

METONCHOLAIMUS AMPLUS HOPPER, 1967 (NEMATODA: ONCHOLAIMIDAE), A PSEUDOPARASITE OF THE FISH HAEMULON SCIURUS (SHAW) IN BRAZIL

In 1987, helminthological examinations of the marine fish *Haemulon sciurus* (Shaw, 1803) (fam. Pomadasysidae, Perciformes) originating off the Brazilian coast (Ilha do Governador, Rio de Janeiro) revealed the presence of nematodes of unusual morphology that had been located in the stomach and intestines of the infected fish. Of a total of 50 specimens of this fish species examined in the period from April to November, 13 of them harboured the nematodes, the intensity of infection being 2-50 nematodes per fish. The nematodes were not attached to the intestinal mucosa of the fish host and some of them were dead.

A closer examination of the nematodes recovered showed that they belonged to the genus *Metoncholaimus* Filipjew, 1918 (in the conception of Belogurov and Belogurova 1978: Zool. zhur. 57: 977-986) of the family Oncholaimidae (subf. Oncholaiminae), namely to the species *M. amplus* Hopper, 1967. These nematodes are free-living, mostly in the coastal mud in the sea. It is clear that in this case they are not the true parasites of the fish, which might acquire them accidentally while either feeding on them or along with other food items taken from the bottom. It is also indicated by the fact that most of these nematodes have been damaged by digestion of their fish hosts. Nevertheless, we consider it useful to place this finding on record, because such pseudoparasites might easily be mistaken for true parasites by some ichthyoparasitologists.

Metoncholaimus amplus Hopper, 1967 Fig. 1

Description of specimens from *Haemulon sciurus* (measurements in mm): Body elongate, somewhat tapering to both ends. Cuticle smooth, with several small, irregularly distributed bristles on both ends. Mouth opening roughly hexagonal, with narrow membranous margin provided with 6 minute papillae. Outer sensory organs represented by 10 well developed bristles. Amphids large, cyathiform. Buccal capsule large, with well sclerotized walls, provided with three well developed, unequal onchia of which dorsal and right ventrolateral teeth being small; left ventrolateral tooth conspicuously large, anteriorly reaching to anterior end of buccal capsule. Oesophagus simple, somewhat expanded at its posterior part. Nerve ring encircling oesophagus approximately at its mid-length; excretory pore not located. Intestine dark-coloured, straight. Tail of both sexes

conical, with drop-like extension at its tip. Male (7 specimens): Length of body 3.14 to 3.86, maximum width 0.068-0.082. Length of buccal capsule 0.033-0.039, its width 0.021-0.024. Length of oesophagus 0.340 to 0.394, maximum width 0.033-0.048. Nerve ring 0.195-0.237 from anterior extremity. Testes initiating a short distance below end of oesophagus. Two slender, equal needle-like spicules with slightly expanded proximal ends and gubernaculum present. Length of spicules 0.198-0.306, length of gubernaculum 0.033. Two rows of conspicuously big bristles (some 8-10 in number) present in cloacal opening region; single bristles may be present on ventral side in middle of tail. In two specimens, additional groups of small ventral bristles were observed a short distance in front of big copulatory bristles; single small bristles present also more anteriorly. Oblique copulatory muscles present in region of spicules. Length of tail 0.090-0.117.

Female (9 specimens): Length of body of gravid females 3.66-4.11, maximum width 0.095-0.109. Length of buccal capsule 0.036 to 0.039, its width 0.021-0.027. Length of oesophagus 0.354-0.422, maximum width 0.039-0.042. Distance of nerve ring from anterior extremity 0.195-0.255. Uterus monodelphic. Ovary anteriorly starting at 0.204-0.544 below oesophagus end. Uterus filled in with 7-20 eggs arranged in single file. Genital opening situated in posterior part of body, 1.00-1.17 from posterior end of body. Tail 0.081-0.108 long, with marked drop-like extension at tip. Eggs irregular in shape, spherical to transverse-oval, size 0.060-0.120 $\times$ 0.060 to 0.105, with thin (thickness 0.003) hyaline shell. Content of eggs in utero uncleaved.

