

COMEPHORONEMA OSCHMARINI (NEMATODA: CYSTIDICOLIDAE), A SPECIFIC PARASITE OF *LOTA LOTA* (PISCES), OCCURS IN WESTERN EUROPE

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A helminthological examination of a fish sample from Annecy Lake, France (Haute-Savoie), carried out on 16 June 1998, revealed the presence of a male nematode from the stomach of one out of eighteen burbots, *Lota lota* (L.), examined. This proved to belong to *Comephoronema oschmarini* Trofimenko, 1974, a little-known parasite specific to the burbot. *Comephoronema* Layman, 1933 was considered by Chabaud (Chabaud A. G. 1975: In Anderson R. C., Chabaud A. G., Willmott S. (Eds.): CIH Keys to the Nematode Parasites of Vertebrates. No. 3. Keys to genera of the order Spirurida. Part 2. Spiruroidea, Habronematoidea and Acuarioidea. Commonwealth Agricul. Bureaux, Farnham Royal, U. K., 58 pp.) a junior synonym of *Cystidicola* Fischer, 1798, but Moravec and Nagasawa (Moravec F., Nagasawa K. 1999: Folia Parasitol. 46: 123-131) revalidated this genus, which shows affinities more to *Salvelinema* Trofimenko, 1962 than to *Cystidicola*.

D e s c r i p t i o n (measurements in millimetres) (Fig. 1): Nematode body 9.40 long, maximum width 0.109; cuticle smooth. Pseudolabia fairly large, 0.003 long. Length of vestibule including prostom 0.177; size of prostom 0.018 × 0.018. Muscular oesophagus 0.375 long, 0.015 wide; glandular oesophagus 1.69 long, 0.048 wide; length ratio of both parts of oesophagus 1 : 4.5. Nerve ring and excretory pore 0.264 and 0.405, respectively, from anterior extremity; minute deirids situated at level of vestibule end. Caudal end spirally coiled, with wide caudal alae; *area rugosa* well developed. Preanal papillae: 6 pairs forming on either side three groups, each consisting of two papillae situated close together. Postanal papillae: 6 pairs situated separately, only two last pairs being close to each other. Left spicule 0.405

long, its shaft measuring 0.096, forming 24% of spicule length. Right spicule 0.090 long. Length ratio of spicules 1 : 4.5.

The morphology and measurements of the specimen are very similar to those given in the original description (Trofimenko V. A. 1974: Tr. GELAN 24: 199-207 [In Russian]); deirids are described in *C. oschmarini* for the first time. The specimen is deposited in the Institute of Parasitology, Academy of Sciences of the Czech Republic, in České Budějovice (Cat. No. N-721).

In Europe this freshwater parasite has hitherto been reported from Onega Lake and from lakes in Karelia in Russia; otherwise it is known from the Asiatic part of Russia from the lower reaches of the Yenisei River and the lakes of eastern Siberia (Trofimenko 1974, op. cit.; Bauer O. N. (Ed.) 1987: Key to Parasites of Freshwater Fishes of the Fauna of the USSR. Part III. Nauka, Leningrad, 583 pp. [In Russian]). The present finding of *C. oschmarini* in France represents the first record of this parasite from western Europe.

Although the prevalence of *C. oschmarini* in the definitive host (*L. lota*) reaches up to 100% with the intensity as many as 200 nematodes per fish in some localities (Trofimenko 1974, op. cit.), this parasite seems to be rather rare in burbots of Annecy Lake (prevalence 5.6%). According to the unpublished data by Trofimenko (see Bauer 1987, op. cit.), intermediate hosts of *C. oschmarini* are gammarids (*Palassea quadrispinosa*, *Echinogammarus baicalensis*).

Stay of one of the authors (T.S.) in France was supported by the project No. 206/98/0591 of the Grant Agency of the Czech Republic.

