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RESEARCH NOTE

RHADINORHYNCHUS PRISTIS (RUDOLPHI, 1802) ACANTHOCEPHALAN PARASITE OF FISHES, *SCOMBER SCOMBRUS* AND *S. JAPONICUS*. SOME OBSERVATIONS ON THE SCANNING ELECTRON MICROSCOPE

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We had the opportunity to examine by scanning electron microscope some specimens of Acanthocephala collected from Scombrid fishes, *Scomber scombrus* L. and *S. japonicus* Houtt., from Portuguese coast (Atlantic Ocean). Previously, these worms were erroenously designed as *Rhadinorhynchus tenuicornis* (Linton, 1891) (Rego et al., 1985, *Mem. Inst. Oswaldo Cruz, 80*(1) :97-100). Due to taxonomic controversy in the concerned publications, we make a brief historic on the matter.

Petrochenko (1956, Acanthocephala from domestic and wild animals, Vol. 1) placed *R. tenuicornis* and *R. pristis* in the same genera, *Rhadinorhynchus;* according to this author, in *R. pristis* the trunk anterior hooks are distributed in two zones, separate by an area without spines. In his check list of hosts, *Scomber scombrus* and *S. japonicus* are also mentioned. Regarding to *R. tenuicornis,* it was figured with these spines distributed continuously over the trunk.

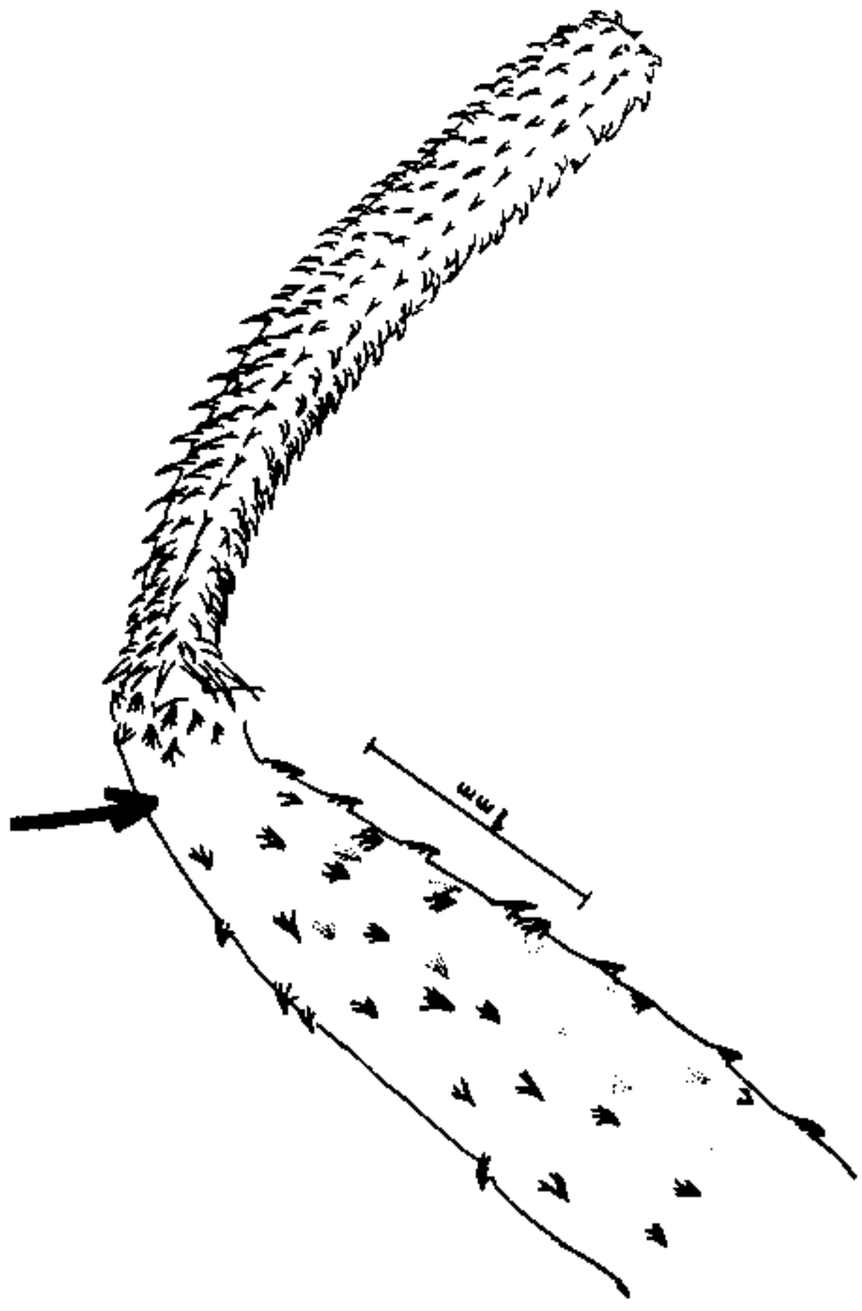
Yamaguti (1963, Systema Helminthum, V, Acanthocephala) adopted Petrochenko's opinion, but these species were placed in different genera, depending on the way of distribution of the trunk spines, respectively *Rhadinorhynchus pristis* and *Telosentis tenuicornis.*

Cable & Linderoth (1963, *J. Parasit., 49*(5) :706-716) commented and redescribed *R. pristis* and *R. tenuicornis.* They were represented differently; in both species the trunk spines showed aspined area. This pattern is in disagreement with the description of Petrochenko and Yamaguti. Cable & Linderoth also showed that there are differences between *R. tenuicornis* and *R. pristis,* concerning the trunk spines.

