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# *THERODAMAS DAWSONI*, A NEW SPECIES OF PARASITIC COPEPOD (CYCLOPOIDA: ERGASILIDAE) FROM THE WEST COAST OF PANAMA

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A single female specimen of this new species was sent to me by Mr. C. E. Dawson of the Gulf Coast Research Laboratory. The copepod attached to the base of the pectoral fin of a stargazer, *Dactyloscopus thysannotus*, was collected by Dawson at Chiriqui, Panama, 21 June 1971. I am indebted to the collector for sending me this unusual copepod.

**Therodamas dawsoni** new species

*Material studied*: Holotype female (USNM 141308).

*Female*: Body form as in Figure 1. Holotype measurements: total length, 2.17 mm; length of head to posterior margin of neck, 0.56 mm; width of head at area of lobes, 0.42 mm; width of neck, 0.31 mm; length of genital segment and abdomen, 0.30 mm; width of genital segment, 0.32 mm; length of abdomen, 0.09 mm; width of abdomen, 0.16 mm.

Anterior part of head (Fig. 2) with lateral lobes posterior to second antenna at junction of necklike area. Neck of specimen studied appearing somewhat contracted. Posterior part of head behind neck expanding to form broad shoulders with no obvious demarcation separating head from thorax. Thoracic segments weakly divided. Genital segment (Fig. 3) with 2 transverse rows of short hairs on ventral surface, surface with scutelike divisions. Abdomen (Fig. 3) bilobed with deep post median incision. Caudal ramus (Fig. 4) on lateral edge of abdomen, bearing 4 terminal setae as indicated in figure.

First antenna (Fig. 5) 5-segmented, each segment bearing several long setae; terminal setae obscured in specimen studied and exact number could not be determined. Second antenna (Fig. 6) a stout claw; basal segment with broad spine near inner midmargin; claw with small seta near base; tip blunt in holotype antenna. Mouthparts (Fig. 7) very



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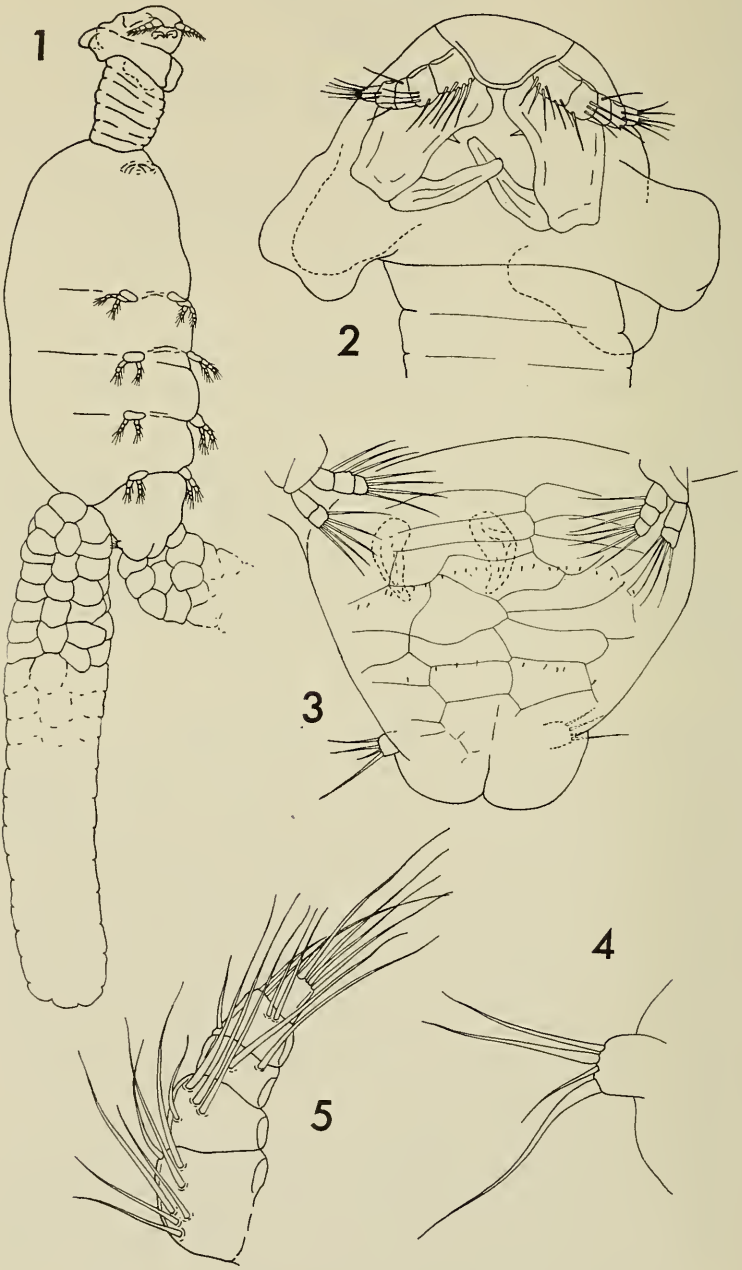
1
2
3
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small, separated from rest of head appendages by long neck. First maxilla simple lobe with 2 setae. Second maxilla 2-segmented, terminal segment with several setae in comblike arrangement. Maxilliped absent.

