

A NEW GENUS OF STOMATOPOD FROM THE CARIBBEAN SEA (STOMATOPODA: SQUILLIDAE)

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ABSTRACT

A new genus, *Humesosquilla*, is recognized for *Squilla decimdentata* Manning, 1970. It can be distinguished from all recognized species of *Squilla sensu* Manning, 1969, sharing a single lateral process of the fifth thoracic somite by the presence of 10–11 teeth on the dactylus of the raptorial claw.

In our account of the genus *Fennerosquilla* Manning and Camp, 1983, we noted that since Manning's 1968 limitation of *Squilla* Fabricius, 1787, to species occurring in the Atlanto-East Pacific region, several features, including the number of teeth on the dactylus of the raptorial claw, are now recognized as important characters at the generic level in squillids. We also pointed out that *Squilla decimdentata* Manning, 1970, has 10 teeth on the raptorial claw, far more than any other

species of *Squilla*. Here we recognize a new genus for a species formerly placed in *Squilla* on the basis of the number of teeth on its raptorial claw.

Humesosquilla, new genus

Diagnosis.—Size medium, total length of adults less than 90 mm. Eye large, cornea bilobed, inner margin of eye longer than outer. Rostral plate with median carina. Median carina of carapace entire, with bifurca-

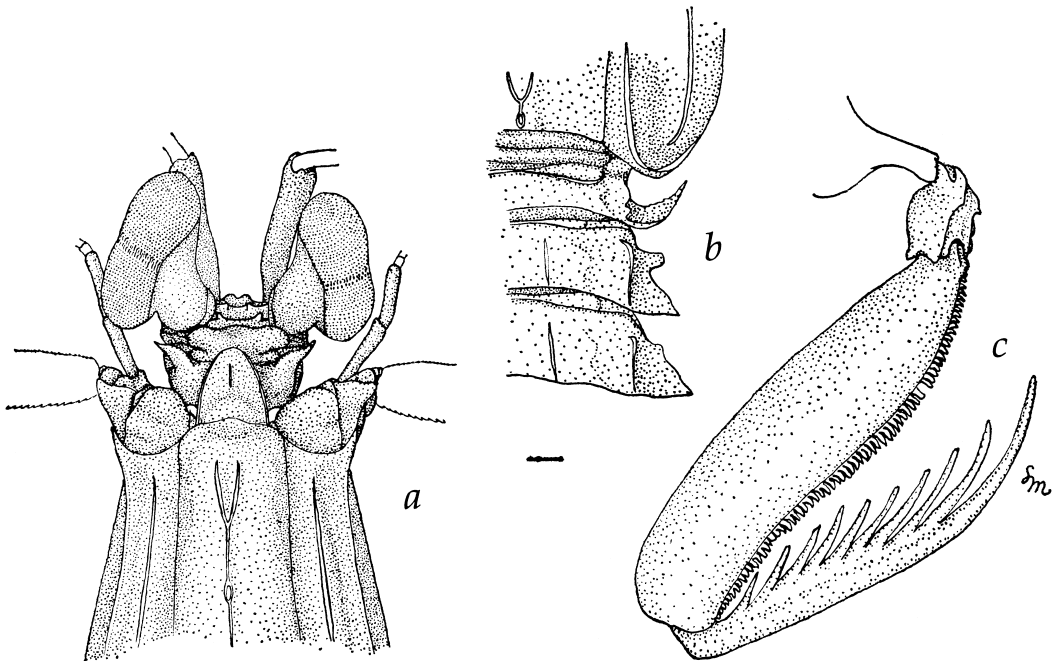


Fig. 1. *Humesosquilla decimdentata* (Manning, 1970). Female paratype, total length 68 mm, off Venezuela. a, anterior part of carapace and anterior appendages; b, lateral processes of fifth to seventh thoracic somites; c, raptorial claw (from Manning, 1970). Scale = 1 mm.

