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Redescription of the type material of *Eubrachiella antarctica* (Quidor, 1906) (Copepoda, Lernaeopodidae)

by Teodoro STADLER

Résumé. — La femelle d'*Eubrachiella antarctica* (Quidor, 1906) est redécrite et illustrée. La morphologie de son tronc ressemble à celle d'*E. gaini* redécrite par KABATA et GUSEV, parasite de *Chionodraco kathleenae*. Les mandibules, maxillipèdes et premières maxilles de la femelle d'*E. antarctica* sont plus proches de celles de *Neobrachiella* que de celles de *Brachiella*.

Abstract. — The female of *Eubrachiella antarctica* (Quidor, 1906) is redescribed and illustrated. The general morphology of the female's trunk resembles that of *E. gaini* redescribed by KABATA and GUSEV from *Chionodraco kathleenae*. The appendages of *E. antarctica*, especially the mandible, maxillipeds and first maxilla, are more similar to those of females of *Neobrachiella* than to those of *Brachiella*.

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The records of parasitic copepods on fishes of the south Atlantic are scarce and the descriptions are in general poorly detailed. About the genus *Eubrachiella* Wilson, 1915, which includes at the moment four species, two being very closely related, *E. gaini* (Quidor, 1912) and *E. antarctica* (Quidor, 1906), and two others which are less closely related to the first two, *E. sublobulata* Barnard, 1955, and *E. mugilis* Kabata, 1971. *E. gaini* has been carefully redescribed by KABATA, 1965.

The original description of *Eubrachiella antarctica* (Quidor, 1906) is very brief and its morphology cannot be considered as being adequately known. On the other hand, some of the characteristics given in the present paper differ considerably from those in the original description, which require amendment.

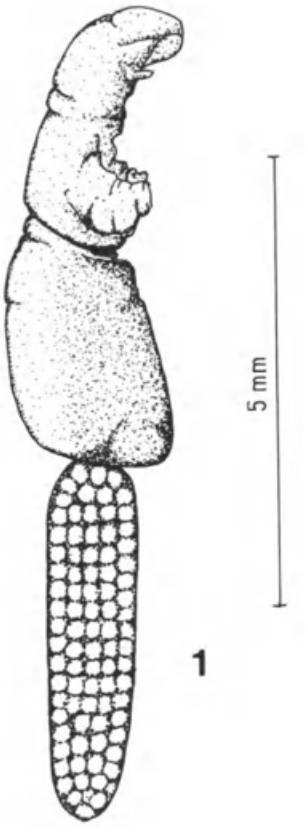
MATERIAL EXAMINED : Three syntypes. Two ovigerous and one young female. Material placed in the collection of the Muséum national d'Histoire naturelle, Paris, n° : Cp. 102.

HOST : *Dissostichus eleginoides* (Smitt).

HABITAT : Buccal cavity.

DESCRIPTION OF THE FEMALE

Body (fig. 1 and 2) consisting of a sub-cylindrical cephalothorax, well delimited from the trunk, which is trapezoidal and dorsoventrally flattened. The eggsacs straight and cylindrical, approximately as long as the cephalothorax.



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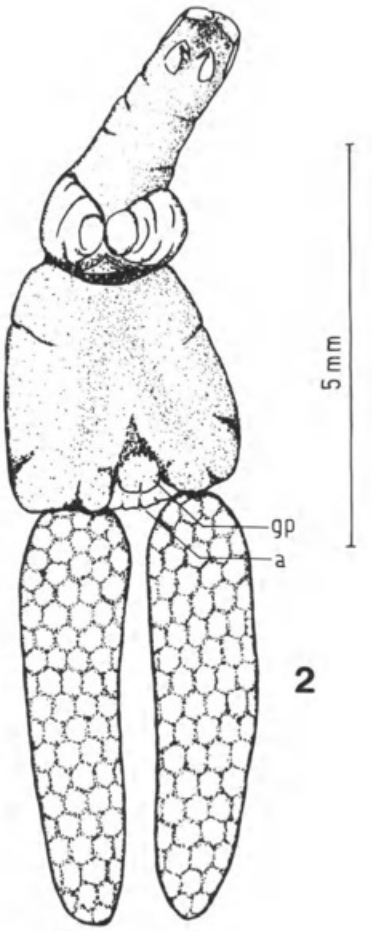

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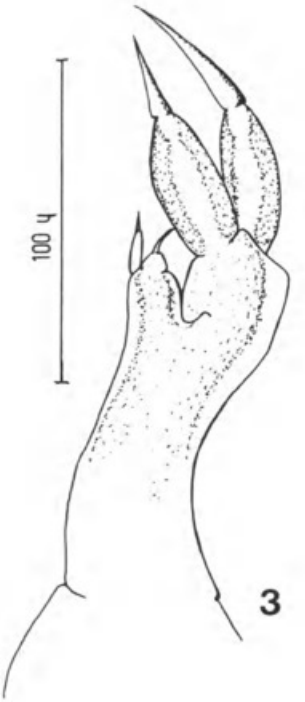

