Belizia brevicauda, a new genus and species of caligid copepod from the western Caribbean Sea

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Abstract

A new genus and species of parasitic copepod collected from the fishes *Calamus pennatula* and *Clepticus parrae* from off Belize, Central America is described. The new genus is characterized by a very reduced sternal furca, a pair of sclerotized knobs between the interpodal plates of the first and second legs, and endopod of third leg with 4 setae.

Introduction

Recent works by Kabata (1979) and Prabha (1983) resulted in 14 genera being recognized as currently valid. The new genus described below adds an additional genus to that list (see Discussion) and is characterized by a number of reductions in cephalic appendages and armature of the caudal rami.

Belizia n. g.

Female body caligiform. Lunules present. Claw of second antenna reduced. Sternal furca reduced to pair of sclerotized knobs. One additional pair of sclerotized knobs present between interpodal plates of first and second legs. Last segment of third leg endopod with 4 pinnate setae. Male unknown.

Belizia brevicauda n. sp. (Figs 1-8)

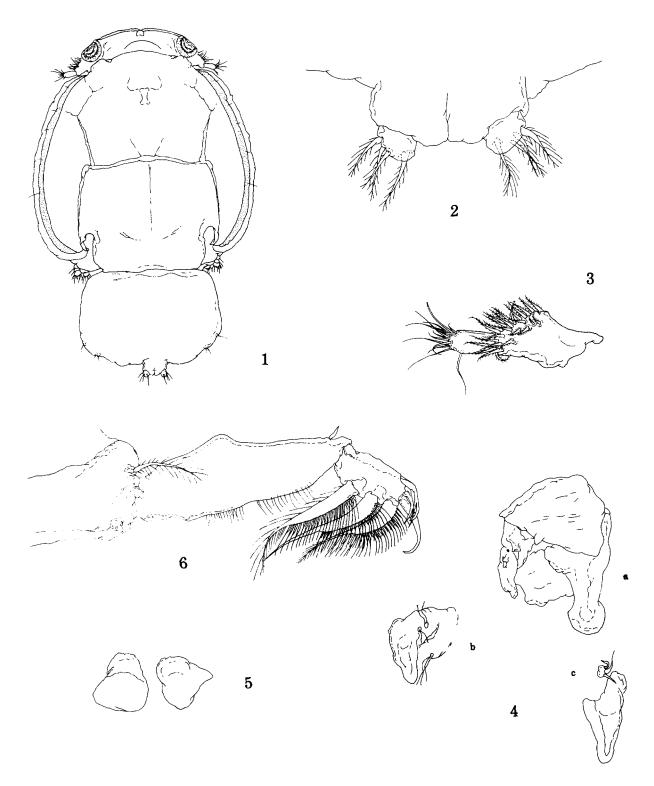
Material examined. Holotype female (USNM 241651) and 4 paratype females (USNM 241652) collected from 3 *Calamus pennatula*, and one pa-

ratype female (USNM 241653) from *Clepticus parrae*. All collections from Carrie Bow Cay, Belize, Central America. Copepods were recovered from branchial chambers of hosts. All material deposited in collections of Smithsonian Institution, Washington, D.C.

