, fig. 121. — SERENE 1947: 385-387, pi. 2, fig. 1.

*Gonodactylus lenzi* HOLTHUIS 1941: 288-289. *Protosquilla lenzi* MANNING & SERENE 1968: 115 (listed). — TIRMIZI & MANNING 1968: 19-20, fig. 6.

*Haptosquilla lenzi* MANNING 1969 a: 161 (in key).

**Material.** — 1 ♂ 15.86 mm; Ayer Isl.; corals; coll. M. K. Moosa, 27/5/1971; cat. no. S. 458. — 1 ♀ 29.08 mm; data as above; coll. M. K. Moosa, 2/12/1971; cat. no. S. 613. — 1 ♀ 23.52 mm; Kongsil. Isl.; sand flat; coll. Sujoto, 29/7/1973; cat. no. S. 1193.

**Remarks.** — The specimens fully agree in most characters with the descriptions of KEMP (1913), SERENE (1947) and TIRMIZI & MANNING (1968). The fifth abdominal somite furrowed on both sides and posterior half of median portion pitted dorsally.

Type locality. — Jakarta Bay.

Previous record. — Jakarta Bay (HOLTHUIS 1941).

### **Odontodactylus cultrifer** (WHITE 1850)

*Odontodactylus cultrifer* KEMP 1913: 137-138. — SUNIER 1918: 11-13. — MANNING 1967: 18-22, fig. 5. — MOOSA 1973: 13.

**Remarks.** — The species is not represented in the collection, and known only from east of Seribu Islands (SUNIER 1918).

**Pseudosquilla ciliata** (FABRICIUS 1787)

*Squilla ciliata* FABRICIUS 1787: 333.

*Pseudosquilla ciliata* KEMP 1913: 102-103. — SUNIER 1918: 11. — HANSEN 1926: 17-18. — HOLTHUIS 1941: 261 - 262. — MANNING & SERENE 1968: 115 (listed). — MOOSA 1973: 13.

**Material.** — 1 ♂ 77.64 mm, 1 ♀ 79.40 mm; Ayer Isl.; sand and coral rubble; coll. M. K. Moosa, 26/2/1972; cat. no. S. 1209 -1210.

**Previous record.** — None. A new record for the area.

**Pseudosquilla oculata** (BRULLE 1836)

*Pseudosquilla oculata* KEMP 1913: 102 -103. — HOLTHUIS 1941: 266 - 267. — MANNING & SERENE 1968: 115 (listed).

**Material.** — 1 ♂ 38.24 mm; Panjang Isl., Sunda Strait; coll. Kasijan R., 16/3/1963; cat. no. S. 356.

**Remarks.** — Additional description of several characters: Cornea is markedly broader than eyestalk. Rostral plate armed with a sharp anterior spine. Carapace with a pair of dark spot surrounded by an entire white ring. Dorsal surface of telson with 4 pairs of carinae on either side of median carina.

**Previous record.** — None. A new record for the area.

LYSIOSQUILLIDAE GIESBRECHT 1910

**Acanthosquilla derijardi** MANNING 1969

*Acanthosquilla deryardi* MANNING 1969 c: 1434-1438, fig. 2. — MOOSA 1973: 13-14.

**Material.** — 1 ♀ 30.80 mm; Jakarta Bay, 05°51'35"S., 106°09'40"E.; dredged, 30-35 M; muddy sand; coll. R.V. SAMUDERA, 5/5/1971; cat. no. S. 463.

**Previous record.** — None. A new record for the area.

**Lysiosquilla maculata** (FABRICIUS 1793)

*Squilla maculata* FABRICIUS 1793: 511.

*Lysiosquilla maculata* KEMP 1913: 111-116, pi. 8, figs. 86-91. — SUNIER 1918: 11, fig. 4. — HOLTHUIS 1941: 269-272, fig. 5. — MANNING & SERENE 1968: 116 (listed).