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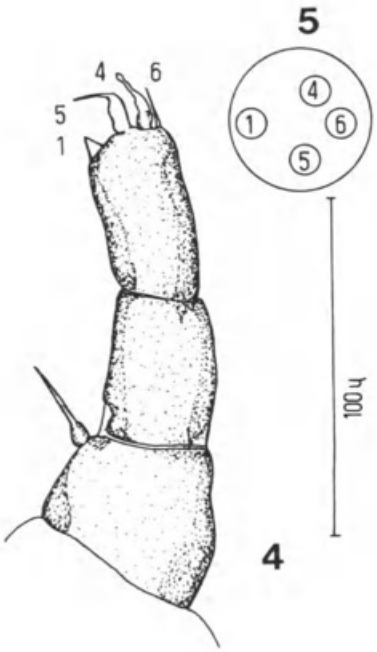

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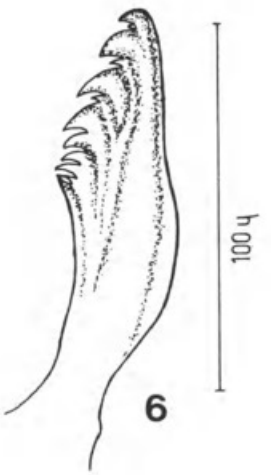

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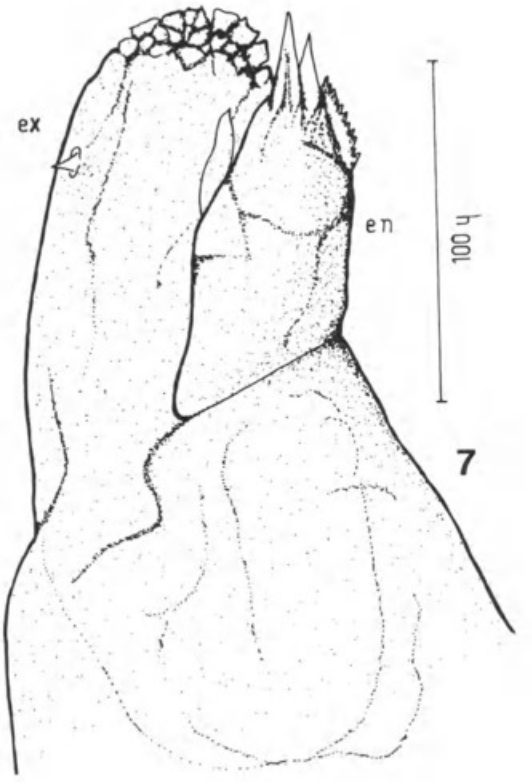

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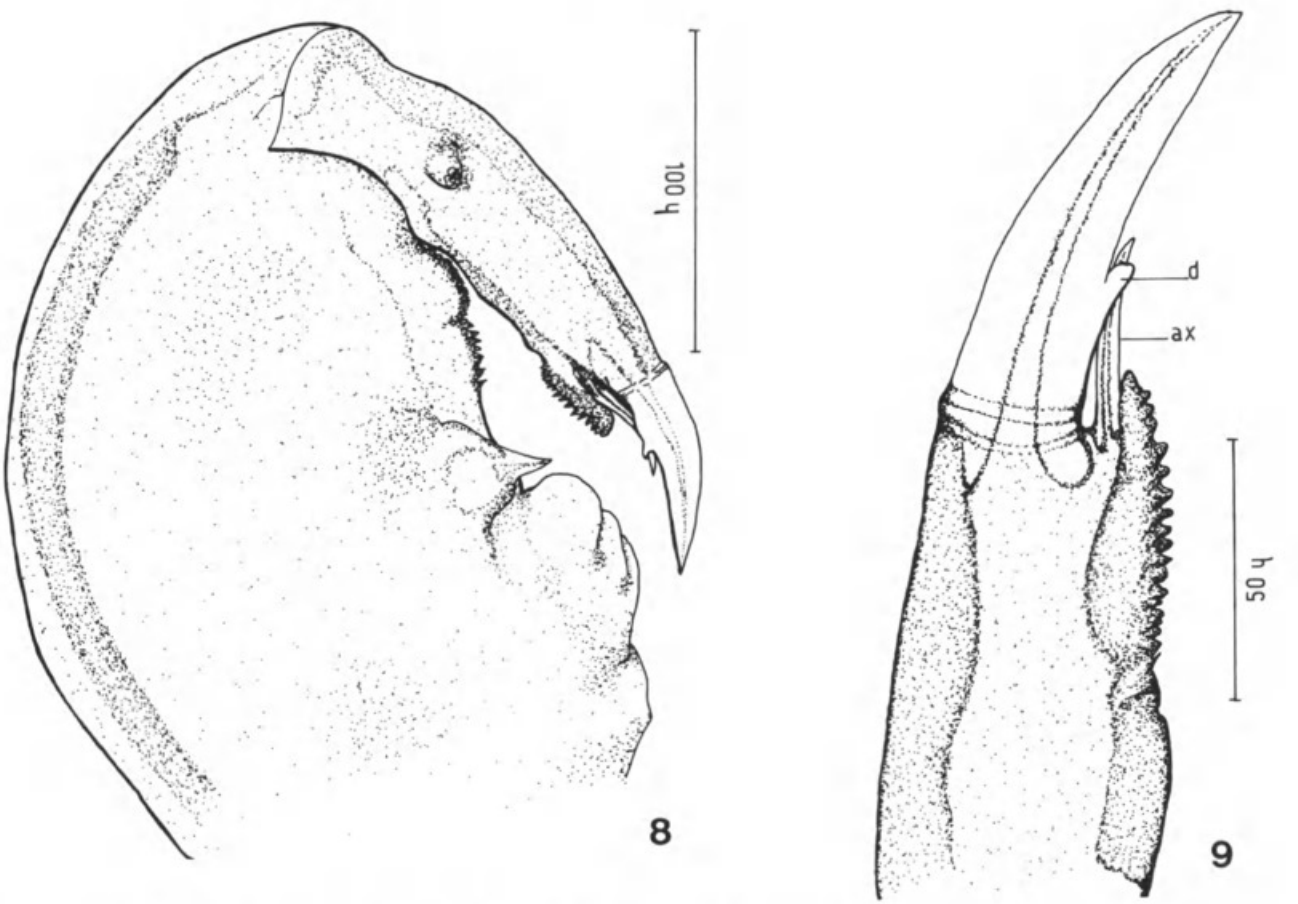

