

TWO NEW INTERMEDIATE HOSTS OF THE NEMATODE *PHYSOCEPHALUS SEXALATUS* (MOLIN, 1860)

The nematode species *Physocephalus sexalatus* (Molin, 1860) is a common and widely distributed stomach parasite of hog and pig. This nematode is a member of the family Thelaziidae Baylis et Daubney, 1926 and of the subfamily Ascaropsinae Alicata et McIntosh, 1933. The incidence of imaginal stages of this parasite has been recorded in Czechoslovakia from *Sus scrofa* L. only. In Slovakia it was recorded first by JURÁŠEK (Helminológia—Proceedings of the 1st Conference of Czechoslovak Helminthologists in 1956; pp. 287—291, Bratislava 1957), in Bohemia and Moravia by PÁV, KOTRLÝ and ZAJÍČEK (Vet. Med., Collected papers of the ČSAZV 6: 287—300, 1961). The list of intermediate hosts given by SKRYABIN, SOBOLEV and IVASHKIN (Osnovy nematodologii XIX, pp. 1—239. Publ. House "Nauka", Moscow 1967) includes beetles of the family Scarabeidae (genera *Scarabeus*, *Aphodius*, *Ataenius*, *Caccobius*, *Canthon*, *Copris*, *Geotrupes*, *Gymnopleurus*, *Onthophagus*, *Phanaeus* and *Pinotus*) and Passalidae (genus *Passalus*). The range of intermediate hosts of this nematode species has not been studied in Czechoslovakia.

We found invasive larvae of *P. sexalatus* in new species of intermediate hosts, i.e. in beetles of the species *Oeceptoma thoracica* L., family Silphidae and in *Glomeris* sp., family Glomeridae (Diplopoda). In three specimens of *Oe. thoracica* the incidence of larvae was 2—8, in 2 specimens of *Glomeris* sp. 1—3 larvae. These larvae were located in spherical cysts in the abdominal cavity of their intermediate hosts.

The morphology of our larvae was analogous to that of the larvae described by RYZHIKOV and NAZAROVA (Tr. gelm. lab. AN SSSR 9: 249—252, 1959), but the size of the body was smaller—overall length 0.69—0.84 mm, maximum width 0.045—0.066 mm. Body white to yellowish in colour, cuticle clearly transversely striated. Mouth terminal with two lateral lips. Length of vestibule 0.057—0.061 mm, of muscular oesophagus 0.048—0.066 mm, of glandular

oesophagus 0.24—0.46 mm. Nerve ring at 0.096 to 0.11 mm from anterior end of body, excretory pore at 0.11—0.13 mm. Cervical papillae small, situated at the level of the nerve ring or slightly

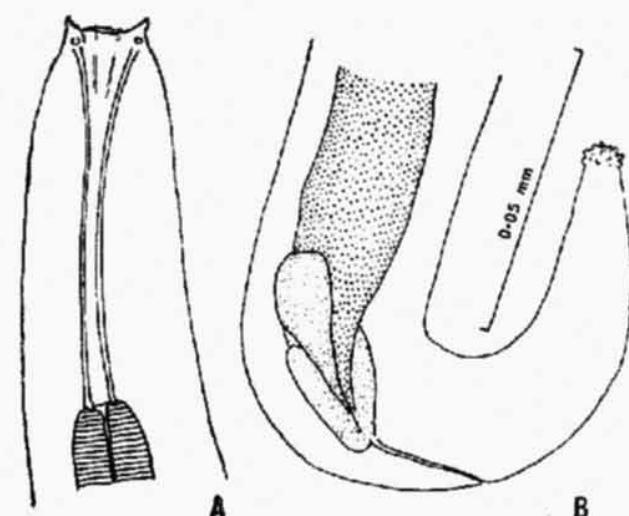


Fig. 1. *Physocephalus sexalatus* (Molin, 1860) — invasive larva. A — anterior extremity (lateral view) B — posterior extremity (lateral view).

behind it. Intestine shaped like a straight dark tube, equal in width. Rectum short with a group of rectal glands. Posterior end of body conical terminating in a conical process with small papillae (18—21). Anus at 0.054—0.066 mm from end of body.

Both new species of intermediate hosts of *P. sexalatus* were collected in southern Bohemia in the neighbourhood of the villages Klec and Lužnice in localities frequently visited by *Sus scrofa*. The migration of these animals to distant places and the occurrence of suitable intermediate hosts of the nematode *P. sexalatus* may represent important epizootical factors for the potential distribution of this helminthosis to breeds of domestic pigs (*Sus scrofa* f. dom.).

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