**Material.** — 1 ♀ 204.80 mm; east of Untung Jawa Isl.; coll. M. K. Moosa, 30/12/1963; cat. no. S. 001. — 1 ♂ 223.48 mm; data as above; cat. no. S. 002. — 2 ♂♂ 158.90 - 242.18 mm right raptorial claw missing; Jakarta Bay; coll. Verwey, 1929; cat. no. S. 009-010. — 1 ♂ 214.58 mm; data as above; cat. no. S. 012. — 2 ♂♂ 240.02-244.40 mm; west coast of Rengit Isl.; coll. Kasijan R., 23/2/1961; cat. no. A. 013-014. — 1 ♂ 278.04 mm; south coast of Pancalirang Timur Isl.; coll. Kasijan R., 24/2/1961; cat. no. S. 015. — 1 ♂ 253.16 mm; 2 ♀♀ 187.84 -195.72 mm; west coast of Rengit Isl.; coll. Kasijan R., 23/2/1961; cat. no. S. 016 - 018. — 1 ♂ 226.00 mm; Kongsii Isl.; coll. Sapri D., 27/7/1972; cat. no. S. 871.

**Previous records.** — Panggang Island; Ancol (SUNIER 1918), Jakarta Bay (SUNIER 1918, HOLTHUIS 1941).

#### SQUILLIDAE LATREILLE 1804

##### *Alima hyalina* LEACH 1817

*Alima hyalina* MANNING 1969 b: 128-135, figs. 37, 38, 39 a. — 1969 c: 89-90, fig. I.

**Material.** — 1 ♀ 42.24 mm; Kongsii Isl.; coll. Sukardi, 29/6/1973; cat. no. S. 1194.

**Remarks.** — The specimen fully agree with the description and figures of MANNING (1969 b). Corneal index 354, the rostrum shows a little eruption on its lateral side.

**Previous record.** — None. A new record for the area.

##### *Anchisquilla fasciata* (DE HAAN 1844)

*Squilla fasciata* DE HAAN 1844: 224, Tab. LI, fig. 4. — KEMP 1913: 33-36, pi. 1, fig. 21-23. — HANSEN 1926: 5 - 6. — HOLTHUIS 1941: 242-243. — SERENE 1954: 59-60, pi. 3, figs. 1-4.

*Anchisquilla fasciata* MANNING & SERENE 1968: 116 (listed). — MOOSA 1973: 17.

**Material.** — 1 ♀ 60.22 mm; Ayer Isl.; light fishing; coll. Sapri D., 24/5/1971; cat. no. S. 474.

**Remarks.** — MANNING (1968) created the genus *Anchisquilla* with *Squilla fasciata* DE HAAN 1844 as the type of the genus. At present this genus consists of 5 species. One of the main generic characters of the genus

is the presence of movable apices on submedian teeth of telson (not present on *Squilla fasciata* but present on all the other known members of the genus). MANNING (1968) stated that *Anchisquilla* consisted of species with diversified characters. Further study may reveal that this species will have to be separated from the other members of this genus. The characters that they share in common are the presence of movable apices on the submedian teeth of telson and the presence of the four epipods. By the complete absence of the movable apices of the submedian teeth of telson, it is clearly indicated that *Anchisquilla fasciata* is separated from the remaining species of *Anchisquilla* for which MANNING (personal communication) agrees that the remaining species of *Anchisquilla* may need a new generic name. Following MANNING'S key for the genera of Squillidae (MANNING 1968) *Squilla fasciata* will come into either *Squilla* or *Squilloides*. By having reduced complement of dorsal carinae on carapace and less developed abdominal carination, *Squilla fasciata* is much closer to *Squilloides* than to *Squilla*, which is unfortunately regarded as Atlanto-East Pacific genus. Further study is required to clear up the exact generic position of this species.

**Previous record.** — None. A new record for the area.

#### ***Carinosquilla lirata* (KEMP & CHOPRA 1921)**

*Squilla lirata* KEMP & CHOPRA 1921: 303-307, figs. 3, 4. — TWEEDIE 1934: 39-40.  
*Carinosquilla lirata* MANNING & SERENE 1968: 116 (listed).

Material. — la 50.74 mm, raptorial claws missing; Pasar Ikan fish-market; coll. M. K. Moosa, 23/5/1971; cat. no. S. 159.

Previous record. — None. A new record for the area.

#### ***Carinosquilla multicarinata* (WHITE 1847)**

*Squilla multicarinata* KEMP 1913: 86-88, pi. 4, figs. 73-76. — SUNIER 1918: 9.  
*Carinosquilla multicarinata* MANNING & SERENE 1968: 116 (listed).  
MOOSA 1973: 17.

**Remarks.** — The specimen is not represented in the collection from Seribu Islands and adjacent waters. The species is known only from western Seribu Islands (SUNIER 1918).

