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Redescription of *Oratosquilla interrupta* (Manning, 1995) (Crustacea: Stomatopoda) and its Transfer to *Oratosquillina* (Manning, 1995) from Northern Arabian Sea, Karachi, Pakistan

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The stomatopods are among the most aggressive and behaviourally complex crustaceans. All species are active predators and mark one of the few radiations of obligate carnivores within the Crustacea (Schram, 1986). Characteristics features of Stomatopods are large powerful raptorial appendages. Prey is captured by 'spearing' or 'smashing', depending on whether the dactyl is extended or kept folded during the strike. The two methods of prey capture distinguish two broad functional groups-the 'smashers' and 'stomatopoda', the only living representatives of the subclass Hoplocarida (Schram, 1986).

Manning (1995) subdivided *Oratosquilla* and proposed *Oratosquillina* for the *perpensa* and *gonypetes* groups (Manning, 1978). Twenty two species were recognized in *Oratosquillina* and an additional species from Karachi coast.

Reexamination of the *Oratosquillina interrupta* shows not only that it belongs in the genus *Oratosquilla*, but also that it is a senior synonym of *Oratosquilla interrupta* (Kemp, 1911). The condition of the anterior bifurcation of the median carina of the carapace; whether interrupted or uninterrupted basally, is an important character distinguishing species groups and genera among squilloids (Manning, 1970, 1978, 1995).

In comparison with the fauna of other areas, the stomatopod fauna of the northern Arabian Sea shows diversification. Specimens of *Oratosquillina interrupta* recently collected from the Karachi coast, constituting the first record of the genus and species from Pakistan. Manning (1995) discussed the validity of the genus *Oratosquillina* in detail. The collection comprises 369 specimens representing Superfamily Squilloidea, family Squillidae. The holotype of *Oratosquillina interrupta* (Manning, 1995) is redescribed and transferred from *Oratosquilla* (Manning, 1968) to *Oratosquillina* (Manning, 1995). Characters previously used to distinguish *Oratosquilla interrupta* is described and illustrated. A diagnostic key to the species known and it is recorded for the first time from Northern Arabian Sea Pakistani waters.

Several major studies of stomatopods are presently in progress, each of which includes material of, rather than

await completion of those works to correct the nomenclature, however, the present note serves to clarify the taxonomic status of both species in order to simplify the nomenclatural discussion in forthcoming works and to minimize perpetuation of errors in the taxonomic literature. Descriptive terminology generally follows Manning (1969, 1978) with modifications used by Ah Yong (1998). All measurements are in millimeters (mm). Total length (TL) is measured along the midline from the tip of the rostrum to the apices of the submedian teeth. Carapace length (CL) is measured along the midline and excludes the rostral plate. Abbreviations used in this account include; abdominal somites (AS); median (MD); submedian (SM); lateral (LT); marginal (MG); Type material is deposited in the collections of Zoological Museum, University of Karachi.

***Oratosquillina interrupta* (Kemp, 1911):** *Squilla interrupta* Kemp, 1911:98 (type-locality: India), Kemp, 1913:3, 10, 23, 72, pl.5, figs. 60-62; Holthius, 1941: 253, 254; Liu, 1949: 39-41; text-figs. 3a-b; Lee & Wu, 1966: 49, 50; Manning, 1966: 97, 98.

Chloridella interrupta Schmitt, 1931 (1929): 140, 147.

Oratosquilla interrupta Manning, 1978h: 6, 7.

Oratosquilla interrupta Tirmizi & Manning, 1968: 1-48

Oratosquillina interrupta Manning, 1995: 25 [list], 225, 231-233, text-figs. 136e-g, 140, 141.

Oratosquillina interrupta Ah Yong *et al.* (1999): 49-51

Material examined.-64 Males, TL=56 mm, 82; Females, TL=581 mm; 7th October, 2002, 45 Males, TL= 54mm; 95 Females, TL=75mm; 40 Males TL=95 mm, 43 Females, TL=64mm; 21st December, 2002; Karachi Fish Harbour.

Measurements. -Males (n= 149) TL = 56-89 mm, females (n= 220) TL 58-95 mm.

