# A NEW SPECIES OF ORATOSQUILLA (CRUSTACEA: STOMATOPODA) FROM ARABIAN GULF 

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(Received June 24, 1970; revised September 22, 1970)


#### Abstract

A new species Oratosquilla arabica (Crustacea: Stomatopoda), was collected during an ecological survey of Iraqi fauna from Arabian Gulf in April, 1968. The holotype male was described with stress on most distinguishing characters.


## Oratosquilla arabica sp. nov.

Squilla interrupta-Kemp, ${ }^{3}$ 1913, Mem. Ind. Mus. IV, p. 72, pl. V: Fig. 60-62.

Oratosquilla interrupta-Tirmizi and Manning, ${ }^{9}$ ig68, Proc. U.S. Nat. Mus., 125 (3666), p. 41, Fig. 16.

Material. - 3 males $(67-80) \mathrm{mm} ; ~ 1, ~ ㅇ+73 \mathrm{~mm}$. These specimens were collected from Arabian Gulf, during an ecological survey to Iraqi fauna, started by the University of Basrah in April 1968, and are kept in the Department of Biology, College of Science.

Remarks.-This species agrees with the accounts of the species described by Kemp, ${ }^{3}$ and Tirmizi and Manning, 9 but it differs in the following:
(i) The first joint of antennular peduncle supplied with six spines, one medial, one lateral, three disto-medial, two rostral; (2) the antennal protopodite with dorsal spine, anteriorly directed; (3) the posterior margin of rostral plate with inlet forming an oval superficial pit with anterior inlet of carapace; (4) anterior width of carapace more than one-half median length, ocular scale cordiform; (5) the outer margin of intermediate carina of sixth pleomer with a small pointed lobe; (6) a transverse lobe situated between the anterior end of the prelateral lobe and the apical spine of intermediate carine of sixth pleomer, where a small oblique lobe is also situated; (7) the denticles of telson are: $2-3,6-8,1$.

Description.5,6-Holotype male, 80 mm , eye large, elongate, cornea faintly bilobed, broader than the inflated stalk, set obliquely on it, extending to distal end of the first joint of antennular peduncle. Rostral plate subquadrate, with median carina but with posterior inlet forming an oval superficial pit with anterior inlet of carapace.

Ocular scale cordiform, pointed antero-laterally. Ophthalmic somite wing-nut in form, projecting antero-laterally at both sides, never pointed.

Carapace deeply excavated antero-laterally, slightly rounded postero-laterally, its median carina with fine anterior bifurcation and posterior one, but rostrally directed. Anterior width of carapace is more than one-half its median length, while its antero-lateral spines well developed, but
not exceeding the posterior margin of rostral plate (Fig. I). Antennular peduncle is shorter than carapace, of 3 joints, first is the thickest, second is the longest, and third is the thinnest. Near proximal end of first joint are 2 spines; a medial spine and a lateral opposite to it. Distally are 3 medial spines and 2 apical ones directed anteriorly and located at articulation with second joint. The flagellum with 2 segmented branches, the inner is thicker and longer, the outer shortly bifurcates into inner jointed ramus and outer shorter one; each joint of former with a single spine distally, while the latter densed with hairs (Fig. 2 A). Antennal scale 3 times as long as broad and latero-posteriorly directed. Antennal peduncle extending laterally from eyes, antennal protopodite with dorsal spine, anteriorly directed. Dactylus of raptorial claw with 6 teeth, outer margin slightly sinuous, upper margin of propodus pectinate with 3 proximal movable oblique spines, middle one shortest and located slightly interior to the others (Fig. 2 B), propodi of third and fourth peraeopods longer than broad, not beaded ventrally, carpus with two dorsal processes, mandible palp present, 4 epipods, ventral keel of eighth peracomer is right triangled. The last 3 peraeomers with unarmed submedian and intermediate carina, anterior lobe of lateral process of fifth peracomer slender, spiniform, latero-anteriorly directed, posterior one short with pointed apex laterally directed, of sixth and seventh peraeomers, the anterior lobe is smaller than the posterior, whereas the anterior lobe of eighth peracomer is larger than the posterior, the latter is covered by half-oval lobe, extending from anterior margin of lateral portion of first pleomer.