The morphology of the specimens from *H. sciurus* corresponds more or less to the descriptions of this species given by Hopper (1967: Marine Biol. 1: 85-96) and Riemann and Rachor (1972: Israel J. Zool. 21: 167 to 187), small differences may be considered to be within the limits of intraspecific variability.

The nematode *Metoncholaimus amplus* has so far been known off the coast of Florida and Bermuda Islands and also from the Suez Canal (Riemann and Rachor 1972: op. cit.). After FAO, the distribution of *Haemulon sciurus*, the host of this pseudoparasite, is from the lower Gulf of Mexico, southern Florida and the Bahamas southward through the area of Brazil and also in Bermuda. *M. amplus*

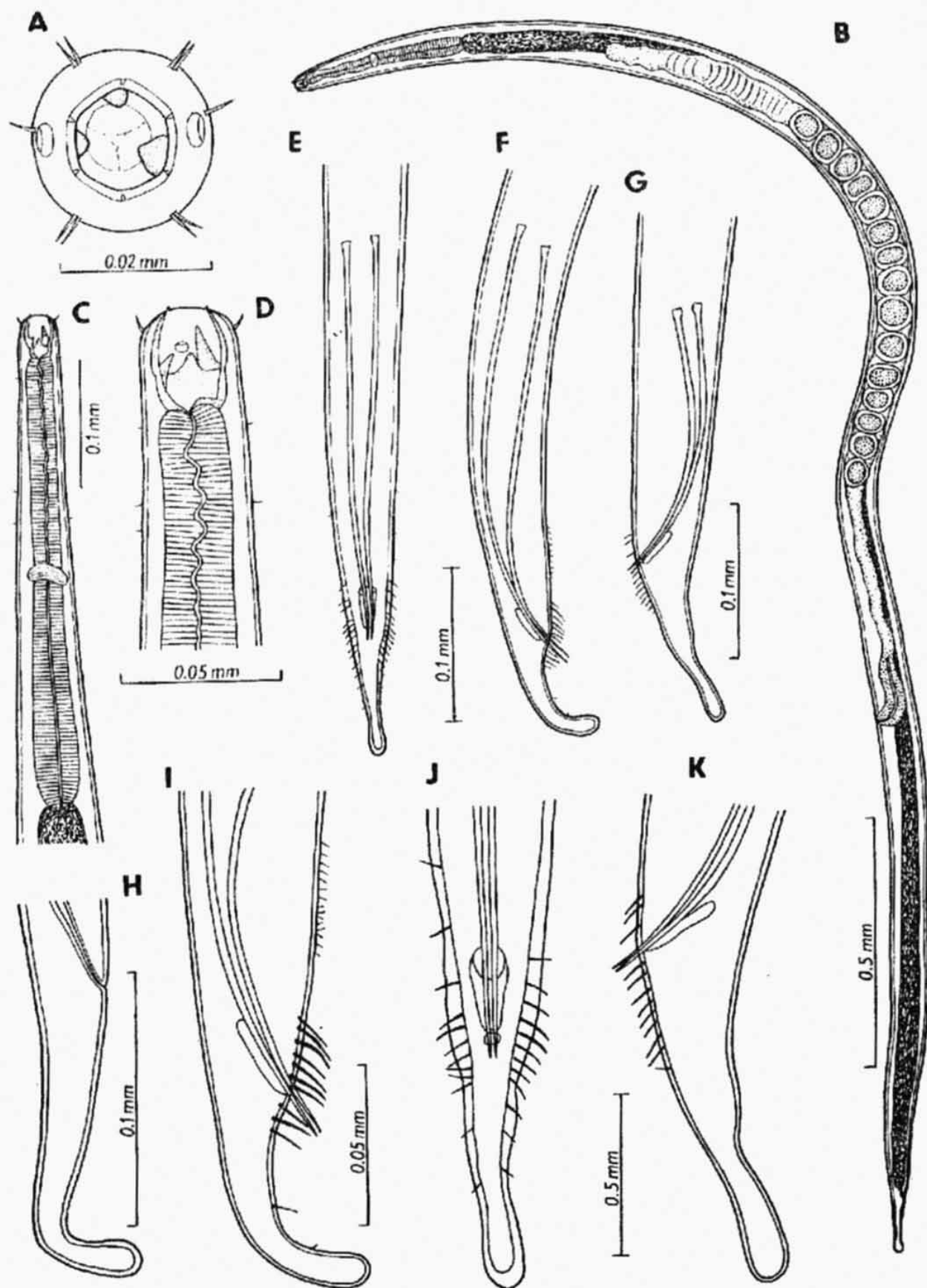


Fig. 1. *Metoncholaimus amplius* Hopper, 1967 from *Haemulon sciurus*. A — head end, apical view; B — female, general view; C — head end of female; D — same, higher magnification; E, F — posterior end of male, ventral and lateral views; G — posterior end of male with shortest spicules; H — tail of female; I, J — tail of male, lateral and ventral views; K — same, lateral view.