Legs 1–4 biramose. Leg 1 (Fig. 8) rami 3-segmented, segmentation of endopod weak; exopod terminal segment with one outer spine and 6 terminal setae, endopod terminal segment with 2 outer spines and 4 terminal setae, all setae with short plumosities, all spines with spinules along outer edge. Leg 2 (Fig. 9) rami 3-segmented; exopod terminal segment with 6 setae, endopod terminal segment with 5 setae, setae sparsely plumose. Leg 3 as in leg 2. Leg 4 (Fig. 10) exopod 2-segmented, terminal segment with 5 setae; endopod 3-segmented, terminal segment with 4 setae.

Spine and seta formula of legs 1–4 as follows (Roman numerals refer to spines, Arabic numerals to setae):

| | leg 1 | | leg 2 | | leg 3 | | leg 4 | |
|---|---|---|---|---|---|---|---|---|
| | exo | end | exo | end | exo | end | exo | end |
| Seg. 1 | I:0 | 0:1 | I:0 | 0:1 | I:0 | 0:1 | 0:0 | 0:1 |
| Seg. 2 | 0:0 | 0:1 | 0:1 | 0:2 | 0:1 | 0:2 | 5 | 0:2 |
| Seg. 3 | I:6 | II:4 | 6 | 5 | 6 | 5 | | 4 |

Legs 5 and 6 absent.

Egg sacs as long as body containing 50–75 eggs.

*Male*: Unknown.

*Remarks*: In 1863 Krøyer described a new species of copepod parasitic on *Serranus* sp. from the Danish West Indies. This species, *Therodamas serrani*, represented a new genus. Wilson, in 1917, determined that Krøyer's species belonged to the family Lernaeidae based on Krøyer's description. Thomsen, in 1949, collected additional specimens of *T. serranus* from *"Tachyurus barbus"* and a new species, *T. sphyricephalus*, from the same host from Uruguay. Thomsen reassigned the genus to the family Ergasilidae. Based on my examination of the new species described here I agree with Thomsen that the genus *Therodamas* is not a lernaeid and the morphology of the appendages is typical ergasilid. The striking modification of the cephalon with the necklike separation of the anterior cephalic appendages from the mouthparts certainly is unique to ergasilids and may in the future warrant separating this genus from other ergasilids at the subfamily level.

*Therodamas dawsoni* can be separated from the other two species by the following characters. In the new species the anterior portion of the head including the neck comprises only about one-fourth of the total

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Figs. 1–5. *Therodamas dawsoni* new species, female: 1, ventral; 2, anterior portion of head, ventral; 3, genital segment and abdomen, ventral; 4, caudal ramus, ventral; 5, first antenna.

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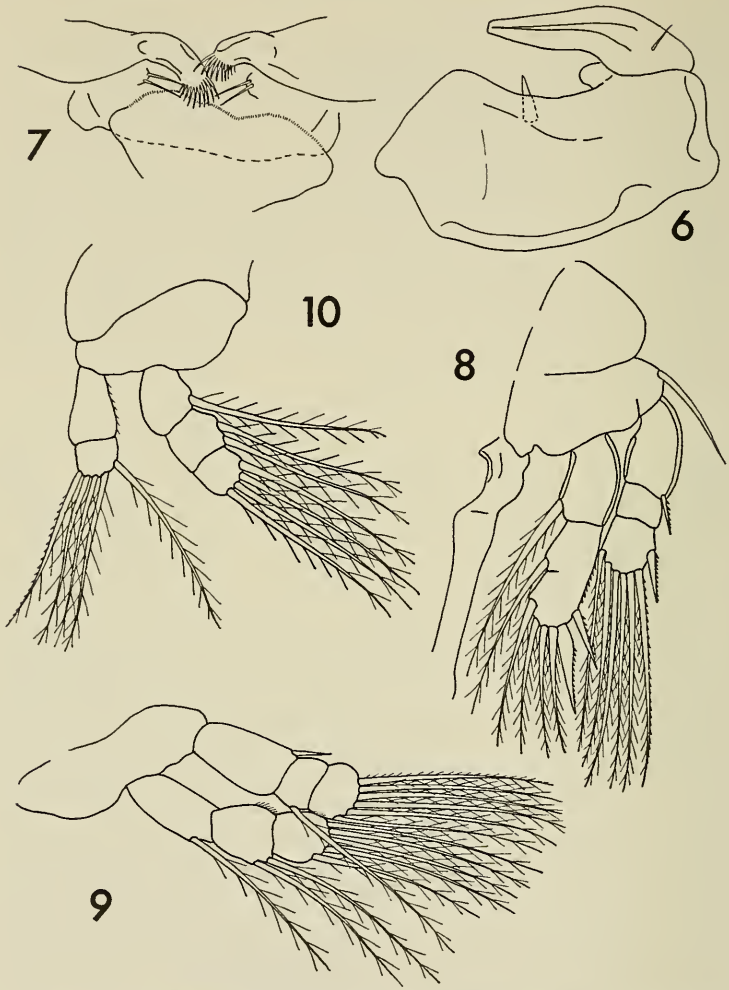


Figs. 6–10. *Therodamas dawsoni* new species, female: 6, second antenna; 7, oral; 8, leg 1; 9, leg 2; 10, leg 4.

body length. Even if not contracted I doubt that it would reach one-half of the body length as it does in the other two species. The spine and seta formula of the new species differs from the other two in that there are more setae present on the last ramal segment of the new species (Thomsen indicates that the legs of his new species are armed as in *T. serranus*). The egg sacs of *T. dawsoni* are equal to the total

body length, whereas in *T. sphyricephalus* they are considerably shorter. I was advised by Mr. Dawson that over 2,000 specimens of the host fish were examined and only the single parasite found. This indicates either the copepod is very rare or that *D. thysannotus* is not the preferred host.

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