Received 18 August 1998

Accepted 30 November 1998

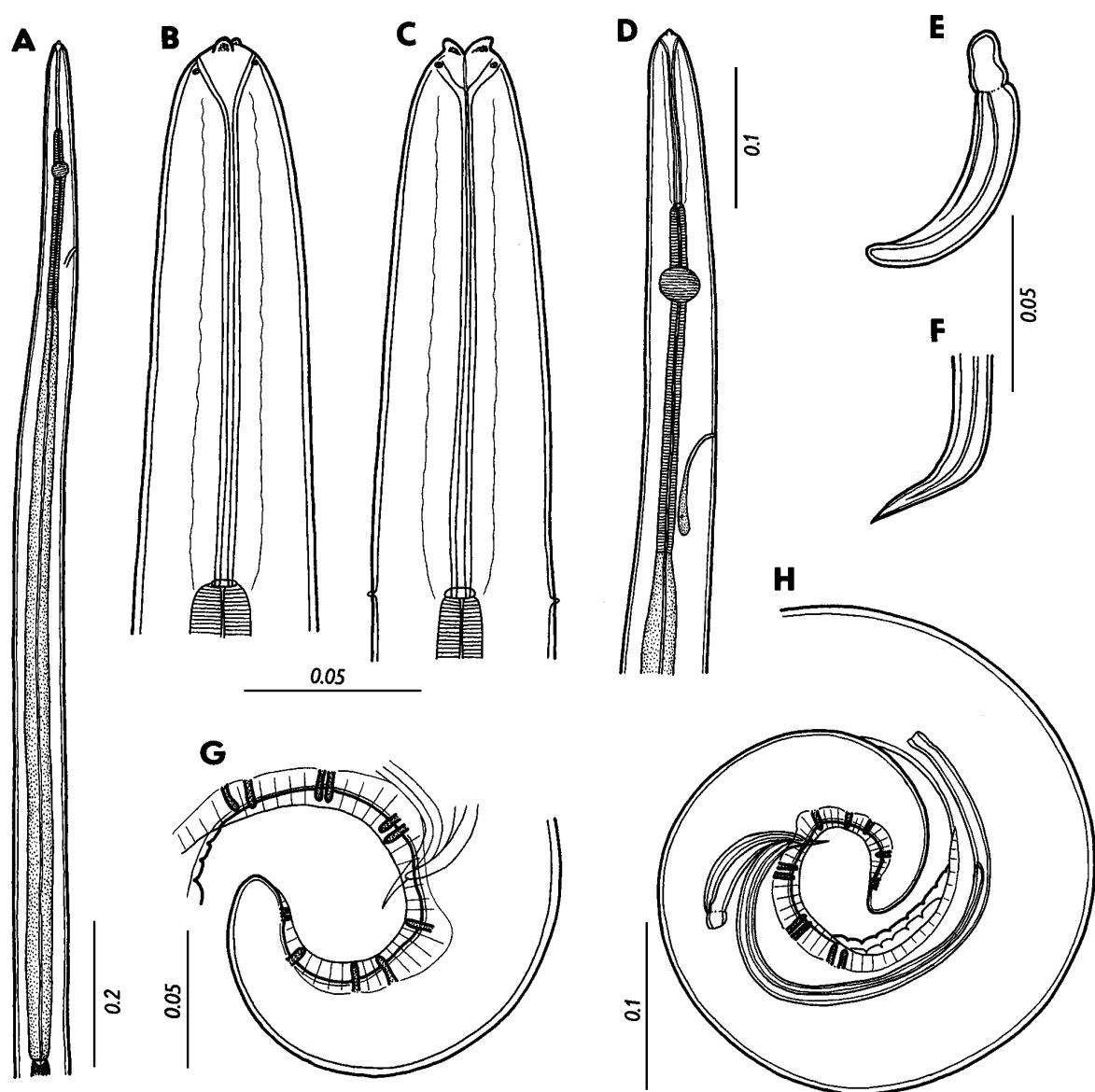


Fig. 1. *Comephoronema oschmarini* Trofimenko, 1974, male. **A** – anterior part of body, lateral view; **B, C** – cephalic end, lateral and dorsoventral views; **D** – anterior end, lateral view; **E** – right spicule; **F** – distal end of left spicule; **G** – tail, lateral view; **H** – posterior end of body, lateral view. Scale bars in mm.