**Clorida latreillei** EYDOUX & SOULEYET 1841

*Clorida latreillei* EYDOUX & SOULEYET 1841: 265 - 266, pi. 5, figs. 2-5. — MANNING & SERENE 1968: 116 (listed).

*Chlorodiella latreillei* WOOD-MASON 1895: 7 - 8, pi. 4, figs. 6-13.

*Squilla latreillei* KEMP 1913: 24-27, pi. 1, figs. 1-4.

**Material.** — 1 juvenile; Jakarta Bay, 05°58'30"S., 106°37'E, dredged, 16 M; mud; coll. R.V. SAMUDERA, 4/5/1971; cat. no. S. 464. — 1 ♀ 54.82 mm; Ancol, Jakarta; hand-dredged, 7 - 8 M; sandy mud; coll. Kasijan R., 9/10/1964; cat. no. S. 508.

**Previous record.** — None. A new record for the area.

**Cloridopsis scorpio** (LATREILLE 1825)

*Squilla scorpio* LATREILLE 1825: 472. — KEMP 1913: 42-44, pi. 2, fig. 30. — SUNIER 1918: 4. — HOLTHUIS 1941: 243-244.

*Cloridopsis scorpio* MANNING & SERENE 1968: 117 (listed).

**Material.** — 1 ♀ 21.28 mm; west coast of Pasar Ikan river mouth; small beach-seine; mud; coll. M. K. Moosa, 5/8/1972; cat. no. S. 853. — 1 ♀ 62.12 mm; Bintang Mas, Jakarta; small beach-seine; mud; coll. M. K. Moosa, 26/8/1972; cat. no. S. 884.

**Previous records.** — Pasar Ikan fishmarket (SUNIER 1918 as Batavia fishmarket, the specimens probably were collected from Pasar Ikan river mouth or from the neighbouring coast), Tanjung Priok, Jakarta Bay (HOLTHUIS 1941).

**Harpiosquilla harpax** (DE HAAN 1844)

*Squilla harpax* DE HAAN 1844: 222, tab. LI, fig. 1. — TIWARI & BISWAS 1952: 358 - 359, fig. 3.

*Squilla raphidea* KEMP 1913 (partim): 88 - 92, pi. 7, fig. 77. — HOLTHUIS 1941 (partim): 256-257.

*Harpiosquilla harpax* MANNING & SERENE 1968: 117 (listed). — MANNING 1969 d: 25-33, figs. 28-38.

**Material.** — 1 ♀ 176.56 mm, left eye and left raptorial claw missing; Jakarta Bay; coll. W. C. van Heurn, May 1927; cat. no. S. 133. — 1 ♂ 115.86 mm; Jakarta Bay; coll. Kasijan R., 15/7/1961; cat. no. S. 217. — 3 ♂ ♂ 120.72-127.78 mm, 2 ♀ ♀ 136.54-166.40 mm; off Sukadana,

east of Lampung, South Sumatera; coll. Nurzali, 5/1/1973; cat. no. S. 1202-1207.

**Previous records.** — Uncertain. Probably some specimens mentioned by SUNIER (1918) and HOLTHUIS (1941) as *raphidea* were *harpax*.

### **Harpiosquilla raphidea** (FABRICIUS 1798)

*Squilla raphidea* FABRICIUS 1798: 416. — KEMP 1913 (partim): 88 - 92, pi. 7, fig. 77. — SUNIER 1918: 9-10, fig. 3. — HOLTHUIS 1941 (partim): 256-257. — TIWARI & BISWAS 1952: 356-358, fig. 3.

*Harpiosquilla raphidea* MANNING & SERENE 1968: 117 (listed). — MANNING 1969 d: 9-15, figs. 4-9.

**Material.** — 1 ♀ 122.96 mm; Jakarta Bay; coll. W. C. van Heurn, May 1927; cat. no. S. 134. — 1 ♀ 237.92 mm; Aquarium Pasar Ikan (collected from Jakarta Bay?); coll. M. K. Moosa, 19/11/1963; cat. no. S. 147.

**Remarks.** — A large specimen from Aquarium Pasar Ikan is seriously damaged. Right basal prolongation of uropod shows abnormality in form of the spine, outer smaller spine bifurcates to subequally large spines, making the basal prolongation as though bearing 3 spines.