FIG. 1-9. — *Eubrachiella antarctica* (Quidor, 1906), female : 1, lateral view ; 2, ventral view ; 3, first maxilla ; 4, first antenna ; 5, first antenna, diagram of apical armature ; 6, mandible ; 7, second antenna ; ex. exopod, en. endopod ; 8, maxilliped ; 9, maxilliped, tip of subchela.

The cephalothorax, flexed a little forward on the cephalic end (fig. 1), is separated from the trunk by a distinct groove. The cephalic part is not swollen and bears no distinct dorsal caparace.

The trunk is longer than wider, with small tubercles flanking the genital process. The small and semisphaeric genital process (fig. 2, gp) is situated in a triangular depression at the posteromedian part of the ventral side. The anus (fig. 2, a) is like a longitudinal slit situated postero-medially between both egg-strings.

The first antenna (fig. 4) is three-segmented, with a robust basal segment carrying at its distal end a whip with swollen base. The distal segment, is much longer than wider ; it carries a poorly developed apical armature composed of one tubercle, one flagelliform seta, one digitiform seta and one small seta ; distributed as in the diagram (fig. 5).

The second antenna (fig. 7) is turned down across the frontal margin. The endopod is apparently unsegmented and armed apically with two strong spines and a patch of small spinules. The exopod is large, armed with a short and strong spine and distally wrinkled.

The dental formula of the mandible (fig. 6) is P1, S1, P1, S1, P1, S1, and B5.

The first maxilla (fig. 3) carries a small exopod tipped with two short unequal seta ; each one has a swollen basal part and a slender distal part. The endopod bears terminally two large papillae, each surmounted by a long and flexible seta.

The second maxilla is subcylindrical and relatively short, furrowed, the branch being separated at their bases and united at the tips, probably by a common bulla. Bulla unknown.

The maxillipeds (fig. 8) are situated closely behind the cephalic appendages. The corpus is armed and strengthened on its medial margin ; it carries at midlength a rounded boss tipped by a prominent spine. Near the base of the subchela is an ondulated bulge armed with denticles of different size. Myxa looks like a prominent unarmed bulge with a smooth and ondulated surface. The subchela, bearing a prominent blunt process near its base, ends in a gently recurved claw with one ventral secondary denticle (fig. 9, d). At the base of the claw is a flexed auxiliary spine (fig. 9, ax) which overreaches the denticle, and, at its base, a row of denticles stands out arranged on a prominent cutting blade.

COMMENTS

The filaments, described by QUIDOR, which arise from each branch of the second maxilla, correspond probably to the terminal plugs of this appendage. Its tips, in the original material, carry bits of broken cuticle and cement-substance originating perhaps from the manubrium-base of the bulla.

The posterior margin of the trunk of *E. antarctica* is closely similar to that of *E. gaini* (Quidor, 1912) from *Chionodraco kathleenae* Regan, 1914 redescribed by KABATA and GUSEV in 1966. On the posterior margin of the trunk of the young female it is possible to recognize two small and smooth tubercles without visible caudal laminae or structures like spines or setae. If the evolution of the genus progressed from the simple shape of the trunk towards an increasing complexity (KABATA & GUSEV, 1966) we have to place *E. antarctica* at the beginning of the line, since the trunk of this species is almost smooth.

In reference to the appendages of the female, especially the mandible, first maxilla and maxillipeds, *E. antarctica* seems to be closer to *Neobrachiella*, according to KABATA's (1979) subdivision of the *Brachiella*-branch.

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