A NEW SPECIES OF ALPHEOPSIS (DECAPODA, ALPHEIDAE) FROM THE TROPICAL EASTERN PACIFIC, WITH A KEY TO THE SPECIES OF ALPHEOPSIS OF THE AMERICAS

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RESUMEN

Se describe Alpheopsis allanhancocki, especie nueva, de las Islas Galápagos y del Golfo de California. La especie se asemeja a A. labis Chace y A. aequalis Coutière, que no ocurren en el Pacífico oriental, pero no tiene dientes prominentes en sus quelas. Se presenta una clave para identificación de las especies de las Americas.

INTRODUCTION

Species of Alpheopsis are small burrowing shrimp. They occur world-wide in tropical and temperate areas from the intertidal zone to the continental shelf. Chace (1972) and Banner & Banner (1973) studied the Caribbean and Australian species, respectively. There is less information on the eastern Pacific species.

Wicksten & Hendrickx (1986) mentioned an unidentified species of Alpheopsis Coutière, 1896 in a key to the four species of the eastern Pacific. Additional specimens of that new species have been located among the collections of the Smithsonian Institution (U.S. National Museum of Natural History). The new species is described herein. A key to the American species is included.

Alpheopsis allanhancocki new species (figs. 1-2)

Type material. — Holotype: ovigerous female, total length 11.4 mm, Isla Candelero, Sonora, Gulf of California, Mexico (27°56'N 111°03'W), 10 m depth, among zoanthids, 6 July 1983, Alex Kerstitch. Allan Hancock Foundation type number 833. -- Paratypes: ovigerous female, total length 8.9 mm, female, not ovigerous, 9.2 mm, Darwin Bay, Tower Island (Isla Genovesa), Galapagos (0°19'18"N 89°57'14"W), shore, rock, 26 February 1933, “Velero III” sta. 101-33, U.S. National Museum (uncatalogued).

Description. — Rostrum short, acute, not reaching end of visible part of first segment of antennular peduncle. Frontal margin of carapace projecting slightly beyond cornea, without orbital spines. Pterygostomial angle blunt. Carapace with posterolateral notch. First article of antennular peduncle longest, second and third articles successively shorter. Stylocerite sharply pointed, nearly reaching end of second segment of antennular peduncle. Carpocerite exceeding antennular peduncle and antennal spine. Basicerite with blunt spine. Sca-
phocerite broad, blade with rounded distal margin, spine exceeding blade, not reaching end of antennular peduncle.

Mouthparts similar to those of *A. labis* Chace (1972, fig. 15). Mandible with strong molar process, toothed incisor process, three-segmented palp. Endite of first maxilla setose, palp with two lobes. Second maxilla with three endites, small endopod, narrow scaphognathite. First maxilliped with broad upper endite, smaller lower endite; narrow endopod, exopod with lash. Second maxilliped with stout endopod, long exopod with lash, and podobranch. Third maxilliped with arthrobranch and exopod, exopod about as long as most proximal segment of endopod; endopod with three segments, the most proximal the longest; ending in strong spines.

Pereopods 1 to 4 with epipods. Chelifeds nearly equal in size. Major chela with slender fingers having rounded margins, not lamellate; without teeth. Carpus of major cheliped with tuft of setae. Merus with 4 small spines on inner margin, one long inner spine and one lateral spine at articulation of merus and ischium. Ischium with 2 movable spines. Minor chela with curved dactyl. Fingers with 2 or 3 low teeth, inner margin of fixed finger lined with curved setae. One spine at articulation of merus and ischium, ischium with 2 spines.

Second pereopod chelate, with 5 carpal articles, their ratio (proximal to distal) 10:5:5:6:8. Third pereopod elongate, dactylus slender and sickle-shaped. Propodus with 5 or 6 spinules and long spine at articulation with dactyl. Carpus and merus without spines. Ischium with 2 long spines and 1 or 2 long setae. Fourth and fifth pereopods similar to third.

Abdominal somites without carina and with rounded pleura. Pleuron of fifth somite rectangular posteriorly. Sixth somite slightly longer than fifth, with triangular articulated plate at base of uropod. Uropods exceeding telson, with 2 sharp lateral spines. Telson widest at midlength, with 2 pairs of dorsolateral spines. Apex of telson rounded, flanked by 2 pairs of posterolateral spines.

Larval stages. — The holotype is accompanied by hatched larvae and unhatched eggs. The illustrated form is a second larva, in which the antennular peduncle has differentiated into three segments. However, first larvae, in which the peduncle is not segmented, also are present.

Etymology. — The species is named in honor of Captain G. Allan Hancock, sponsor of the cruise to the Galapagos during which the species was collected, and long-time benefactor of marine biological studies.

Remarks. — Of the species of *Alpheopsis* in the eastern Pacific, only *A. allanhancocki* and *A. chilensis* lack orbital teeth (Wicksten & Hendrickx, 1986). The latter species, from Peru and Chile, has a notch on the dorsal surface of the large chela. There is no such notch in the chela of *A. allanhancocki*.

Two other species resemble *A. allanhancocki* in the structure of their chelae and their lack of orbital teeth. *Alpheopsis labis* Chace, 1972, from the Bermudas, Gulf of Mexico and Caribbean region, has unequal chelifeds. The major chela bears large lobate teeth. The anterior margin of the carapace slopes post-