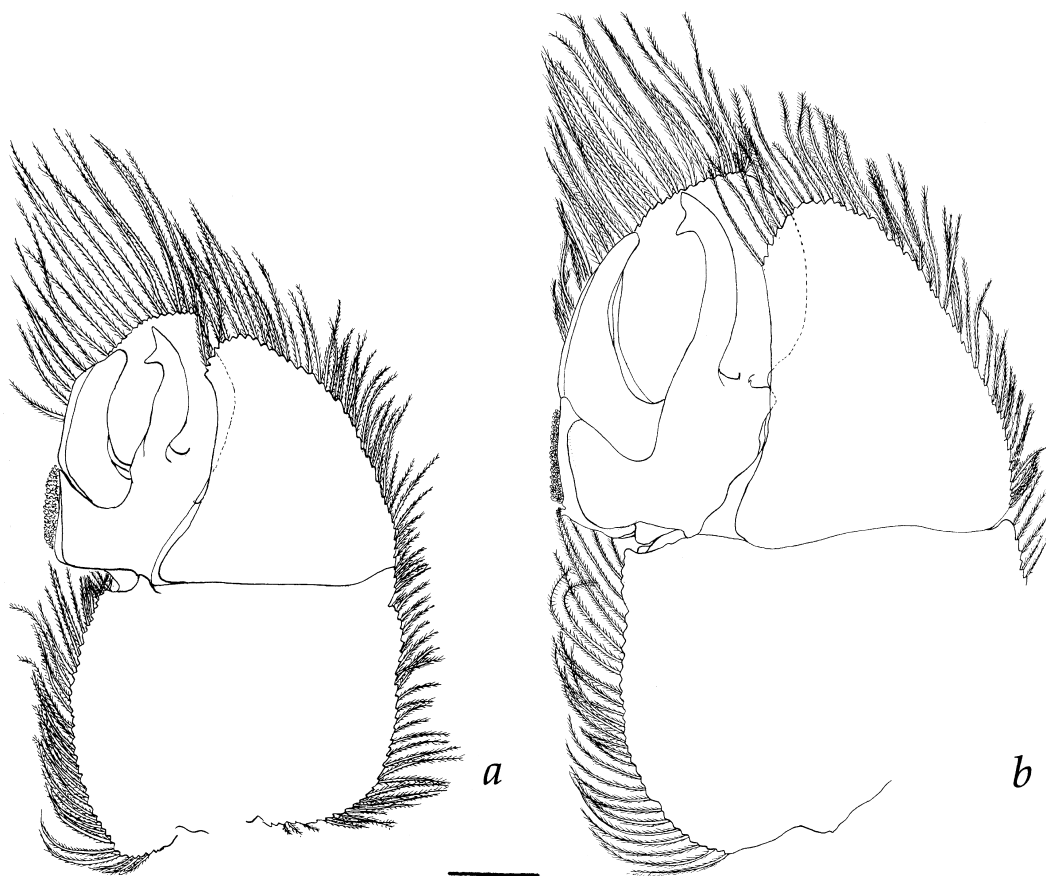


Fig. 2. Endopod of male first pleopod. *a*, *Humesosquilla decimdentata* (Manning, 1970), male holotype, total length 80 mm; *b*, *Squilla mantis* (Linnaeus, 1758), male, total length 134 mm, off Tunisia. Scales = 1 mm.

tion well anterior to dorsal pit. Mandibular palp and 5 epipods present. Dactylus of raptorial claw with 10–11, usually 10, teeth. Lateral process of fifth thoracic somite a slender, sharp, curved spine. Lateral processes of sixth and seventh thoracic somites bilobed, posterolateral lobes larger, apices acute. Abdominal somites with 4 pairs of carinae, medians absent. Telson with median carina only on dorsal surface. Apices of submedian teeth of telson fixed.

Type species.—*Squilla decimdentata* Manning, 1970, by present designation and monotypy.