Rodrigues et al., (1975, *Mem. Inst. Oswaldo Cruz, 73*(3) :209-214) followed the lines of Cable & Linderoth, nominating their specimens from *Scomber scombrus,* as *R. tenuicornis.*

Rego et al. (1985, *Mem. Inst. Oswaldo Cruz, 80*(1) :97-100) referred *R. tenuicornis,* and other helminths, from *Scomber scombrus* from Portuguese coast, in accordance with Rodrigues et al.

Recently we could re-examine these specimens and others collected from *Scomber japonicus* (similar to the specimens from *S. scombrus*), and we had the opportunity to prepare some of them to study in the scanning electron microscope. Now we agreed with Petrochenko about the disposition of the trunk spines and their importance in separating these two species.



Rhadinorphynchus pristis (Rudolphi, 1802). Fig. 1: Trunk and proboscis. Aspinose area indicated by arrow.

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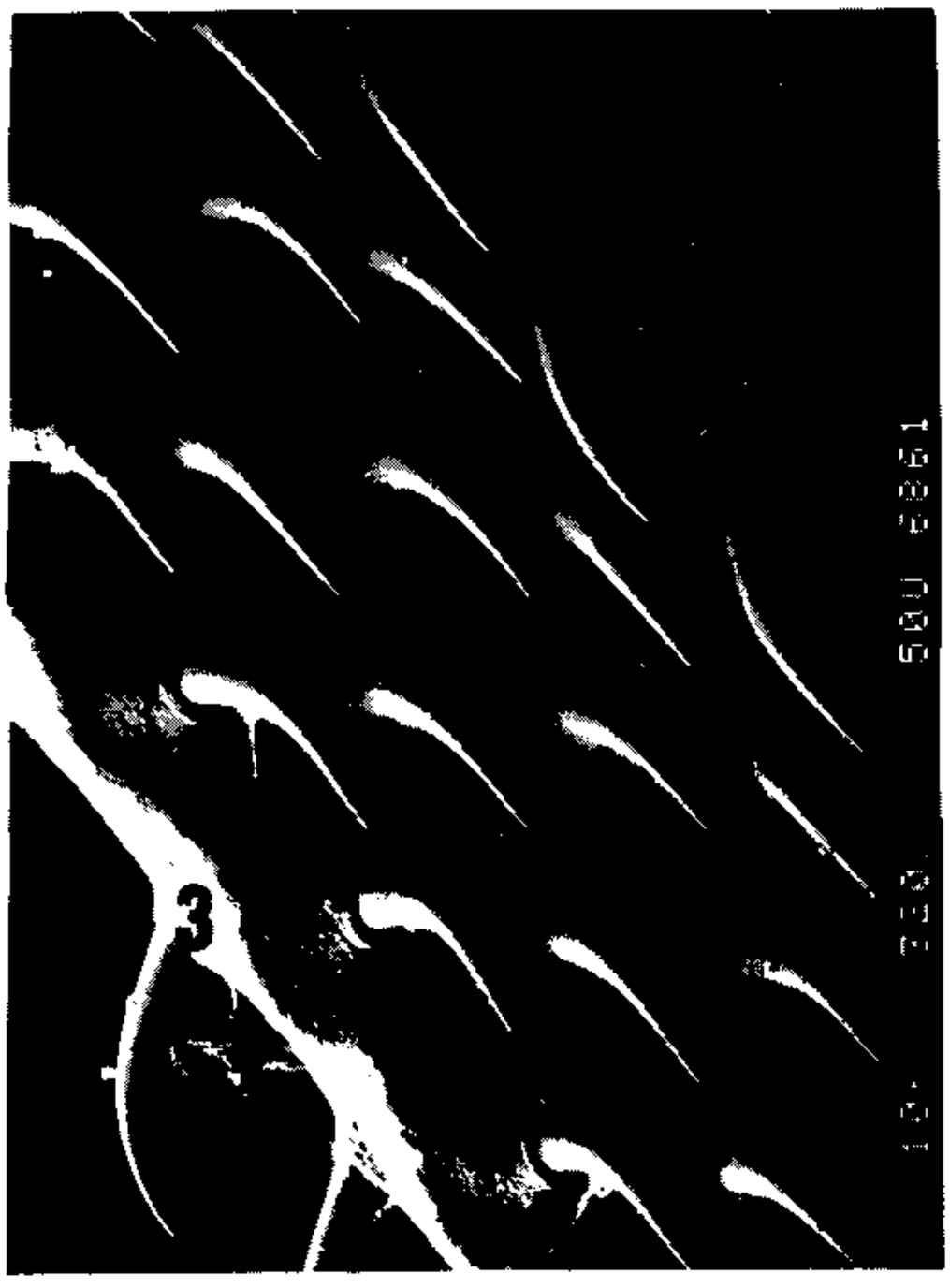
The trunk spines are anteriorly distributed in two zones, separated by a not spinous area (Fig. 1). These spines are sheated, recovered by cuticle (Fig. 2), 0,090-0,120 mm large. The male proboscis is 2,4 mm large and has 14 rows of hooks; each longitudinal row has 26 hooks. Proboscis hooks have the same lenght of trunk spines, but they are completly different in origin, i. e., the trunk spines are coated by the cuticle, as mentioned, while the proboscis hooks originated under the latter (Figs. 3-4). Females have larger proboscis, about 3 mm, but the spines and hooks are similar in size to the males.

Based on presente datum, we think that the *Rhadinorhynchus* specimens from *Scomber scombrus* and *S. japonicus*, must be nominated *R. pristis*, in accordance with Petrochenko.



Rhadinorhynchus pristis (Rudolphi, 1802). Fig. 2: Trunk spines. Note the cuticular revestment of the spines. Fig. 3: Proboscis hooks, median region. Fig. 4: Hooks of proboscis. Apical portion.