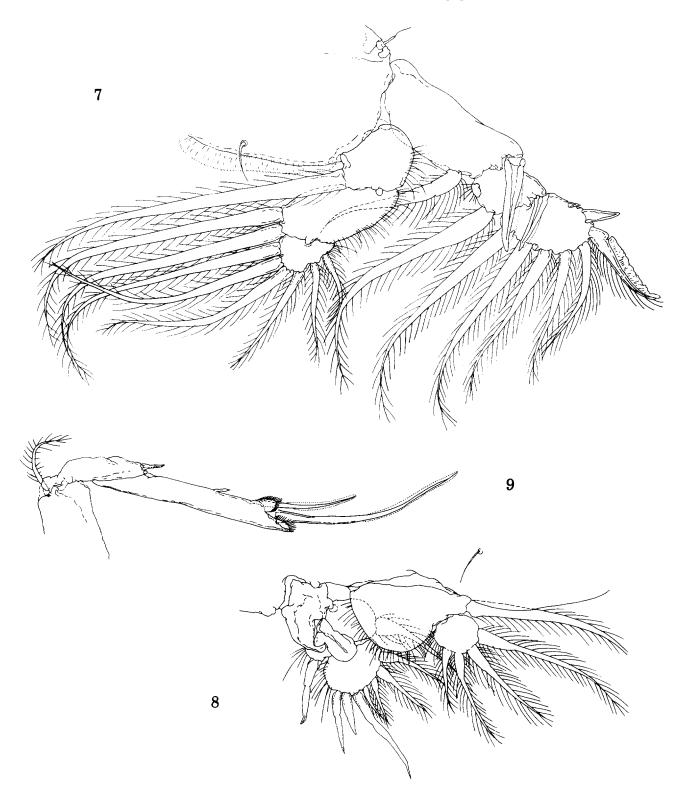
Description

Female. Body form as in Fig. 1. Total length of holotype 1.6 mm. Lunules present on rostral plate and widely spaced. Cephalothorax 1.2 mm in length, somewhat longer than wide. Genital segment wider than long $(0.68 \times 0.45 \text{ mm})$. Abdomen (Fig. 2) very small and somewhat wider than long $(0.09 \times 0.11 \text{ mm})$. Uropods at outer distal corners of abdomen and slightly longer than wide $(0.032 \times 0.027 \text{ mm})$, each bearing 4 short pinnate setae (Fig. 2).

First antenna (Fig. 3) 2-segmented, first segment with 26 distal pinnate setae, second segment with one seta on posterior margin and 12 distal setae (one seta near antero-distal corner blunttipped). Second antenna (Fig. 4a) small with short, nearly straight claw and prominent posterior process with spatulate round tip. Postante-



Figs 1-6. Belizia brevicauda n. g., n. sp., female: 1, dorsal; 2, abdomen uropods; 3, first antenna; 4, second antenna (a), postantennal spine (b), first maxilla (c); 5, sternal furca; 6, leg 1.



nnal process (Fig. 4b) with thick, round-tipped claw. Posterior process of first maxilla (Fig. 4c) heavily sclerotized and blunt-tipped. Sternal furca (Fig. 5) reduced to 2 sclerotized knobs.

Leg 1 (Fig. 6) exopod first segment with short naked spine near anterior distal corner, terminal spines 2 and 3 bifid, spine 4 nearly twice as long as 2 and 3; 3 setae on inner margin well developed, pinnate, pinnae along outer margins, thickened at bases; inner margins sparcely pinnate, endopod weakly developed. Leg 2 (Fig. 7) exopod first 2 segments each with prominent spine on outer distal corner extending across next segment with fringed membrane along outer margin; spine on second segment about two-thirds length of first segment spine; last segment with small naked spine on outer mid-margin; more prominent naked spine at outer distal corner; long terminal semipinnate spine membranous on outer margin, with 5 pinnate setae on medial margin; endopod segments each with fringe of setules on outer margins and first segment with inner pinnate seta, second segment with 2 pinnate setae; last segment with 6 pinnate setae, as in figure. Leg 3 (Fig. 8) exopod first segment with prominent spatulate spine near outer distal corner extending over base of second segment; well-developed pinnate seta on inner margin and weak spine at outer distal corner; second segment with 3 weak spines on outer margin and 4 weakly-developed pinnate inner setae; endopod 2-segmented, first segment inflated over inner margin of exopod to form velum and with inner pinnate seta, last segment with 4 pinnate setae. Leg 4 (Fig. 9) with 2-segmented ramus; first segment with weak seta at outer distal corner; second segment with very weak seta near mid-margin and 2 fringed terminal setae, innermost about twice as long as outermost; each terminal seta with pecten near base.

Discussion

Kabata (1979) presented an overview of the currently recognized genera in the Caligidae. Those with lunules are Alicaligus, Caligodes, Caligulina, Caligus, Echetus, Parapetalus, Pseudanuretes, Scianophilus and Synestius. In 1983 Prabha included Abasia, Anchicaligus, Caligopsis, Caritus and Pseudechetus in addition to those of Kabata. The new genus described here differs from all of the above caligid genera with lunules by the presence of four setae on the endopod of leg 3. All of the above have six setae except Abasia (0-1) and Caritus (0), and Caligopsis lacks a fourth leg. The new genus can be further separated from the above by the presence of only four setae on the uropods and the velum of leg 3 is not separated from the exopod as in most caligid genera.

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