Abdominal Carina Spined. ${ }^{8}$-Submedian 5-6, intermediate 4-6, lateral 3-6, marginal $1-5$. The sixth pleomer is with short ventral spine at its articulation with uropodal protopodite. The outer margin of intermediate carina of the sixth somite with a small pointed lobe.

Pleopods. ${ }^{2}$-The exopodite of 2 joints, proximal is long, distal is broader, half-oval and se toblique to the former. Near articulation of the proximal joint with protopodite is a tubular one sidefeathered gills which cover proximal portion of


Fig. 1.-Anterior portion with carapace, last peracomers and 1. pleomer of male; Fig. 2.-(A)Antennula; (B)1. peraeopod, raptorial claw; (C) 1. pleopod of male; Fig. 3.-(A) 6 pleomer with telson; (B) Uropod ventral view; (C) uropod dorsal view.
endopodite. A curved process is extending from inner side of endopodite in a manner that processes of the two sides take the form of a fan to serve swimming. All pleopods armed with hairs (Fig. 2C).

Telson much broader than long, with sharp median carina terminated with a posterior fixed spine, dorsal surface unarmed, posterior margin cleavated medially opposite to spine of median carina. Telson with three pairs of sharp marginal fixed tecth: submedian, intermediate, and lateral. Prelateral lobes present, denticles large rounded, $2-3,6-8$, I. A transverse lobe extending from anterior end of prelateral lobe to apical spine of intermediate carina of sixth pleomer where is a small oblique lobe (Fig. 3A). Ventral surface of uropodal protopodite (Fig. 3B), with a short spine at its articulation with endopodite. Its inner fork, extending as far as two-thirds of distal joint of exopodite, with convex lobe on outer margin and is serrated on inner margin. The outer fork extending till proximal third of ventral surface of distal joint of exopodite. At articulation of protopodite with exopodite (Fig. ${ }_{3} \mathrm{C}$ ) is a dorsal spine caudally directed. Endopodite slender, elongate, twice as long as the distal joint of exopodite. The proximal joint of exopodite with 8-9 movable spines; posterior one is the largest and extending as far as one-third of distal joint. At articulation of proximal joint of exopodite with distal one is a ventral spine (Fig. 3 B ). The entire uropod armed with hairs.

Colour.-Pale-yellow, eye light-brown with reddish-brown stalk. A row of dark pigments, on posterior margins of the carapace as well as the last three peraeomers, and the first five pleomers.

Female smaller and more faded than male, but bilobed cornea more conspicuous than male.

Acknowledgements.-The author wishes to express his gratitude to Dr. H.-E. Gruner, Curator of Crustacea Department and Prof. K. Senglaub, Director of the Natural History Museum, Berlin, for providing facilities for research to identify this specimen.

## References

I. B. Chopra, Records of the Indian Museum, 36, 17 (I934), figs. $1-5$.
2. A. Kaestner, Lehrbuch der Speziellen Zoologie, Band 1,2 . Teil, VEB Gustav Fischer Verlag, Jena (1967).
3. S. Kemp, Mem. Indian Museum, 4, I (1963), io figs. plates $\mathrm{I}-\mathrm{Io}$.
4. S. Kemp and B. Chopra, Records of the Indian Museum, 22, 297 (1921), figs. I-4.
5. R.B. Manning, Notes on some Stomatopoda Crustacea from Southern Africa, Smithsonian Contributions to Zoology, No. I (1969).
6. R.B. Mannig A Review of the Genus Harpi-


Description of Three New Species. Smithsonian Contributions to Zoology, No. 36 (1969).
7. W.L. Schmitt, Allan Hancock Foundation Pacific Expeditions, 5(4), I29 Figs. I-33 (1940).

lenzi (Crustacea: Stomatopoda), from Karachi Coast with Notes on Other Species (University of Karachi, Pakistan 1960), vol III, No. 3.
7. N.M. Tirmizi and R.B. Manning, Proc. U.S Nat. Mus., 125 (3666), I (I968), figs. I-I 7 .

