# A NEW SPECIES OF *CERCEIS* (ISOPODA, SPHAEROMATIDAE) FROM THE ARABIAN SEA

### BY

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#### ABSTRACT

*Cerceis biforamina* sp. nov. belonging to the Dynameninae, collected from algae of the intertidal pools of Bulleji, Karachi, is described and figured. The genus *Cerceis* Milne-Edwards is for the first time recorded from the Arabian Sea. The relationship of *Cerceis biforamina* sp. nov. with *Cerceis bicarinata* Barnard, 1936 is also discussed.

# RÉSUMÉ

*Cerceis biforamina* sp. nov. (Isopode Dynameninae), recueilli dans des algues, dans des mares intertidales de Bulleji, Karachi, est décrit et figuré ici. Le genre *Cerceis* est signalé pour le première fois de la mer d'Oman. Les relations de *C. biforamina* sp. nov. avec *C. bicarinata* Barnard, 1936, sont aussi discutées.

#### INTRODUCTION

The genus *Cerceis* Milne-Edwards, 1840 contains 11 species of which six are known from Australian waters (Harrison & Holdich, 1982) and the remaining five have been recorded from Singapore (Dana, 1853), from the Philippines (Nierstrasz, 1931), from the Andaman Islands (Barnard, 1936), from India (Pillai, 1954), and from Sri Lanka (Müller, 1991). *Cerceis biforamina* is the twelfth member of the genus and provides the first record of the genus from the Arabian Sea (cf. Harrison & Ellis, 1991: 935).

The type-specimens have been deposited in the Museum of the Department of Zoology, University of Karachi, Karachi.

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#### TAXONOMY

# Family Sphaeromatidae Milne-Edwards, 1840 Subfamily Dynameninae Bowman, 1981 Genus *Cerceis* Milne-Edwards, 1840

## Cerceis biforamina sp. nov.

(figs. 1-3)

Material examined. — Holotype male, 17.0 mm, 22 December, 1988. Paratypes: 3 males, 13.0 mm, 15.0 mm, 11 November, 1985; 1 non-ovigerous female, 15.0 mm, 28 January, 1988. All material examined was collected from the algae floating in the intertidal pools of Bulleji, Karachi, Pakistan, 24°51′N 66°48′E.

Etymology. — The specific name *biforamina* refers to the presence of two foramina at the base of the apical tooth of the pleotelson in the male.

Description of male holotype. — Cephalon (fig. 1A) smooth, with large eyes, situated postero-laterally. Posterior margins of pereonite 1 to 6 with a row of short setae, that of pereonite 7 with a row of tubercles and short setae, sides of pereon subparallel, widening slightly posteriorly. Coxae 2 to 7 (fig. 1B) distinct and smooth, postero-dorsal margin of coxa 7 serrated and setose. Pleon (fig. 1A) with scattered tubercles medially and posterior margin with rows of well developed tubercles. Pleotelson (fig. 1A) with a median pair of longitudinal rows of tubercles and short setae, gradually narrowing posteriorly, having almost straight lateral margins; apex with deep rectangular notch, bearing a broad, long tooth with a small elongated foramen at each side of the base; foramina and lateral sides of tooth beset with very short setae; tooth apex extending well beyond the level of the notch opening. Ventral margin of pleotelson and penes as illustrated in fig. 3A.

Epistome (fig. 1C) smooth, apex anteriorly produced, anterolateral margins slightly concave, widening posteriorly, posterior margins truncate, labrum with short marginal setae.

Antenna 1 (fig. 1D) extending to the posterior margin of pereonite 1, inferior process of article 1 much stouter and longer than the superior one, flagellum 18 articled. Antenna 2 (fig. 1E) long, reaching posterior margin of pereonite 3, peduncle articles 3 and 4 subequal in length, distal one being the longest, flagellum composed of 23 articles. Left mandible (fig. 3B, B') incisor 4-cuspidate, lacinia mobilis 3-cuspidate with a row of 5 pectinate spines and 5 plumose setae, molar with a row of 6 tubercles, disto-medial margin beset with a row of simple spine-like setae, palp second article with 20 setae, the distal 2 of which thick and fringed; third article with 22 setae (full num-

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Fig. 1. Cerceis biforamina sp. nov. A-G, adult male holotype, 17.0 mm. A, dorsal view; B, latera view; C, epistome, labrum and peduncles of antennae; D, antenna 1; E, antenna 2; F, maxilla G, maxilla 2. H, I, non-ovigerous female paratype, 15.0 mm. H, dorsal view of pleotelson I, ventral view of pleotelson. Scale F, G = 0.5 mm; remaining scales = 2 mm.



Fig. 3. Cerceis biforamina sp. nov., adult male holotype, 17.0 mm. A, ventral view of pleotelson and penes; B, incisor process, lacinia mobilis and molar process of left mandible; B', mandibular palp; C, incisor process, lacinia mobilis and molar process of right mandible; D, pleopod 3; E, pleopod 4; F, pleopod 5. Scale B, C = 0.5 mm; remaining scales = 1 mm.

Remarks. — This species has some resemblance to *Cerceis bicarinata* Barnard, 1936 in having a submedian pair of ridges on the pleotelson, but differs from it by its tuberculation, large rectangular apical notch of pleotelson with a

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large tooth having two foramina at the base, much longer antennae, and uropodal endopods subequal in length to the pleotelson apex. The uropodal endopods of *Cerceis bicarinata* extend much further beyond the apex of the pleotelson (Barnard, 1936, fig. 15b). Furthermore, *Cerceis biforamina* sp. nov. has no grooves on the coxae 2 to 7 as found in *Cerceis bicarinata* (cf. Barnard, 1936: 184, fig. 15a).

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