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A NEW GENUS OF CALIGOID COPEPOD FROM THE FISH GENUS *APOGON*

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ABSTRACT

A new genus of parasitic copepod is described from the tongue of the cardinalfish, *Apogon mosavi* Dale from Grand Bahamas Is., collected by G. Dale. The new genus is characterized by the absence of a sternal furca and the posterior lobes of the genital segment which surround and extend well beyond the posterior margins of the reduced abdomen and caudal rami.

INTRODUCTION

A few years ago the first author received from Dr Leveret Smith (American Museum of Natural History, N.Y.) 2 female specimens of the new genus of parasitic copepod described below. The description of the new genus and species was delayed in the hope that additional material might be found. Since no additional specimens were recovered, the description of the new copepod is necessarily based on moteriae currently available.

Apogonia, new genus

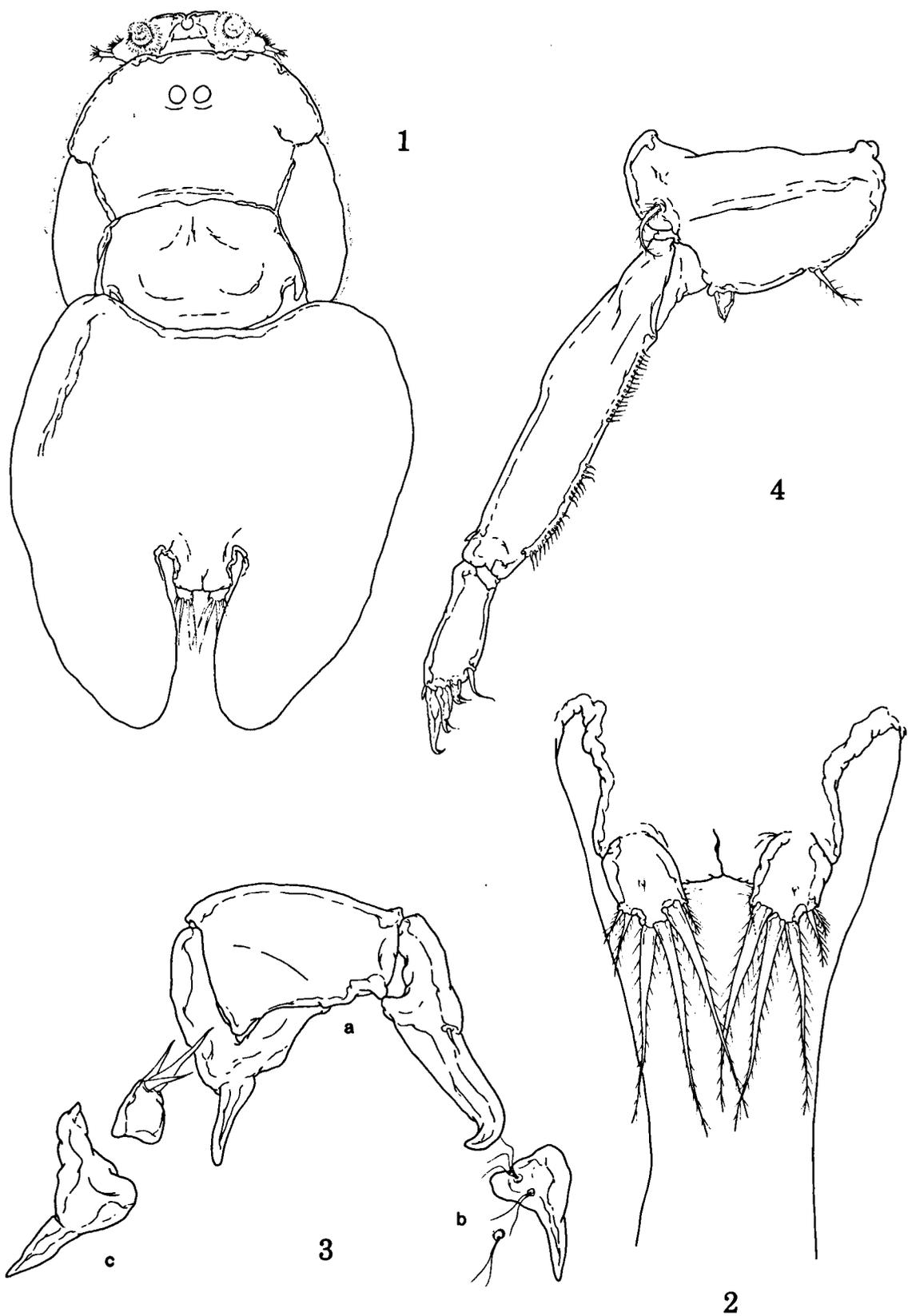
Diagnosis. — Caligidae. Lunules present. Abdomen reduced. Genital complex larger than cephalothorax. Sternal furca absent. Leg 1 endopod vestigial. Leg four endopod absent. Type species. — *Apogonia stocki* new genus, new species.