has not been previously reported from Brazilian waters.

Another pseudoparasite, a cosmopolitan rodent nematode *Aspicularis tetrapectera* (Nitzsch,

1821), has recently been reported from *Haemulon sciurus* in Brazil by Kohn and Macodo (1984: Ann. Parasitol. Hum. Comp. 59: 477 to 482).

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FIRST RECORD OF THE NEMATODE SYNCUARIA SQUAMATA (LINSTOW, 1883) FROM COMMON CORMORANTS (PHALACROCORAX CARBO (L.)) IN CZECHOSLOVAKIA

The hitherto data on the helminth fauna of cormorants (*Phalacrocorax carbo* (L.)) in Czechoslovakia are rather scarce. Small numbers of these fish-eating birds were examined by Vojtěchová-Mayerová (1952: Věst. čs. Společ. zool. 16: 71–88) and Ryšavý (1958: Věst. čs. Společ. zool. 22: 121–129) from one locality (Podunajské Biskupice) in southern Slovakia and only recently Moravec et al. (1988: Folia parasitol. 35: 381–383) reported on the results of the helminthological examination of two cormorants originating from South Bohemia (surroundings of Třeboň). According to the above mentioned authors, a total of 6 helminth species (3 trematodes, 1 cestode, and 2 nematodes) have so far been recorded from cormorants in Czechoslovakia.

In 1989, a total of 10 cormorants were obtained for examination from one South-Bohemian locality (fishpond Ženich near Třeboň — 2 specimens examined on 22 August) and two South-Moravian ones (fishpond Starý near Pohodnice — 2 specimens examined on 10 September and fishpond Prostřední near Lednice — 6 specimens examined on 18 September). In addition to several other helminth parasites, also medium sized, whitish nematodes localized in the cormorants' gizzard were found in all three localities; these were later identified as *Syncuaria squamata* (Linstow, 1883) Wong, Anderson et Barlett, 1986. Both cormorants from the first locality were infected by this parasite (intensity 8 and 3 nematodes), while only a single nematode specimen was found in one cormorant from both South-Moravian localities. Since *S. squamata* has not been previously

reported from Czechoslovakia, some morphological data based on the present material are provided.

Syncuaria squamata (Linstow, 1883) Fig. 1

Description (measurements in mm): Whitish, medium sized nematodes. Pseudolabia well developed, with conical apices, each bearing pair of cephalic papillae and amphid. Cordons starting at dorsal and ventral sides of oral opening and anastomosing on lateral sides immediately in front of large, trident deirids; cordons consisting of wide serrated crescent-shaped cuticular plates. Lateral alae present. Male (2 specimens): Length of body 9.04–9.98, maximum width 0.245–0.272. Length of pseudolabia 0.027–0.040. Cordons 0.93–1.02 long, their maximum width 0.027–0.033. Deirids 0.030 long and 0.033 wide. Length of narrow vestibule 0.270–0.299, of muscular oesophagus 0.517; length of glandular oesophagus not established. Nerve ring 0.367–0.394 from anterior extremity. Caudal alae well developed, being supported by four pairs of preanal and five pairs of postanal papillae. Left spicule 0.99–1.04 long, with sharply pointed tip in lateral view. Right spicule spatula-shaped, 0.141–0.144 long. Tail conical, with rounded end, 0.109 long. Female (7 specimens): Length of body 15.33–19.51, maximum width 0.435–0.476. Length of pseudolabia 0.027–0.041. Cordons 0.98–1.50 long, their maximum width 0.054. Deirids 0.060 long and 0.066 wide. Length of vestibule 0.408–0.517, of muscular oesophagus