

# ACANTHATRIUM BISUTUM SP. N. (TREMATODA), A PARASITE OF BATS (CHIROPTERA) IN AFGHANISTAN

A new species of trematodes was found in the material collected from Afghanistan bats during the expedition of members of the Department of Zoology, University of Agriculture, Brno. A description is given below.

*Acanthatrium bisutum* sp. n. Fig. 1

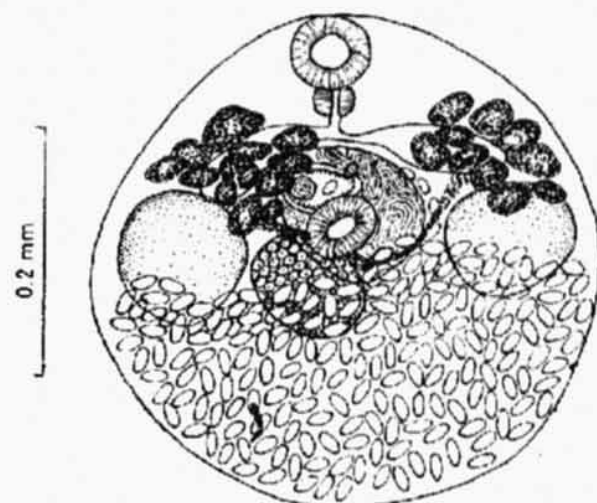
**Material:** One specimen from *Eptesicus nasutus* (Dobson, 1877) (26 specimens examined) — locality: Bisut; one specimen from *Pipistrellus coromandra* (Gray, 1838) (22 specimens examined) — locality: Jalal-Abad. Host of holotype: *Eptesicus nasutus*. Location in host: small intestine.

Holotype (No. A 568) and paratype (No. A 412) deposited in the Institute of Parasitology, Czechoslovak Academy of Sciences, collection Trematoda-Chiroptera.

**Description** (measurements of paratype in parentheses; all measurements in mm): Body distinctly oval, 0.392 (0.370) long, 0.392 (0.333) wide. Cuticle smooth, without chitinous setae or spines. Terminal oral sucker measures  $0.059 \times 0.066$  ( $0.044 \times 0.059$ ). Propharynx absent, pharynx measures  $0.030 \times 0.033$  ( $0.022 \times 0.022$ ). Oesophagus indistinct or very short (0.015). Ventral sucker at the anterior margin of body, measuring  $0.052 \times 0.059$  ( $0.037 \times 0.051$ ), at 0.148 (0.133) from the oral sucker. Pseudocirrus sac well-developed, situated in the area of ventral sucker, measuring  $0.103 \times 0.118$  ( $0.096 \times 0.111$ ). Ovary postacetabular, measuring  $0.074 \times 0.089$  ( $0.074 \times 0.066$ ). Testes paracetabular, somewhat larger than ovary, measuring  $0.111 \times 0.103$  and  $0.111 \times 0.111$  ( $0.103 \times 0.059$  and  $0.088 \times 0.044$ ). Intestinal branches long, extending nearly to the middle of the anterior margin of testes. Vitellaria consist of relatively large follicles overlapping the intestinal caeca. There are 11 follicles on one side and 13 on the other. Genital atrium covered with very fine chitinous spines, measuring 0.003–0.005. Eggs occupy nearly the whole second half of body measuring  $0.023 \times 0.012$  ( $0.023 \times 0.012$ ).

**Discussion:** *A. (A.) bisutum* belongs to those species of the genus *Acanthatrium* which possess very short atrial spines, e.g. *A. molossidis*

Martin, 1934, *A. japonicum* Yamaguti, 1939, *A. microcanthum* Macy, 1940, *A. oligacanthum* Chong, 1957 and *A. houini* Richard, 1966. According to the literary data, (G. Dubois, Rev. Suisse Zool. 68: 273–302, 1961; J. Richard, Ann. Parasit. Hum. Comp. 5: 413–427, 1966; R. W. Macy, Am. Midl. Nat. 22: 640–641, 1939; R. W. Macy, J. Parasit. 26: 279–283, 1940; T. C. Cheng, J. Parasit. 45: 323–326, 1959) *A. (A.) bisutum* sp. n. resembles most closely *A. (A.) houini* Richard, 1966. It differs from this species principally in the length of intestinal branches, in the size ratio of ovary and testes to cirrus sac, in the size of eggs and in the zoogeographical distribution.



On the basis of differential diagnosis of the species belonging to the genus *Acanthatrium* (cf. Dubois l.c. and Cheng 1957) we consider the specimens found in the Afghanistan bats to represent a new species.

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