**Previous records.** — Since the materials mentioned by SUNIER (1918) and HOLTHUIS (1941) probably consisted of both *raphidea* and *harpax*, the distribution is uncertain. The specimens of SUNIER from Jakarta were probably *harpax*, judging from their smaller sizes with the largest of 16.5 cm in length. Figure 3 of SUNIER is undoubtedly *raphidea* which was collected from Bagan Siapiapi, east Sumatera. The specimens of HOLTHUIS from Tanjung Priok and from Jakarta Bay were probably true *raphidea*, judging from their larger sizes.

### **Oratosquilla gonypetes** (KEMP 1911)

*Squilla gonypetes* KEMP 1911: 96-97. — 1913: 54-55, pi. 4, figs. 42-44. — SUNIER 1918: 5-6. — HANSEN 1926: 10. *Oratosquilla gonypetes* MANNING & SERENE 1968: 117 (listed).  
MOOSA 1973: 24.

**Remarks.** — This species is not represented in the collection, and known only from west of Seribu Islands (SUNIER 1918).

**Oratosquilla holochista** (KEMP 1911)

*Squilla holochista* KEMP 1911: 97-98. — 1913: 64-65, pi. 4, figs. 50-53. —  
SUNIER 1918: 8. — HOLTHUIS 1941: 246-247.  
*Oratosquilla holochista* MANNING & SERENE 1968: 117 (listed).  
MANNING 1971: 3 (in key).

**Remarks.** — This species is not represented in the collection, and known only from Anyer, Sunda Strait (SUNIER 1918).

**Oratosquilla inornata** (TATE 1883)

*Squilla oratoria* var. *perpensa* KEMP 1913 (partim): 70-72. — SUNIER 1918: 8.  
*Squilla oratoria* var. *inornata* HOLTHUIS 1941: 248-249.  
*Squilla inornata* MANNING 1966: 95-97, fig. 3.  
*Oratosquilla inornata* MANNING & SERENE 1968: 117 (listed) misprint as *Oratosquilla ornata* TATE 1883. — MANNING 1971: 8 (in key).

**Material.** — 1 ♀ 62.98 mm, Pasar Ikan fish market; coll. M. K. Moosa, 22/5/1971; cat. no. S. 161. — 1 ♂ 38.76 mm; west coast of Pasar Ikan river mouth; coll. M. K. Moosa, 5/8/1972; cat. no. S. 851.

**Previous record.** — None. A new record for the area.

**Oratosquilla interrupta** (KEMP 1911)

*Squilla interrupta* KEMP 1911: 98-99. — 1913: 72-74, pi. 5, figs. 60-62. —  
SUNIER 1918: 8. — HANSEN 1926: 11. — HOLTHUIS 1941: 253-254. —  
MANNING 1966: 97-98, fig. 4.  
*Oratosquilla interrupta* MANNING & SERENE 1968: 117 (listed). — MANNING 1971: 8 (in key).

**Material.** — 1 ♀ 93.22 mm; Jakarta; in poor condition; MZB cat. no. Cru. 210.

**Previous records.** — West of Seribu Islands (SUNIER 1918), Jakarta Bay (HOLTHUIS 1941).

**Oratosquilla jakartensis** new species  
(Figs. 1 a, b, c and d)

**Material.** — Holotype: 1 ♀ 54.24 mm; Pasar Ikan fish market; coll. M. K. Moosa, 22/5/1971; cat. no. S. 160. — Paratype: 1 ♂ 39.58 mm; data as holotype; coll. M. K. Moosa, 12/6/1971; cat. no. S. 162.