Apogonia stocki, new species

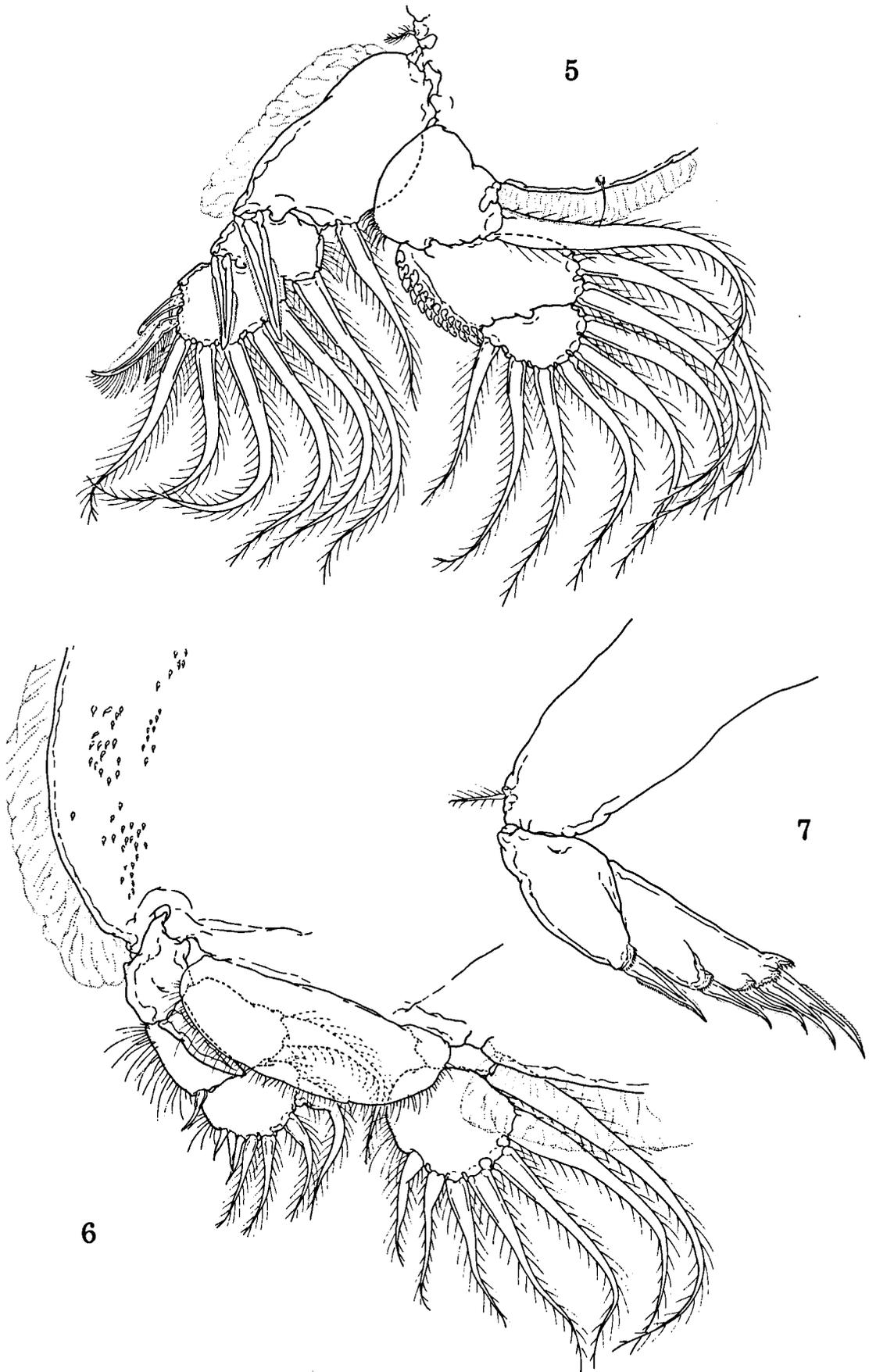
Material examined. — 2 females from the tongue of *Apogon mosavi* collected from the Caribbean

Sea. Total length 3.96 mm. Greatest width (measured at widest part of genital segment) 2.28 mm. Length of cephalon 1.67 mm, width 1.60 mm. Length of genital segment 2.37 mm. Length and width of abdomen respectively 0.25×0.32 mm. Length and width of caudal rami 0.12×0.09 mm respectively. Longest seta of caudal rami 0.27 mm.

