Gonodactylellus spiridonovii, a new species of coral reef mantis shrimp from the Red Sea (Crustacea: Stomatopoda: Gonodactylidae)

Gonodactylellus spiridonovii, новый вид рифовых рако-богомолов из Красного моря (Crustacea: Stomatopoda: Gonodactylidae)

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ABSTRACT. A new species of coral reef mantis shrimp of the genus Gonodactylellus spiridonovii is described from the Red Sea, constituting the twenty-fourth species in the genus and fourth from the northwestern Indian Ocean. The new species aligns with those species of Gonodactylellus having short accessory median carinae on the telson that do not extend anteriorly beyond the posterior one-third of the median carina and lacking dorsal spinules on the telson surface (G. annularis Erdmann et Manning, 1998, G. erdmanii Ahyong, 2001, G. incipiens (Lanchester, 1903) and G. viridis (Serène, 1954)) but is distinguished from all of the species by the shorter anterior submedian carina of the species by the shorter anterior submedian carina that do not extend beyond the posterior one-third of the median carina that do not extend anteriorly beyond the posterior one-third of the median carina. A key to the species of Gonodactylellus from the northwestern Indian Ocean is provided.

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KEY WORDS: Crustacea, Stomatopoda, mantis shrimp, Red Sea, Indian Ocean.

КЛЮЧЕВЫЕ СЛОВА: Crustacea, Stomatopoda, раки-богомолы, Красное море, Индийский океан.

Introduction

The gonodactylid genus Gonodactylellus Manning, 1995, includes 23 comparatively small Indo-West Pacific species, usually TL 30 mm or less, that are abundant on tropical reefs in crevices in rock, coral, sponge, and biofouling [Ahyong, 2001, 2012, 2016]. The majority of species of Gonodactylellus occur in the western Pacific, but, to date, only three species of the genus have been recorded from the Red Sea and Persian Gulf, namely G. choprai Manning, 1968, G. demani (Henderson, 1893) and G. lanchesteri (Manning, 1967). A new species of Gonodactylellus is described herein from the region based on specimens collected from the Gulf of Aqaba and the Gulf of Aden.

Materials and methods

Morphological terminology follows Ahyong [2001] and Ahyong et al. [2008]. Total length (TL) is measured along the dorsal midline from the tip of the rostral plate to the apices of the submedian teeth of the telson. Carapace length (CL) is measured along the dorsal midline of the carapace and excludes the rostral plate. The abdominal-width carapace-length index (AWCLI) is given as 100× (width of abdominal somite 5)/CL. Specimens are deposited in the Senckenberg Museum Forschungsinstitut, Frankfurt, Germany (SMF).

Taxonomy

Superfamily Gonodactyloidea Giesbrecht, 1910
Family Gonodactylidae Giesbrecht, 1910
Genus Gonodactylellus Manning, 1995
Gonodactylellus spiridonovii sp.n.

Fig. 1.

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Fig. 1. *Gonodactylellus spiridonovi* sp.n.: A–I — male holotype, TL 14 mm, Gulf of Aqaba, SMF 37071; J–K — female paratype, TL 14 mm, Gulf of Aden, SMF 37072. A — anterior cephalothorax; B — ocular scales; C — right antennal protopod; D — right raptorial claw; E — thoracic somites 6–8, right lateral view; F — posterior abdominal somites, telson and right uropod; G — telson, right lateral view; H — right uropod, ventral view; I — right pleopod 1 endopod, anterior view; J — telson, dorsal view; K — right uropodal endopod, ventral view. Scale: A–H, J, K — 1.0 mm, I — 0.5 mm.

Рис. 1. *Gonodactylellus spiridonovi* sp.n.: A–I — голотип самец, TL 14 мм, залив Акаба, SMF 37071; J–K — паратип самка, TL 14 мм, Аденский залив, SMF 37072. A — передняя часть цефалоторакса; B — глазные чешуйки; C — правый протопод антены; D — правый коготь клешни; E — грудные сомиты 6–8, вид справа сбоку; F — задние брюшные сомиты, тельсон и правый уропод; G — тельсон, вид справа сбоку; H — правый уропод, вид снизу; I — правый эндопод плеопод 1, вид снизу; J — тельсон, вид сверху; K — правый эндопод уропод, вид снизу. Масштаб: A–H, J, K — 1.0 мм, I — 0.5 мм.
A new species of coral reef mantis shrimp from the Red Sea (Gonodactylidae)
inci piens from Oman is also a misidentification, herein referred to G. spiridonovi. 

Gonodactylus spiridonovi sp.n. is the fourth species of the genus confirmed from the northwestern Indian Ocean; they are distinguished in the key below.

**KEY TO SPECIES OF GONODACTYLLUS FROM THE NORTH-WESTERN INDIAN OCEAN**

1. Telson dorsal surface with numerous spinules .............. 2
    - Telson dorsal surface without spinules ....................... 3
2. Uropodal endopod inner margin with few setae at proximal end, otherwise smooth, glabrous ................................. G. demani (Henderson, 1893)
    - Uropodal endopod inner margin fully with setae ............... G. lanchesteri (Manning, 1967)
3. Telson accessory median carinae short, not extending posterior one-third of median carina; apices of lateral teeth not extending posteriorly to apices of inner intermediate denticle. Uropodal exopod proximal article without fixed distal spine ...................... G. choprai (Manning, 1967)
    - Telson accessory median carinae short, not extending anteriorly beyond posterior one-third of median carina; apices of lateral teeth extending to level of apices of inner intermediate denticle. Uropodal exopod proximal article with fixed distal spine ........... G. spiridonovi sp.n.

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