



Title	On a New Species of Hatschekia (Crustacea, Copepoda) from Halichoeres poecilopterus (T. & S.) (With 1 Text-figure)
Author(s)	SHIINO, Sueo M.
Citation	北海道大學理學部紀要, 13(1-4), 105-108
Issue Date	1957-08
Doc URL	<a href="http://hdl.handle.net/2115/27210">http://hdl.handle.net/2115/27210</a>
Type	bulletin (article)
File Information	13(1_4)_P105-108.pdf



[Instructions for use](#)

**On a New Species of *Hatschekia* (Crustacea, Copepoda)  
from *Halichoeres poecilopterus* (T. & S.)**

By

**Sueo M. Shiino**

(Faculty of Fisheries, Prefectural University of Mie)

(With 1 Text-figure)

A copepod representing a new species of the genus *Hatschekia* Poche, 1902, Family Dichelesthidae, was obtained from the gills of a labrid fish, *Halichoeres poecilopterus* (T. & S.), purchased at the fish-market in Tsu City, June 5, 1956. The parasite was found clinging to the gill filament of host with the second antennae and directing the body along the filament toward its free end.

***Hatschekia cylindrica* n. sp. (Fig. 1)**

Host: *Halichoeres poecilopterus* (T. & S.).

Locality: Ise Bay.

Specimens examined: Fifteen females and no male.

Holotype: Female. Body slender, cylindrical, 1.93 long, carapace  $0.29 \times 0.40$ , trunk  $1.64 \times 0.47$ , egg string 0.95 long (all in mm). Color whitish in alcohol.

Carapace wider than long, nearly straight in front, delimited in the rear by widely round, distinct border and dilated on either side in a crescentic lobe. All thoracic segments fused into an elongate, cylindrical trunk (so-called fused genital segment) without leaving any trace of articulation. Trunk five and a half times as long as carapace, widest in the middle, gradually narrowing toward both ends, but less intensely forward than backward. It is somewhat abruptly contracted to form a short neck at extreme fore end, where it bears first pair of legs. Insensible lateral constrictions occur a short distance behind the neck and second pair of legs locate in the region between the neck and these constrictions. Caudal end slightly arched, lacking lateral processes, and carrying triangular, rudimentary abdomen on ventral level.

First antennae three-jointed, middle joint shorter than other two, which are subequal, and apical joint incompletely divided into two subjoints near base. First two joints and proximal subjoint of the third fringed with setae on anterior margin, but distal subjoint of the latter supplied only with apical setae. Second antennae three-jointed, hook-like. Terminal claw curved in falciform and pointed toward tip. Second joint elongate, twice as long as claw, relatively slender, but somewhat widening at base and finely granulated on surface; basal joint short.

Mouth tube broad and blunt, directing caudo-ventrally and enclosing tiny mandibles armed with two terminal denticles. Maxillae placed just outside the base of mouth tube and consisting of two closely adjoining tubercles on either side; inner tubercle surmounted with one spine, whereas outer tubercle with two. Maxillipeds

