

PROVISIONAL SPECIES VOUCHER SHEET

Provisional Name: *Pachychelium* sp SD1

Taxon: Lysianassidae

Taxonomist: D. Pasko / E. Nestler

Authority:

Date: 7 April 2003; Revised 1 February 2005

Common Synonyms:

Specimen(s): STATION DATE DEPTH STORAGE LOCATION VIAL#

B-11 (2) 22-Jan-03 88 m CSD-Voucher Collection

B'03 Sta 4029 21-Jul-03 75 m CSD-B'03 V#4737.1

Characters:

Small, elongate specimen (much like *Prachynella* or *Pachynus*)

Maxilliped palp 3-articulate; inner plate absent

Gnathopod 1 uniquely shaped with carpus attached to hind margin of enlarged propodus (see figure); propod slightly produced at antero-distal margin of palm; basis and ischium not greatly enlarged; coxa large, broader than deep, with blunt antero-distal tooth

Gnathopod 2 reduced, dactyl small, vestigial

Coxa 4 similar to coxa 1-3, not excavate and without lobe

Pereopod 7, similar in shape to pereopods 5 and 6; merus postero-distally produced; basis broadly rounded

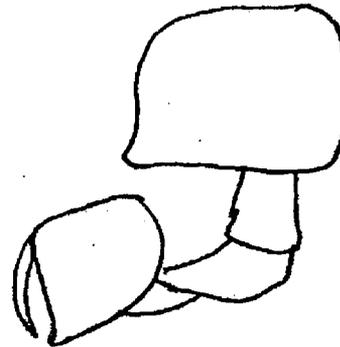
Pleon, epimeron 2 with blunt tooth; epimeron 3 rounded

Uropodal rami naked; Ur3 rami subequal, inner ramus composed of two articles, the distal-most being the smallest

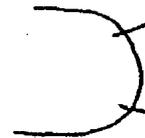
Telson ordinary, broadly rounded with one pair of disto-lateral setae

Illustrations: *Pachychelium* sp SD1

Gnathopod 1



Pereopod 7

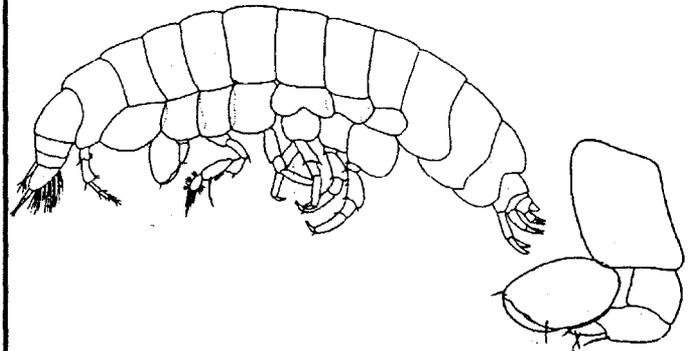


Telson



Uropod 3

Pachychelium davidis (from Barnard 1969)
whole animal & gnathopod 1

**Related Species & Other Comments:**

The uniquely shaped first gnathopod distinguishes this species as being closely related to the *Acheronia* and *Pachychelium* genera of the Pachynid group (see Lowry 1984). It differs from *A. pegasus* Lowry 1984 in the absence of an antero-ventral lobe on coxa 4 and the uni-articulate inner ramus of uropod 3, which is approximately 1/4 the length of the outer. It appears to be more closely aligned to *Pachychelium davidis* Stephensen 1925 and *P. antarcticum* Schellenberg 1926. It differs from the former in possessing an antero-distal process on the propodus and coxa of gnathopod 1, as well as the postero-distal process on the merus of pereopod 7. It differs from *P. antarcticum* by the absence of small inner plates on the maxilliped. *Pachychelium* sp SD1 is also intermediate between *P. schellenbergi* Lowry 1984 and *P. nicholli* Lowry 1984 for some characters (e.g., size of basis and ischium of gnathopod 1 and relative shape of pereopods 5-7), but differs from both by the 3-articulate maxilliped palp.

Two important character states could not be verified due to the condition of the specimens examined. The teeth of the outer plate of maxilla 1 could not be reliably distinguished as smooth or spined, and the presence or absence of a complex spine on gnathopod 1 remains in question. Additional material is required to confirm these character states. *Pachychelium* has been reported from the Arctic and Antarctic, so its presence in southern California requires careful consideration.