# ZEUGOPHILOMEDES, A NEW GENUS OF MYODOCOPINE OSTRACODE (PHILOMEDINAE)

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Abstract.—Zeugophilomedes, a new genus of myodocopine ostracode in the subfamily Philomedinae is proposed for 5 species in the Red Sea and Indian, Atlantic and Pacific Oceans. A key to the species is given and pertinent morphological characters illustrated.

A new genus is proposed for 5 species previously referred to either *Philomedes* Liljeborg, 1853 or *Euphilomedes* Poulsen, 1962: *Zeugophilomedes oblongus* (Juday, 1907:145), *Z. polae* (Graf, 1931:5), *Z. multichelatus* (Kornicker, 1958:230), *Z. fonsecensis* (Hartmann, 1959:197), and *Z. arostratus* (Kornicker, 1967a:2). *Euphilomedes grafi* (Hartmann, 1964:37) may, when more completely known, be referred to *Zeugophilomedes*.

## Zeugophilomedes, new genus Figs. 1–3

Type-species.—Philomedes multichelata Kornicker, 1958.

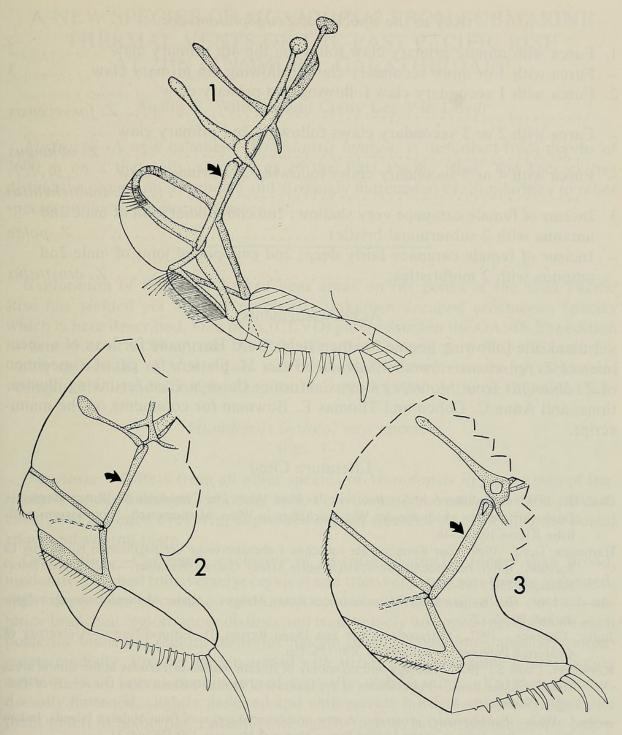
Etymology.—The name derived by combining the Greek zeugos (=pair, team) and Philomedes. Gender: masculine.

Diagnosis.—Sixth limb: End joint with relatively slight posterior projection.

Furca (Figs. 1–3): Each limb with 4 or 5 primary claws: 2 anterior claws separated from lamella by suture; remaining claws fused to lamella. One or more secondary claws between primary claws 2 and 3, and 3 and 4. Primary claw 4 followed by minute primary claw or additional secondary claws.

Internal sclerites in posterior part of body (Figs. 1–3): Y-sclerite unbranching, fairly stout. Complex of sclerites connected to proximal end of Y-sclerite. (Sclerites are visible through body in transmitted light.)

Comparisons.—Other genera in the Philomedinae have 6th limbs with end joints having considerable posterior projection. The slight posterior projection of the end joint of 6th limbs of Zeugophilomedes resembles that of members of the Pseudophilomedinae. I consider this to be the result of parallelism or convergence. (Because the 6th limb of Z. oblongus and Z. fonsecensis had not been described, I examined a female of the former [USNM 139159] from Monterey Bay, California, and an A-1 female of the latter from El Salvador and found the 6th limbs to have only slight posterior projection.) The furcae of members of Zeugophilomedes are unique for the Philomedidae in having some primary claws fused to the lamella (Figs. 1–3). The Y-sclerites (see Kornicker 1975:684 for discussion) of species in other genera of Philomedinae branch proximally (Y-shaped), and the combined stem and dorsal branch is concave dorsally; it is not linear and unbranched as in Zeugophilomedes (Figs. 1–3). The complex of sclerites of the type connected to the proximal end of the Y-sclerite of Zeugophilomedes (Figs. 1–3) has not been described in other genera.



Figs. 1–3. Posterior of body of 3 species of Zeugophilomedes showing furca and internal sclerites (arrow indicates Y-sclerite): 1, Z. arostratus  $\delta$ , USNM 112659; 2, Z. multichelatus  $\delta$ , USNM 152449; 3, Z. oblongus  $\circ$ , USNM 139159.

Known distribution.—Z. oblongus, San Diego Bay and off San Pedro, California (Juday 1907:147), Monterey Bay, California (herein). Z. polae, Gulf of Suez, Red Sea (Graf 1931:38; Kornicker 1967c:4). Z. multichelatus, Bimini, Bahamas (Kornicker 1958:232, 1967b:2), Aransas Pass, Gulf of Mexico (herein). Z. arostratus, Maldive Islands, Indian Ocean (Kornicker 1967a:14). Z. fonsecensis, El Salvador (Hartmann 1959:198).

### Key to the Species of Zeugophilomedes

1. Furca with minute primary claw following the 4th primary claw 2
- Furca with 1 or more secondary claws following 4th primary claw 3
2. Furca with 1 secondary claw following 2nd primary claw
Z. fonsecensis
- Furca with 2 or 3 secondary claws following 2nd primary claw
Z. oblongus
- Furca with 4 or 5 secondary claws following 2nd primary claw
Z. multichelatus
3. Incisur of female carapace very shallow; 2nd endopodial joint of male 2nd
antenna with 2 subterminal bristles Z. polae
- Incisur of female carapace fairly deep; 2nd endopodial joint of male 2nd
antenna with 2 midbristles;

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