

## RESEARCH NOTE

# *Lernanthropus lativentris* Heller, 1865 (Copepoda, Lernanthropidae) of Pillai (1985) recognised as a new species

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## Abstract

Copepod parasitic on the gills of *Lethrinus rhodopterus* and *Lutjanus vitta* (Pisces, Lutjanidae), identified by Pillai (1985) as *Lernanthropus lativentris* Heller, 1865, is recognised as a new species, for which the name *Lernanthropus pillaii* is proposed.

## Key words

*Lernanthropus pillaii* sp. nov., Copepoda, fish, Lutjanidae

In his study of parasitic copepods of fishes collected during the round-the-world cruise of the Austro-Hungarian frigate Novara, Heller (1865) described, among other species, a new member of the family Lernanthropidae, *Lernanthropus lativentris*. This species was found on the gills of *Mesoprion phaiotaeniatus* Bleeker, 1849 (current name *Lutjanus vitta* Akazaki, 1984). The fish came from the waters off Java, Indonesia.

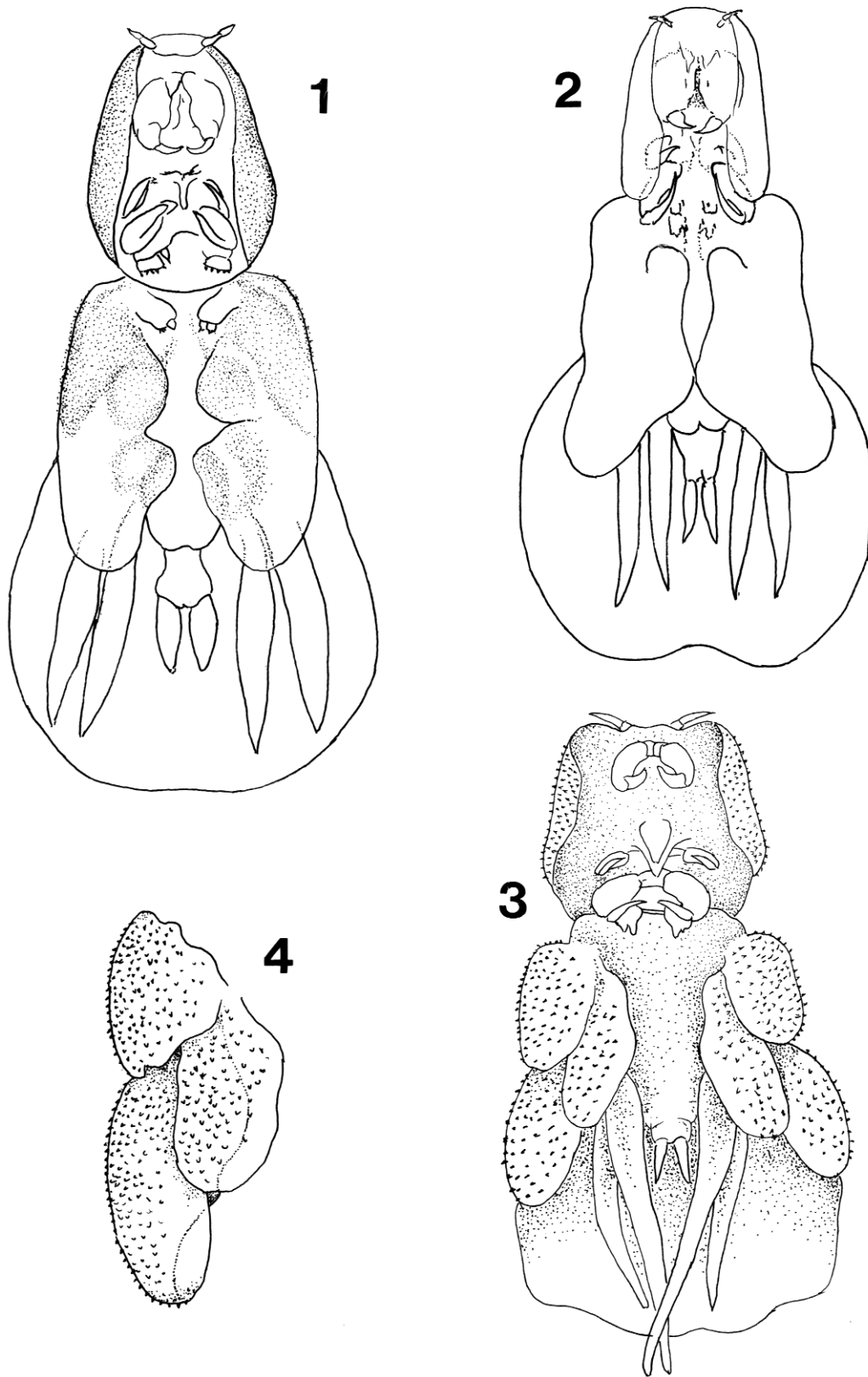
As can be seen in Figure 1, the most salient morphological feature pointing to the uniqueness of this species is its third thoracopod, the structure of which suffices to set *L. lativentris* apart from all its congeners. In Heller's (1865) own words, these legs form two elongate oval plates, with small areas of roughness on their surfaces and each divided into two rounded lobes by an indentation on its inner side. Having subsequently examined the type material, Heider (1879) described *L. lativentris* in similar terms and illustrated it as shown in Figure 2.

