A NEW SPECIES OF *LYSMATA* (CARIDEA, HIPPOLYTIDAE) FROM THE EASTERN PACIFIC

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ABSTRACT

*Lysmata gracilirostris* is described from the tropical eastern Pacific. The species can be differentiated from related species by the length of the rostrum, the absence of an accessory branch on the inner flagellum of the antennule, and the long pereopods. The generic placement of this species is discussed in detail.

RESUMEN

Se describe *Lysmata gracilirostris* del Pacífico oriental tropical. La especie puede distinguirse de las especies próximas por la longitud del rostro, la ausencia de una rama accesoria de flagelo interno de la anténula, y por la longitud de los pereiópodos. Se discute con detalle su posición en el género.

INTRODUCTION

While examining specimens of *Lysmata* spp. from the collections of Scripps Institution of Oceanography (SIO), I discovered a specimen with unusually long pereopods and rostrum. These features differentiated the species from any other species of *Lysmata* in the eastern Pacific. The new species is described herein.

At first, it was difficult to determine the genus to which the new species should be assigned. Through the kindness of Lawrence Griffing and John Scott Harrison, Texas A&M University, I was able to use the facilities of the Biological Imaging Laboratory, Department of Biology, to obtain high resolution images of the gill formula of the species. These images indicate that the species belongs to the genus *Lysmata* as interpreted by Chace (1997). Additional specimens were located among unidentified material from the collections of the R.V. “Velero III”, sponsored by the University of Southern California and the Allan Hancock Foundation. These specimens belong to the collections of the United States National Museum of Natural History (Smithsonian Institution) (USNM); and the Natural History Museum of Los Angeles County (LACM).
SYSTEMATIC ACCOUNT

Lysmata gracilirostris sp. nov. (figs. 1-3)


Description. — Rostrum slender, reaching at least to middle of third segment of antennular peduncle but usually longer than entire peduncle; with 6 dorsal teeth, 2 of them on carapace and 4 on rostrum proper; and 5-6 ventral teeth; apex bifid. Carapace with sharp, prominent antennal spine overlying lobe at base of orbit; small pterygostomian spine present, reduced to knob in one specimen. Pleura of abdominal somites 1-3 rounded, pleura of fourth and fifth abdominal somites with posterolateral ends bluntly pointed, sixth abdominal somite with sharp teeth flanking insertion of uropod. Telson with 2 pairs of dorsolateral spines, these pairs not always parallel to each other; stiff setae on dorsal surface occurring singly or in tufts just proximal to apex, apex with minute point, 1 pair long and 1 pair short spines flanking apex.

Eye large and pigmented.

Stylocular on not as long as end of cornea of eye, much less than first antennular segment. First segment of antennular peduncle longest, distal margin with fringe of small spinules. Second segment shorter than first, with few spinules on dorsal margin. Third segment shortest. Inner flagellum of antennule with accessory branch fused; stiff setae along fused branch.

Basicalerite with ventrolateral spine. Scaphocerite longer than antennular peduncle, spine longer than scale, end of scale rounded. Flagella of both antennae longer than body in intact specimen.

All maxillipeds with epipods and exopods. Second maxilliped with podobranch. Third maxillipeds longer than scaphocerite, with prominent arthrobranch; exopod reaching about 0.5× length of proximal segment. Proximal segment 1.5× length of mesial segment. Ultimate segment slightly shorter than proximal segment, setose and ending in spines.

Pereopods 1-4 with epipods, without arthrobranches. First pereopod robust and chelate. Fingers less than 0.5× palm. Carpus about as long as chela, merus longer than carpus. Ischium short, without spine. Second pereopod slender and elongate,