**Description.** — Dorsal surface of body smooth, glabrous. Eyes large, with bilobed cornea, set very obliquely on stalk; eyes not extending beyond end of first segment of antennular peduncle; ocular scale truncate, widely separated; anterior end of ophthalmic somite with a small triangular median notch; C I 308 in male and 313 in female. Antennular somite blunt. Antennal scale slender, short, more than half as long as carapace. Carapace broad, anterior width more than half median length (including rostrum); anterolateral spines sharp, size moderate, not extending to base of rostral plate; median carina of carapace obscure anteriorly, anterior bifurcation replaced by lines of dark pigment. Dactylus of raptorial claw with 6 teeth; outer margin of dactylus sinuate; dorsal ridge of carpus tuberculate, with 2 tubercles at distal end of sharp median ridge; inferodistal angle of outer face of merus with blunt, triangular notch. Mandibular palp and four epipods present. Last three of thoracic somites with submedian carinae; fifth somite faint; indication of submedian carina on posterior half; lateral process of fifth somite bilobed, with anterior lobe as an anteriorly directed blunt spine and posterior lobe slender, sharp, directed laterally; lateral process of sixth somite bilobed, with anterior lobe slightly recurved posteriorly and posterior lobe larger and triangular in shape; lateral process of seventh somite bilobed, with anterior lobe small, triangular with blunt apex and posterior lobe much larger with acute apex; ventral keel of eighth somite low, rounded. First five abdominal somites with eight dorsal carinae; submedians parallel on four anterior somites, divergent on fifth; abdominal carinae equipped with spines arranged as follows: submedian 5-6, intermediate 3-6, lateral 2-6, marginal 1 - 5; sixth somite with a small ventrolateral spine in front of articulation of each uropod. Telson somewhat broader than long, armed with six slender marginal teeth; praelateral lobe present; dorsal surface ornamented with one median carina and carinae of marginal teeth, supplementary dorsal tubercles absent; denticles rounded, arranged as 3 - 4 submedian, 9 intermediate, 1 lateral; ventral surface with an entire post-anal keel. Outer margin of uropodal exopod with eight movable spines, with largest distalmost not reaching midlength of distal segment; endopod slender, slightly curved; basal prolongation of uropod with sharp triangular projection on outer margin of inner longer spine, inner margin of projecting lobe concave (Fig. Id).

