

**Note on *Caledoniella montrouzieri* Souverbie, a Gastropod
Mollusc living commensally on Stomatopod Crustacea**

by

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When studying the collections of indo-westpacific Stomatopod Crustacea of the Rijksmuseum van Natuurlijke Historie at Leiden and the Zoological Museum at Amsterdam, I found three specimens of *Gonodactylus chiragra* (Fabr.) that on the ventral surface of the body were provided with commensal Gastropods. These Gastropods were kindly identified for me by Dr. C. G. F. H. BAYER, curator of Molluscs of the Rijksmuseum van Natuurlijke Historie.

In a report on the Stomatopoda collected by the Snellius Expedition (HOLTHUIS, 1941, p. 280) I made already mention of the presence of this Gastropod Mollusc on two of the examined Stomatopod specimens. A female of *Gonodactylus chiragra* (Fabr.) collected by the Snellius Expedition at Amboina, Moluccas (September 11-17, 1930) had a specimen of *Caledoniella montrouzieri* Souv. placed on the ventral surface of the eighth thoracic segment between the bases of the third pereopods, while a second specimen of this Gastropod species was attached to the ventral surface of the last abdominal segment of the Stomatopod. A female of *Gonodactylus chiragra* (Fabr.) belonging to the collection of the Amsterdam Museum and collected at Amboina (1913, leg. M.M. WILLEMSZ GEEROOMS) had a juvenile Gastropod attached to the ventral surface of the eighth thoracic segment between the bases of the pereopods. This mollusc also belongs in the genus *Caledoniella* and probably is *C. montrouzieri* Souv., but because it is not yet adult, its identity could not be made out with certainty. The specimen of *Gonodactylus chiragra* collected by the Snellius Expedition showed between the pleopods egg masses of a Gastropod Mollusc species (see HOLTHUIS 1941, fig. 7a). It seems highly probable that these egg masses are those of *Caledoniella montrouzieri* Souv. The eggs in these masses were in different stages of development, in some of them the young larvae were already visible.

Since the publication of my Snellius report I obtained a third specimen of *Gonodactylus chiragra* (Fabr.) which was infested with a Gastropod Mollusc. This Stomatopod, which forms part of the collection of the Leiden Museum, is a female of 17 mm length and originates from Matapao, Samoa (September 3, 1901, leg W. VON BÜLOW). The Gastropod is situated on the ventral surface of the last thoracic segment between the bases of the third pereopods. Like in the Amsterdam specimen, here too the Mollusc is too young to permit of a definite specific identification; it certainly belongs in the genus

Caledoniella Souv. and probably is identical with *C. montrouzieri* Souv. The above supposition that *Caledoniella* should deposit its egg masses between the pleopods of *Gonodactylus* specimens, is strongly supported by the fact that such egg masses also are found in the Samoa specimen of *Gonodactylus chiragra*. As far as I am aware the presence of such egg masses between the pleopods of Stomatopoda heretofore has not been reported in literature.

In the above mentioned publication on the Snellius Stomatopoda I used the name *Epistethe gonodactyli* Preston for the commensal Gastropod, but this name proves to be incorrect since it is a younger synonym of the name *Caledoniella montrouzieri* Souv. ALLAN (1936, p. 392) was the first to point out the identity of PRESTON's and SOUVERBIE's species. The synonymy of the present species is as follows:

Caledoniella montrouzieri Souverbie

Caledoniella Montrouzieri Souverbie, 1869, p. 421; Souverbie & Montrouzier, 1870, p. 71, pl. 9 fig. 4; Fischer, 1885, p. 764; Tryon, 1886, pp. 12, 65, pl. 28 fig. 40; Paetel, 1887, p. 225.

Caledoniella montrouzieri Thiele, 1931, p. 265; Allan, 1936, p. 391, pl. 26 figs. 1-4.

Epistethe gonodactyli Preston, 1912, p. 126 fig.; Balss, 1927, p. 1070; Thiele, 1931, p. 738; Holthuis, 1941, p. 280, fig. 7a.

Episthete gonodactyli Balss, 1938, p. 124.

Caledoniella montrouzieri is the type and only species of the genus *Caledoniella* Souverbie, 1869, which usually is assigned to the family Lamellariidae. BASEDOW (1905) described a second species of this genus, *C. contusifomis*, but as ALLAN (1936) pointed out this species is so strongly different from *C. montrouzieri* that it cannot be maintained in the same genus. Miss ALLAN erected a new genus *Mysticoncha* for BASEDOW's species.

Caledoniella is widely distributed throughout the indo-westpacific region. It is now known from the following localities: Persian Gulf (PRESTON, 1912), Andaman Islands (PRESTON, 1912), Amboina, Moluccas (HOLTHUIS, 1941), Albany Passage, Cape York, Queensland (ALLAN, 1936), Art. Island, New Caledonia (SOUVERBIE, 1869; SOUVERBIE & MONTROUZIER, 1870), Matapao, Samoa (present paper). It always seems to be associated with species of the genus *Gonodactylus*. SOUVERBIE & MONTROUZIER (1870, p. 72) state: "*Trouvée vivante entre les pattes thoraciques d'un Gonodactyle*". PRESTON (1912, p. 126) found his specimens „on the ventral surface of a Stomatopod crustacean, *Gonodactylus chiragra*". Miss ALLAN's (1936, p. 392) specimens were placed "on the ventral surface between the legs" of "a specimen of *Gonodactylus*". Her figure shows one specimen situated on the ventral surface of the seventh thoracic segment between the bases of the second pair of pereopods, and one on the pleopods below the fifth abdominal segment. The specific identity of SOUVERBIE & MONTROUZIER's and Miss ALLAN's Stomatopods is not known.

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