

VOUCHER SHEET

Species name: *Colomastix* sp A

Date Examined: 22 June 2008

Group: Amphipoda, Family Colomastigidae

Voucher By: Donald B. Cadien

Voucher Specimen(s): ISS Outer Coast Yr. 2, Station 406PINROC, subtidal rocky, replicate 3, 9 m, Sample Number 4513. 4 vouchers to MLML, 4 vouchers to CDF& G

SYNONYMY: *Colomastix pusilla* of J. L. Barnard 1955 and 1969, not Grube 1861

LITERATURE: **Barnard, J. Laurens. 1955a.** Gammaridean Amphipoda (Crustacea) in the collections of Bishop Museum. *Bernice P. Bishop Museum, Bulletin*, no. 215: 1-46.

———. **1969a.** Gammaridean Amphipoda of the rocky intertidal of California: Monterey Bay to La Jolla. *United States National Museum, Bulletin*, no. 258: 1-230.

Bousfield, Edward L. 1973. *Shallow-water gammaridean Amphipoda of New England*. Ithaca, New York: Comstock Publishing Associates/Cornell University Press.

LeCroy, Sara E. 1995. Amphipod Crustacea III. Family Colomastigidae. *Memoirs of the Hourglass Cruises* 9(2): 1-139.

———. **2004.** *An illustrated identification guide to the nearshore marine and estuarine gammaridean Amphipoda of Florida. Volume 3: Families Bateidae, Biancolinidae, Cheluiridae, Colomastigidae, Corophiidae, Cyproideidae, and Dexaminidae*, Florida Department of Environmental Protection, Tallahassee, Florida, U. S. A.

DIAGNOSTIC CHARACTERS: undetermined

RELATED SPECIES AND CHARACTER DIFFERENCES: unresolved

DEPTH RANGE: unclear, but generally from intertidal to shallow shelf depths

DISTRIBUTION: colomastigids are reported from at least Cayucos to Mexico

COMMENTS: Since J. L. Barnard initially identified specimens belonging in the genus *Colomastix* as *C. pusilla* from Hawaii (in 1955), and California (1969), any specimens reported from the eastern Pacific have used *C. pusilla* as a "placeholder" identification. It has long been suspected that this is not accurate, and that *C. pusilla*, described from the Mediterranean, does not occur locally. Similar identifications of western Atlantic material as *C. pusilla* by Pearse were later found to belong to a series of other species (see Bousfield 1973, and LeCroy 1995). Grube's species was not confirmed to occur in the western Atlantic. A similar situation undoubtedly exists in the NEP, although the dimensions of the problem are not yet clear. Species of *Colomastix* are commensals with or micropredators on sponges and corals, each species usually found on a variety of hosts (see LeCroy 1995, 2004). It is possible that several colomastigid species occur in California waters, but the diversity has not yet been clarified by the detailed examination necessary to differentiate taxa in the genus. Until such time as detailed investigations have been completed, the designation *Colomastix* sp. A is assigned to specimens from California as a placeholder identification to replace the inappropriate *C. pusilla*. No better definition of what constitutes this "species" is offered, but use of the new designation removes the attribution of a Mediterranean species name to Californian specimens, and removes the presumption of species introduction. Until detailed analyses are completed, the number of local species involved is clarified, and salient characteristics of that (or those) species are established, local colomastigids remain of cryptogenic origin. It is possible that introduced members of this genus are present in local waters, but that remains unproven at this date.

Adoption of the use of *Colomastix* sp A is a data convention, and does not carry with it improved ability to discriminate taxa.