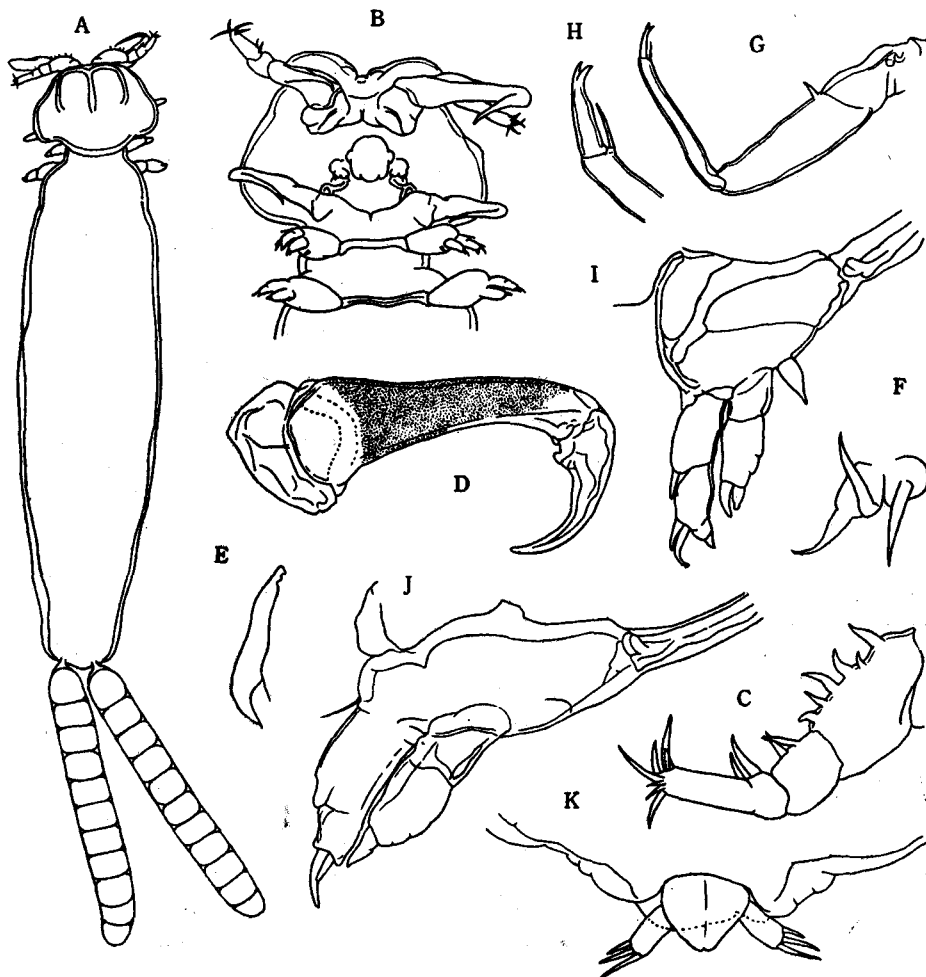


Fig. 1. *Hatschekia cylindrica* n. sp., female. A, dorsal aspect. B, head and anterior portion of trunk, ventral aspect. C, 1st antenna. D, 2nd antenna. E, mandible. F, maxilla. G, maxilliped. H, apical portion of same. I, 1st leg. J, 2nd leg. K, abdomen with caudal rami, ventral aspect. A,  $\times 40$ , B,  $\times 95$ , C, D, G,  $\times 200$ , E, F,  $\times 490$ , H,  $\times 550$ , I-K,  $\times 390$ .

situated near posterior border of carapace, four-jointed, and geniculated between second and third joints. First joint short, second much longer, carrying a basal spine, third also elongate, but far slenderer and bearing a thin hair at the end, and fourth short, with bifurcate tip.

Only two pairs of legs present. First pair a trifle smaller than the second in size. Both pairs composed of broad protopodite and closely adjoining, two-jointed rami; corresponding protopodites of two sides connected with each other across mid-ventral surface by a narrow sternal bar of thickened chitin. Protopodite of first legs with a conical, marginal spine just inside the base of endopodite. Basal joint of the latter shorter than apical joint, which terminates in two spines. Joints of exopodite subequal; first joint furnished with an outer distal spine and the second with two outer and one shorter apical spines. Protopodite of second legs carrying a thin hair at outer distal angle. Endopodite tipped by a single spine and exopodite by two unequal spines; proximal joint of the latter much longer than distal one. Caudal rami projecting diagonally sidewise from the sides of abdomen. They are very minute oblong lamellae and tipped by three spinules graded in length from within outward. Egg strings short, one third as long as body and packed with a single row of flattened eggs.

Male: Unrepresented in the collection.

The type specimen will be preserved in the Prefectural University of Mie.

Remarks: The present species is more closely allied to *branchiostegi* Yamaguti<sup>6)</sup> and *subpinguis* Brian<sup>1)</sup> than to any other members of the genus *Hatschekia*, which comprises more than sixty valid species. Those three are similar to one another not only in the general appearance of body, but also in that the trunk lacks caudo-lateral processes and reaches five to six times the length of carapace, which shows distinct posterior border. The new species, however, may be recognized by the difference in the outline of carapace, since this part of body of *branchiostegi* has triangular sides and the same of *subpinguis* lacks lateral expansions. The armature of legs provides another differential character. In the constitution of trunk, the new species is also related to the following species though less closely than to the above named two: *elongata* Capart<sup>2)</sup>, *bougisi* Nunes-Ruivo<sup>3)</sup>, *couardi* Nunes-Ruivo<sup>3)</sup>, *cluthae* T. Scott<sup>4)</sup>, *leptoscaris* Yamaguti<sup>6)</sup>, *pseudolabris* Yamaguti<sup>7)</sup>, *labracis* (van Beneden)<sup>4)</sup>, *pygmaea* T. Scott<sup>4)</sup>, *albirubra* Wilson<sup>5)</sup> and *oblonga* Wilson<sup>5)</sup>. The first of these species has rectangular carapace and egg strings much longer than in the new species, the second possesses elliptical carapace which is twice as wide as long, the third bears two dorsal bosses on this part, the fourth to seventh are devoid of the lateral expansions of carapace and have the genital segment relatively wider than in the new species, and finally the rest three have two thoracic segments well defined by the deep indentations of trunk sides. The new species is more or less remote from the remainders of the genus, differing, above all things, in the proportion of the carapace and trunk.

### References

- 1) Brian, A. 1913. Die una nuova specie di *Hatschekia* Poche (*Clavella* Oken) copepode parassita del *Crenilabrus pavo*. Monitore Zool. Ital. Sci. Firenze 24 : 60-65, Pl. III.
  - 2) Capart, A. 1953. Quelques copépodes parasites de poissons marins de la région de Dakar. Bull. Inst. Fr. Afrique Noire, Ser. A 15 : 647-671.
  - 3) Nunes-Ruivo, L. 1954. Parasites de poissons de mer ouest-africains récoltés par M.J. Cadenat. III, copépodes (2° note), genres *Prohatschekia* n. gen. et *Hatschekia* Poche. Ibid. 16 : 479-505.
  - 4) Scott T. and A. Scott 1913. The British parasitic Copepoda, 2 Vols., 252 pp., 72 Pls. London.
  - 5) Wilson, C.B. 1913. Crustacean parasites of West Indian fishes and land crabs, with descriptions of new genera and species. Proc. U.S. Nat. Mus. 44 : 189-277, Pls. 18-53.
  - 6) Yamaguti, S. 1939. Parasitic copepods from fishes of Japan. Pt. 5, Caligoida, III. Vol. Jubil. pro Prof. S. Yoshida, 2 : 443-487, Pls. 14-33.
  - 7) ———— 1953. Parasitic copepods from fishes of Japan. Pt. 7, Cyclopoida, III and Caligoida. IV. Publ. Seto Mar. Biol. Lab. 3 : 221-231, Pls. 1-5.
-