

RECORD OF PHYSALOPTERA ALATA RUDOLPHI, 1819 AND CENTRORHYNCHUS BUTEONIS (SCHRANK, 1788) IN FALCONIFORMES IN CZECHOSLOVAKIA

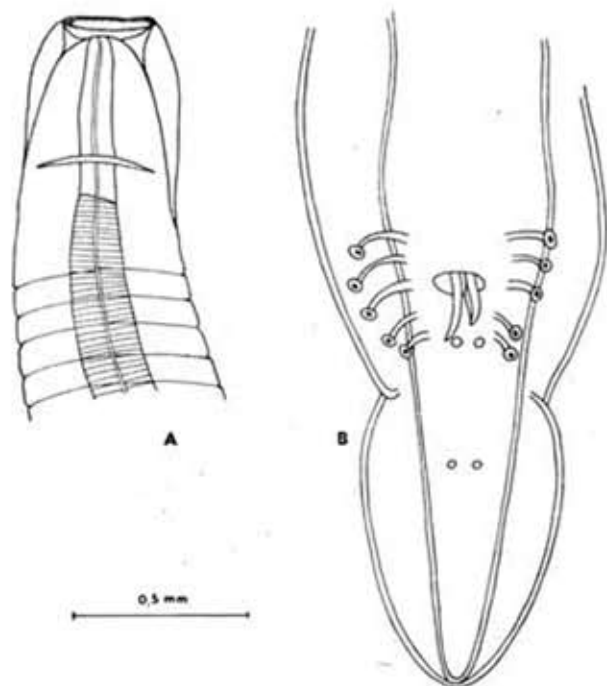


Fig. 1. Male of *Physaloptera alata* Rudolphi, 1819. A — head end, B — tail and cloaca region.

Eight helminth species were found during the studies on the helminth fauna of Falconiformes in South Bohemia. Two of them, *Physaloptera alata* Rudolphi, 1819 (Nematoda, Spirurata) and *Centrorhynchus buteonis* (Schränk, 1788) (Acanthocephala, Palaeacanthocephala) are the first records in Falconiformes in the territory of Czechoslovakia. Their descriptions and illustrations are given below.

***Physaloptera alata* Rudolphi, 1819**

Host: *Accipiter nisus* (L.) (1 of 12 birds examined was positive).

Localization: stomach. Locality: České Budějovice (20 Feb. 1980).

Description (based on one male specimen): Body of white colour, measuring 14.88* in length and 0.83 in maximum width. Body width at level of oesophagus end 0.72. Oesophagus 3.04 in length and 0.25 in maximum width.

* All measurements are in mm.

Nerve ring 0.42 from anterior end of body. Cuticle forming a rim at the head end, funnel-shaped, measuring 0.29 and 0.24 in outer and inner diameters, respectively, and 0.09 in depth. Transverse striation of cuticle begins 0.63 from head end of body, the distance between individual striae being 0.07–0.12. Caudal alae 2.06 long, body width at their anterior margin 0.57. Anal opening 1.04 from tail end and surrounded by 5 pairs of pedunculate papillae: two preanal, one anal and two postanal. Four pairs of sessile papillae situated between anal opening and tail end: two near posterior margin of anal opening, one 0.93 from tail end (at level of second postanal pair of pedunculate papillae) and one 0.60 from tail end. Left spicule 0.23 and right spicule 0.32 long.

The described specimen differs from those reported by Skryabin and Sobolev (*Osnovy nematologii* (Fundamentals of nematology) 12, Moskva, 1965 — in Russian) and Brglez

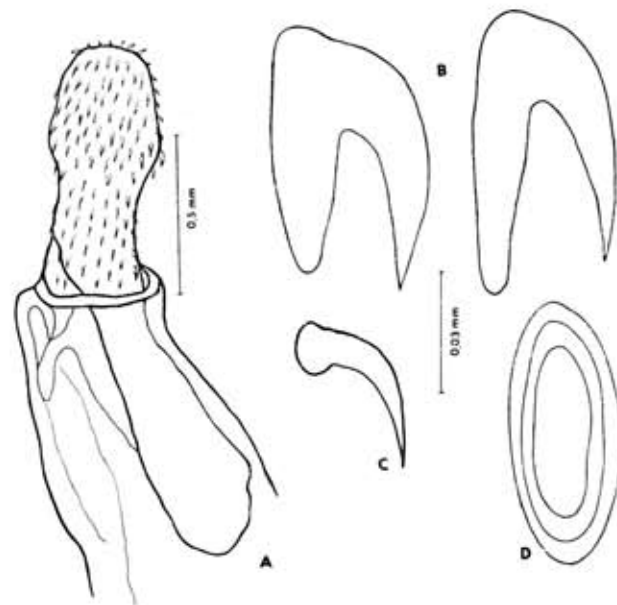


Fig. 2. *Centrorhynchus buteonis* (Schränk, 1788). A — head end, B — spines from anterior part of proboscis, C — spine from posterior part of proboscis, D — egg.

(Acta parasitol. Yugosl. 9: 65–69, 1978) in smaller length of body and greater distance of anal opening from the tail end.

***Centrorhynchus buteonis* (Schränk, 1788)**

Host: *Buteo buteo* (L.) (1 of 56 birds examined was positive).

Localization: intestine. Locality: Lipí near České Budějovice. (3 April 1982).

Specimens studied: 1 adult male, 2 adult females, 1 juvenile male and 1 juvenile female.

Description: Body of white colour, with smooth cuticle. Hooks in anterior part of proboscis different from those in posterior part, which are reduced to spines. In anterior part of proboscis, 7–10 hooks in each longitudinal row (blade 0.06 long and 0.02 wide, root 0.06 long and 0.015 wide). Hooks in posterior part 5–6 in number. Male: Body length 15.51, maximum body width 0.70, width in anterior part 0.41. Proboscis sheath 0.32 wide. Proboscis tapering anteriorly and measuring 0.39 in length and 0.28 in maximum width in anterior part and 0.32 in length and 0.19 in width in posterior part. Female: Body length (without proboscis) 38.84 and 31.34 and maximum width 0.86 and 0.95. Eggs (0.057–0.064 × 0.026 to 0.027) with double shell, inner layer of shell measuring 0.052 × 0.023.

The specimens under study conform to those described by Meyer (*Die Tierwelt Mitteleuropas*,

I, 6, Leipzig, 1958) and Sprehn (*Die Tierwelt Mitteleuropas*, I, 6a, Leipzig, 1958) and differ only in smaller length of male.

Larval stages of *C. buteonis* were found for the first time in Czechoslovakia by Prokopič (*Čs. parasitologie* 5: 109–131, 1956) in 29% of *Sorex araneus* examined in 5 localities. The intensity of infection was as much as 183 specimens in one host. Although the larvae of this species have been known from this territory already since 1956, adult specimens have not yet been recorded. This fact may be explained by the small number of examined definitive hosts and by the fact that Falconiformes rarely prey on *S. araneus*. According to Hudec et al. (*Fauna ČSSR* 21, Ptáci 2 (Fauna of Czechoslovakia 21, Birds 2), Academia, Praha 1977 — in Czech) Soricidae were found in 4.8% of the examined stomachs of *B. buteo* (of them *S. araneus* in 2.8% of stomachs) and only in 1% of stomachs of *B. lagopus*. The incidence in other Falconiformes was still lower. Our finding of adult specimens of *C. buteonis* in 1 of the 56 *B. buteo* examined and in none of other Falconiformes corresponds to the results of the above authors.

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