**Other measurements.** — Holotype: TL 54.24 mm; CI 10.80 mm; cornea width 3.44 mm; anterior carapace width 6.34 mm.

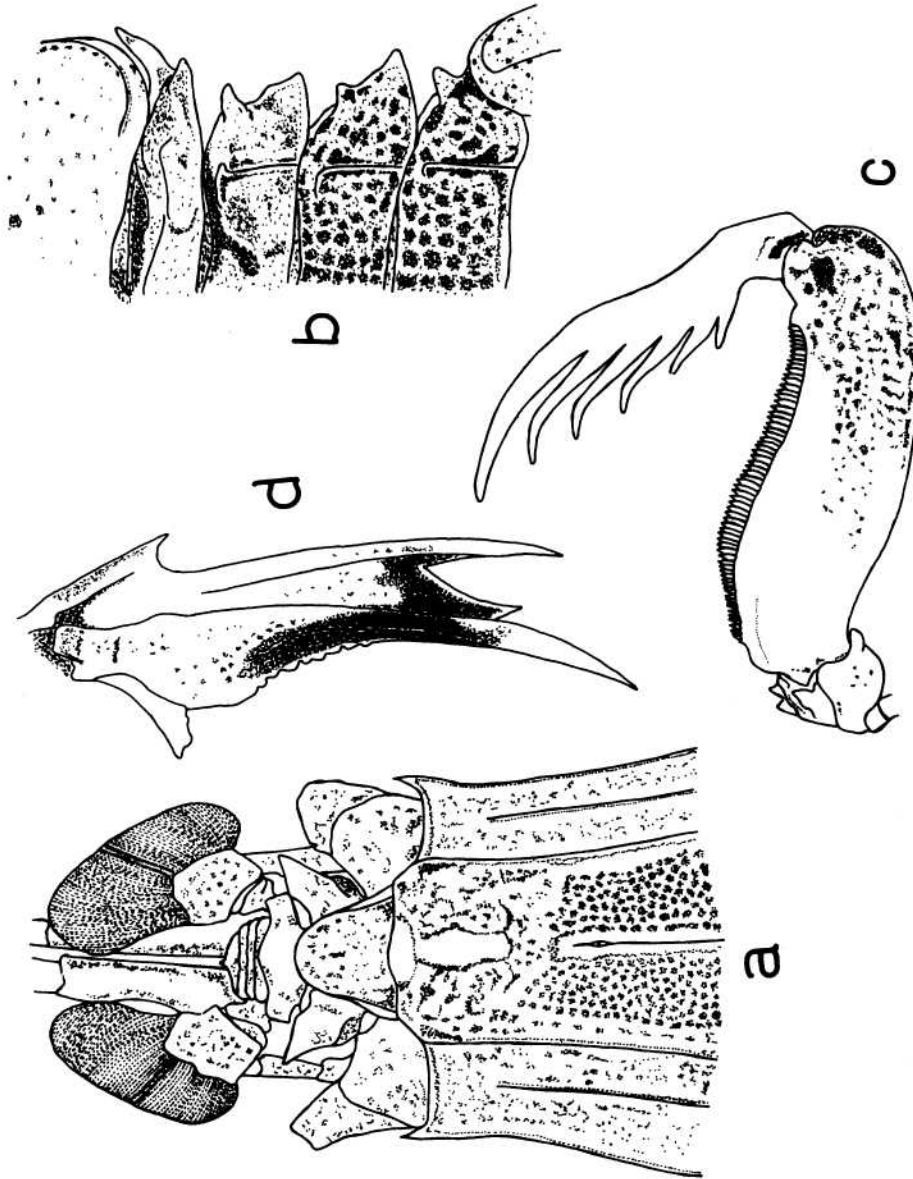


Fig. 1. *Oratosquilla jakartensis* new species, female holotype of 54.24 mm from Jakarta Bay, Indonesia: a. anterior part of body; b. fifth to eighth thoracic somites; c. raptorial claw; and d. basal prolongation of uropod.

Paratype: TL 39.58 mm; CI 7.90 mm; cornea width 2.56 mm; anterior carapace width 4.56 mm.

**Colour.** — The preserved specimens are greyish mottled heavily with dark pigment. Median dorsal surface of the carapace, median dorsal surface of the exposed thoracic somites, median posterior margin of the first five abdominal somites, posterolateral portion of the sixth abdominal somite, outer distal part of the raptorial propodus, distal portion of the uropodal endopod and dorsolateral portion of the telson are the more heavily pigmented areas. Black pigmentation can be seen on the distal part of proximal segment of uropodal exopod, the midrib of distal segment of the uropodal exopod (on which the pigmentation becomes less toward inner margin), the inner and distal margin of the basal prolongation of the uropod, and the carinae of the marginal teeth of telson.

**Remarks.** — *Oratosquilla jakartensis* clearly belongs to the *woodmasoni* group, which is characterized by the broad, smooth carapace and the absence of anterior bifurcation of median carina.

*O. jakartensis* very closely resembles *O. woodmasoni* and *O. tweediei*. From *O. woodmasoni* it can be distinguished by the more prominent anterior lobe of the lateral process of the sixth and seventh thoracic somites and the much more prominent lobe on the outer margin of the inner longer spine of the basal prolongation of the uropod. From *O. tweediei* it is distinguished by the unarmed posterior submedian carina of the fourth abdominal somite and a median notch present at anterior margin of the ophthalmic somite of *jakartensis* (rounded in *tweediei*).

CHOPRA (1934) mentioned a single female of 80 mm from Sandheads, India, together with some specimens from various localities in the Indian Museum collection as showing the presence of a small notch on anterior margin of the ophthalmic somite and the more developed lobe at the outer margin of the inner longer spine of the basal prolongation of the uropod.

These characters were also mentioned by HOLTHUIS (1941) in the Snellius specimens which were partly collected from Jakarta. Some of the Snellius specimens and those mentioned by CHOPRA may belong to *jakartensis*. This supposition is supported by the fact that both authors did not mention the presence of the armed submedian carina of the fourth abdominal somite.

**Type locality.** — Jakarta Bay, Indonesia.

**Etymology.** — The specific name is derived from the type locality, the Jakarta Bay.

**Oratosquilla nepa** (LATREILLE 1825)

*Squilla nepa* LATREILLE 1825: 471 - 472. — KEMP 1913: 60 - 64, pi. 4, fig. 49. — SUNIER 1918: 6-7, fig. 2. — HANSEN 1926: 10-11. — HOLTHUIS 1941: 245-246. *Oratosquilla nepa* MANNING & SERENE 1968: 117 (listed). — MANNING 1971: 3 (in key).