No new finds of this species were recorded for about a century since its original discovery. Bassett-Smith (1899) repeated Heller's record, altering the name of the host to *Mesoprion vitta*. That record was also mentioned by Goggio (1906). Wilson (1922) placed *L. lativentris* in his key to the genus *Lernanthropus* and Yamaguti (1963) included it in the list of species of that genus.

An apparently new record of this species was reported by Reimer (1986), who identified as *L. lativentris* (sic) a copepod found on the gills of *Thyrsitoides marlayi* Fowler, 1929, off Mozambique. The record was not accompanied by description or illustration of the copepod. Its host, a member of the family Gempylidae, is unrelated to the lutjanid host of the type specimens.

At about the same time, Jayasree (1983) mentioned *L. lativentris* in his general comments on the family Lernanthropidae and included in them an illustration of this species that was quite at variance with the original drawings of Heller (1865) and Heider (1879). Jayasree's drawings were reproduced by Pillai (1985), without reference to their earlier publication. Pillai used them to illustrate the specimens he identified as *L. lativentris*. The distinguishing feature of these specimens is their third thoracopods. The rami of these appendages are separated from each other for a substantial part of their length and are likewise partially separated from the sympod of the appendage. This tripartite appearance (Figs 3 and 4) differs so much from that of *L. lativentris* (Figs 1 and 2) that it makes it impossible to include Pillai's specimens in this species. Their general habitus also distinctly varies from that of the type material.

Pillai (1985) listed as the hosts of this specimens *Lethrinus rhodopterus* (Bleeker, 1852), as well as the original host of



**Fig. 1.** *Lernanthropus lativentris*, female, ventral (from Heller 1865). **Fig. 2.** As above (from Heider 1879). **Fig. 3.** *Lernanthropus pillaii* sp. nov., female, ventral (from Pillai 1985). **Fig. 4.** *Lernanthropus pillaii*, third thoracopod, ventral

Heller's specimens. It is not clear, however, if the latter was cited as a new find or merely as a repetition of the original record.

A comparison of Pillai's illustrations with all known species of *Lernanthropus* shows that none has its third thoracopod with the sympod and the rami identifiable as separate structural components. I have found 11 species of *Lernanthropus* with the third thoracopods partly, or substantially, separated from each other, but none in which the sympod is also clearly set off from other parts of the appendage.

These observations prompt the conclusion that Pillai's specimens belong to a new species. I propose, therefore, to name them *Lernanthropus pillaii* sp. nov., in recognition of the original describer of this species.

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