Remarks: Although *Oratosquillina interrupta* bear dorsum with rugose, pitted; distinct longitudinal carinae. Posterolateral angle of carapace entire, broadly rounded (Fig. 1). Dorsal surface not covered with mesh like reticulations, cornea of eye broader than stalk. Dorsal carina of carpus of raptorial claws appear indistinctly divided into 2 blunt lobes; propodus of raptorial claw

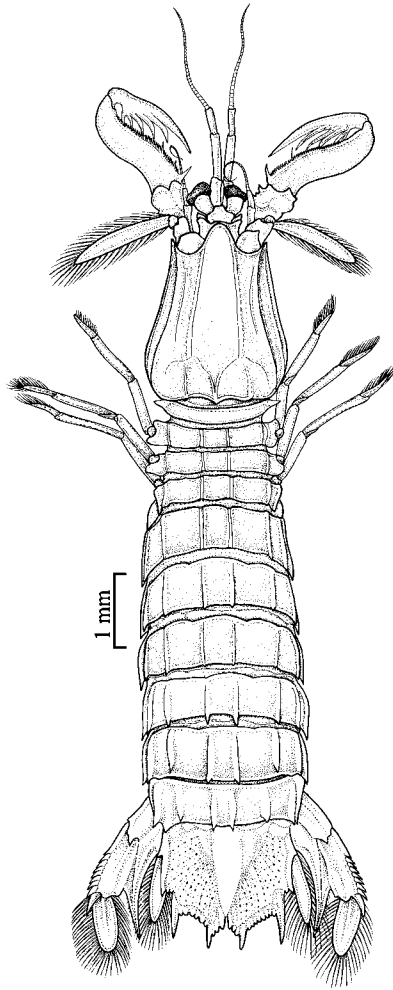


Fig. 1: *Oratosquilla interrupta* Kemp, 1911
Holotype Adult Male, TL=56 mm, 7th October, 2002,
Karachi Fish Harbour.

lined with dorsally set pectinations Lateral process of fifth thoracic somite (TS) bilobed; Abdominal somites (AS) smooth between submedian carinae. Median carina (MD) of carapace interrupted at base of anterior bifurcation (or anterior bifurcation absent), anterior margin of ophthalmic somite (OS) marginate or truncate, lacking a median spine; lobe between spines of uropodal protopod convex.

The specimens reported here agree well with Tirmizi and Manning, (1968) and Ahyong *et al.* (1999) account and are well within the reported distributional range for *Oratosquilla interrupta* and (Ahyong, 1999) specimens from Western Indian Ocean to Australia, Vietnam, Hong Kong and Taiwan, also reported from Northern Arabian Sea.

Discussion

Three species of *Oratosquilla* bear numerous supplementary carinae on the dorsal surface of the telson; *O. striata* (Manning, 1978), *O. fossulata* (Moosa, 1986) and *O. microps* (Manning and Garcia, 1982). Two of these *O. striata* and *O. fossulata* belong to the gonypetes group, which lack an infero-distal spine on the outer margin of the merus of the raptorial claw. *Oratosquilla interrupta* bearing dorsal carina of carpus of raptorial claw divided into 2 blunt lobes; lobe between spines of uropodal protopod is convex.

Consequently *Oratosquilla interrupta* has always been associated with the species in the *perpensa* and *gonypetes* groups of *Oratosquilla* (Manning, 1978) each of which were subsequently transferred to the genus *Oratosquilla* (Manning, 1995).

Key to Stomatopoda known from Northern Arabian sea:

1. Cornea width less than 1/3 carapace length (if cornea equal to or larger than 1/3 carapace length, than rostral plate with median carina). Dactylus of raptorial claw with 5 or 6 teeth-----*Oratosquilla* (Manning, 1968)-----2
2. Anterior bifurcation of median carina of carapace opening posterior to dorsal pit. Cornea small, set transversely on stalk. Dactylus of raptorial claw with 6 teeth-----*O. nepa* (Latreille, 1828)
- Anterior bifurcation of median carina of carapace absent, or when present open anterior to dorsal pit. Cornea large, set obliquely on stalk.-----3
3. Anterior branches of bifurcation of median carina of carapace present, well formed, median carina interrupted at base of bifurcation (dactylus of raptorial claw with 6 teeth)-----*O. interrupta* (Kemp, 1911)
- Anterior branches of bifurcation of median carina of carapace completely absent, area of bifurcation usually smooth, polished (occasionally arms of bifurcation represented by broken lines tubes or by lines of pigment, entire branches rarely present)---4
4. Anterior width of carapace greater than 1/2 median length. Branches of bifurcation absent. Dactylus of raptorial claw with 6 teeth-----*O. hesperia* (Manning, 1968).

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