**Material.** — 1 ♀ 105.28 mm; Pasar Ikan fishmarket, Jakarta; coll. M. K. Moosa, 1/2/1965; cat. no. S. 042. — 1 ♀ 113.82 mm; Pasar Ikan fishmarket, Jakarta; coll. M. K. Moosa, 3/11/1965; cat. no. S. 075. — 1 ♀ 137.58 mm; Undrus Isl., Jakarta Bay; coll. Kasijan R., 9/1/1962; cat. no. S. 123. — 2 ♀ ♀ 116.22-125.80 mm; water reservoir, Pluit Project, Jakarta; cast net; coll. Saniman, 21/12/1964; cat. no. S. 124-125. — 4 ♀ ♀ 80.74 -146.06 mm; fish pond, Muara Baru, Jakarta; cast net; coll. Saniman, 10/12/1964; cat. no. S. 126 -130. — 1 ♀ 132.48 mm; Pasar Ikan fishmarket, Jakarta; coll. Sapri D., 1/11/1965; cat. no. S. 171. — 1 ♀ 113.80 mm; Sakit Isl., Jakarta Bay; coll. Kasijan R., 28/6/1962; cat. no. S. 181. — 1 ♂ 86.82 mm; Petundang Isl.; coll. Kasijan R., 8/8/1961; cat. no. S. 292. — 1 ♂ 105.86 mm; Sakit Isl., Jakarta Bay; coll. Kasijan R., 28/6/1962; cat. no. S. 293. — 1 ♀ 111.42 mm; water reservoir, Pluit Project, Jakarta; coll. Sudarmo, 15/2/1966; cat. no. S. 305. — 1 ♂ 45.50 mm, 1 ♀ 83.72 mm; Muara Karang fishmarket, Jakarta; coll. Sularto M., 20/8/1971; cat. no. S. 330 - 331. — 1 ♀ 92.38 mm; West coast of Muara Karang river mouth; cast net; coll. M. K. Moosa *et al*, 15/7/1972; cat. no. S. 852. — 9 ♂ ♂ 68.02 - 84.94 mm, 7 ♀ ♀ 49.62 - 94.42 mm; West coast of Pasar Ikan river mouth, Jakarta; cast net; mud; coll. M. K. Moosa *et al* 5/8/1972,; cat. no. S. 854-863. — 1 ♂ 69.96 mm; Muara Kalong, Jakarta; mud; coll. M. K. Moosa *et al*, 19/8/1972; cat. no. S. 1200. — 1 ♂ 115.84 mm; off Sukadana, east of Lampung, South Sumatera; coll. Nurzali, 3/1/1973; cat. no. S. 1201.

Previous records. — Jakarta; Jakarta fishmarket; Muara Baru; east of Pasar Ikan river mouth; Ancol; Damar Kecil Island; near Tanjung Priok (SUNIER 1918; HOLTHUIS 1941).

**Oratosquilla quinquentata** (BROOKS 1886)

*Squilla quinquentata* BROOKS 1886: 26-30, pi. 1, fig. 3, pi. 2, fig. 6. — KEMP 1913: 52-53. — SUNIER 1918: 5. — HOLTHUIS 1941: 244-245.

*Oratosquilla quinquentata* MANNING & SERENE 1968: 177 (listed). — MANNING 1971: 14 (in key).

**Remarks.** — The species is not represented in the collection, and known only from northwest of Seribu Islands (SUNIER 1918).

### ***Oratosquilla tweediei* MANNING 1971**

*Oratosquilla tweediei* MANNING 1971: 12 -14, fig. 4.

**Material.** — 1 ♀ 95.98 mm; Jakarta Bay; cat. no. S. 205. — 1 ♀ 115.48 mm; off Sukadana, east of Lampung, South Sumatera; coll. Nurzali, 5/1/1973; cat.no. S. 1208.

**Remarks.** — The specimens fully agree with the description and figure of MANNING (1971). The spines of the lateral, intermediate and sub-median carinae of the last two abdominal somite are pink in colour. The spine on the dorsal surface of the proximal segment of the uropod is also pink. The marginal teeth of the telson are olive green.

**Previous record.** — None. A new record for the area.

### ***Oratosquilla woodmasoni* (KEMP 1911)**

*Squilla woodmasoni* KEMP 1911: 99. — 1913: 74-76, pi. 5, figs. 63-65. — SUNIER 1918: 9. — HANSEN 1926: 12. — HOLTHUIS 1941: 255. — MANNING 1966: 100 -101, fig. 5.

*Oratosquilla woodmasoni* MANNING & SERENE 1968: 117 (listed). — MANNING 1971: 11 (in key).

**Remarks.** — The species is not represented in the collection, and known only from northwest of Seribu Islands (SUNIER 1918), Tg. Priok, Jakarta (HOLTHUIS 1941).

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