Etymology.—Named for our colleague Arthur G. Humes, formerly with the Boston University Marine Program at Woods Hole, Massachusetts. His boundless energy, dedication, and passion for excellence defined both his role as the founding editor of *Journal of Crustacean Biology*, for its first 19 vol-

umes, as well as his remarkably productive research career, in which he named over 700 species of copepods with only 2 synonyms. The gender is feminine.

Remarks.—The Atlanto-East Pacific genera *Squilla*, *Fennerosquilla*, and *Gibbesia* Manning and Heard, 1997, and the Indo-West Pacific genus *Kempina* Manning, 1978, form a closely related group of genera within the Squillidae and share the characteristics of having distinctly bilobed corneas, a single lateral process on the fifth thoracic somite, well-developed dorsal carinae, and fixed submedian teeth on the telson (Ahyong, 1999). *Humesosquilla* belongs to that group of genera. Members of *Humesosquilla* can be distinguished from those of *Squilla* by the presence of 10–11 teeth on the dactylus of the raptorial claw rather than six teeth. Members of *Fennerosquilla* have seven teeth on the dacty-

lus of the claw and a strongly bilobed lateral process on the sixth thoracic somite, with the anterior lobe almost as large as the posterior lobe, whereas those of *Humesosquilla* have more teeth on the claw and the posterior lobe on the sixth thoracic somite is much larger than the anterior lobe. Members of *Gibbesia* have five teeth on the claw and lack a mandibular palp, whereas those of *Humesosquilla* have a mandibular palp. Members of *Kempina* differ from those of *Humesosquilla* by having the anterior lobe of the lateral process on the seventh thoracic somite large rather than small, among other characters.

Only three genera of the Squillidae have members with ten or more teeth on the dactylus of the raptorial claw. Members of *Pterygosquilla* Hilgendorf, 1890, have as many as ten (but usually 8 or 9) teeth on the claw and can be distinguished from *Humesosquilla* by having movable, rather than fixed, apices on the submedian teeth of the telson. Members of *Natosquilla* Manning, 1978, have 10–18 teeth on the claw and can be distinguished from *Humesosquilla* by having a bilobed lateral process on the fifth thoracic somite.

Ingle (1963: 5) was the first modern author to suggest that "the shape of the petasma of the first pleopod of the male is of some value in assigning the species to various genera." He provided figures of the petasma of several species representing different genera as they were defined at that time. His observations have been validated in recent studies by Ah-yong (1997) and Cappola (1997). We agree with all of these authors on the importance of characters of the petasma, especially at higher levels of classification. We provide here figures of the petasma of *H. decimdentata* and of *Squilla mantis* (Linnaeus, 1758), the type species of *Squilla*. The petasma of each of these species is quite similar; we can detect no significant differences.

A specimen of *H. decimdentata* lacking its raptorial claws may be confused with material of *Squilla lijdingi* Holthuis, 1959, but can be distinguished from that species by the presence of a carina on the rostral plate and the presence of a well-formed anterior bifurcation on the median carina of the carapace; *S. lijdingi* lacks those characters (Manning, 1969, 1970). A specimen of *S. lijdingi* with claws can be distinguished immediately from *H. decimdentata* by the presence of only 6 teeth on the raptorial claw.

ACKNOWLEDGEMENTS

The figures were prepared by Lilly King Manning. Manning's studies on the systematics of stomatopods were supported by the Smithsonian Marine Station at Fort Pierce, Florida, a facility of the National Museum of Natural History, Washington. This is contribution 485 from that facility. DKC is especially grateful to Rafael Lemaitre, Smithsonian Institution, for providing assistance and making available all of Ray Manning's notes and figures concerning this manuscript after Ray's death while the manuscript was in review. We are also grateful to the organizers of this dedication issue, Paul Clark, Rony Huys, and Geoff Boxshall, for asking us to contribute to it. Finally, we thank the reviewers who commented on the manuscript; their suggestions led us to improve the text.

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RECEIVED: 16 November 1999.

ACCEPTED: 26 July 2000.