Female. — Body form as in Fig. 1. Lunules widely separated (space between lunules greater than diameter of a lunule). Genital complex wider than cephalothorax and terminating in 2 prominent lateral lobes that extend well beyond posterior margins of caudal rami, including setae. Abdomen and caudal rami small and medial to posterior lobes of genital segment (Fig. 2). First antenna 2-segmented and typically caligiform. Second antenna (see Fig. 3a) terminal claw bent at right angle near tip; basal segment with prominent posterior process, rounded at tip. Postantennal process (Fig. 3b) basal portion about as long as pointed terminal portion. Basal part of the spiniform process of first maxilla (Fig. 3c) about as long as pointed terminal process. Leg 1 (Fig. 4) sym-pod without spinules; exopod first segment long



Figs. 1-4. *Apogonia stocki* n. gen., n. sp. female. 1, female, dorsal; 2, abdomen and caudal rami, dorsal; 3, second antenna, postantennal spine, and first maxilla; 4, leg 1.



Figs. 5-7. *Apogonia stocki* n. gen., n. sp. female. 5, leg 2; 6, leg 3; 7, leg 4.

and bearing an interrupted row of setules along inner margin and a short spine near outer distal corner; second segment with a short spine near outer distal corner, a sclerotized spine on that corner, two terminal spines (each with an accessory process) and a single naked seta at inner distal corner, medial setae vestigial on sympod, endopod absent. Leg 2 (Fig. 5) first 2 exopod segments each with a prominent fringed spine at outer distal corner and an inner pinnate seta, spine on first segment about one-third longer than spine on second segment; third segment with 2 outer spines and an outer semipinnate seta; terminal to medial margin with 5 pinnate setae; endopod first segment bearing a row of setules on outer margin and an inner pinnate seta, second segment with 2 irregular rows of coarse denticles along outer margin and 2 pinnate setae on inner margin; last segment with 6 pinnate setae. Leg 3 (Fig. 6) with a patch of denticles near outer margin of coxopod; exopod first segment with terminal stout sclerotized spine reaching to base of third segment, second segment with short spine on outer distal corner and a pinnate seta on inner distal corner, last segment with 3 short, weakly sclerotized spines on outer margin and 4 short pinnate terminal setae: endopod 2-segmented; first segment small and bearing an inner pinnate seta, second segment with 6 pinnate setae. Leg 4 (Fig. 7) coxopod with small, distal pinnate seta; exopod 2-segmented, first segment with terminal fringed spine reaching beyond base of next spine, last segment with outer medial fringed spine and 3 terminal fringed spines, all spines with pectens at bases, innermost spine somewhat longer than others: endopod absent.

Discussion. — At present 6 caligid genera are characterized by the presence of lunules and the absence of a sternal furca. Those genera are *Abasia*, *Anchicaligus*, *Caritus*, *Echetus*, *Metacaligus*, and *Sciaenophilus* (*Caligulina* Heegaard = *Anchicaligus*) see Dojiri, 1983.

The new genus can be separated from the 6 genera above by the following: *Abasia* lacks a postantennal process and has a 2-segmented abdomen. *Anchicaligus* lacks the posterior process of the first maxilla and the genital segment is not inflated and lacks distal lobes. *Caritus* and *Echetus* lack a postantennal process and the fourth pedigerous segment is very elongated in *Echetus*. *Metacaligus* bears a very reduced spine on the outer distal corner of the second segment of leg 2 and the spine is directed outward rather than the usual medial orientation in most other caligid genera. *Sciaenophilus* is characterized by a very long genital segment and abdomen. Legs 2, 3, and 4 of the new genus are very much like those of *Caligus* but the absence of a sternal furca and presence of posterior processes on the genital segment which surround and extend well beyond the abdomen and caudal rami separates the new genus from *Caligus*.

Recent works by Dojiri (1983), Kabata (1979), and Prabha (1938) listing current valid genera of Caligidae were used as a basis for comparison of the new genus, *Apogonia*.

Etymology. — The genus name is derived from the host, *Apogon*. the species name, *stocki*, is in honor of Dr Jan Stock in recognition of his outstanding contributions to the taxonomy of marine associated copepods and the field of carcinology in general.

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