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SHORT COMMUNICATIONS

HAMATOSPICULUM RYSAVYI SP. N. (NEMATODA: DIPLOTRIAENIDAE) FROM AFGANISTAN

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Dedicated to B. Ryšavý D.Sc. to commemorate his 50th birthday

Abstract. The new nematode species *H. rysavyi* sp.n. of the genus *Hamatospiculum* is described. The new nematode species was found in the host *Athene noctua bactriana* from Afghanistan.

The collection of nematode material recovered from birds of Afghanistan*) contained individuals of the genus *Hamatospiculum* Skrjabin, 1916. A taxonomical evaluation of this material showed that these nematodes are distinctly different from all known species of this genus.

***Hamatospiculum rysavyi* sp.n.** Fig.1

Host: *Athene noctua bactriana* Hutton, 1847. Location: body cavity. Locality: Afghanistan-Ghazni (June 23, 1963), lgt. E. Kullmann.

A total of 7 nematodes (4 male and 3 female worms) were recovered from the two hosts examined. One male and one female were in perfect condition, the other specimens were slightly damaged.

Description: Body cylindrical, attenuated at both ends. Cuticle with transverse striation covered with irregular bosses. Cephalic end armed with two pseudochitinous tooth-like elements and lateral epaulettes. The arrangement of the 4 pairs of cephalic papillae is typical of all species of this genus. Conspicuous amphids are present on the median lobe of the epaulette-like formations. The oesophagus is clearly divided into, an anterior, shorter muscular, portion and a long, dark glandular portion.

Male (holotype): 42.0 mm long, 0.73 mm greatest width. Width of body at the level of the nerve ring 0.13 mm, at the level of the cloaca 0.20 mm. Nerve ring 0.21 mm from anterior end. Overall length of oesophagus 6.90 mm, length of muscular portion 0.29 mm, its width at the level of the nerve ring 0.05 mm. Length of glandular portion 6.60 mm, greatest width 0.18 mm. Spicules equal in shape, but of different length. Length of longer spicule 1.54 mm (that of the paratypes 1.54—1.68 mm). Their width is almost equal throughout; they bear a fine transverse striation. The smaller spicule measures 0.70 mm (that of the paratypes 0.73 and 0.68 mm).Ratio of spicule lenght 1:2. Cloaca 0.20 mm from posterior end. Slender caudal alae present; they join at the posterior end. We

*) We are indebted to Professor Dr. E. Kullmann for providing the nematode material for our studies.

found 10 pairs of caudal papillae arranged in two rows along each side of the body. Four small precloacal papillae, one paracloacal and one double postcloacal papilla are present on the inner ventral row. Three larger pedunculate papillae supporting the caudal alae are situated in the outer row, one of them is precloacal, two postcloacal. In addition, the tip of the tail bears 2 papillar formations which we believe to be phasmids.

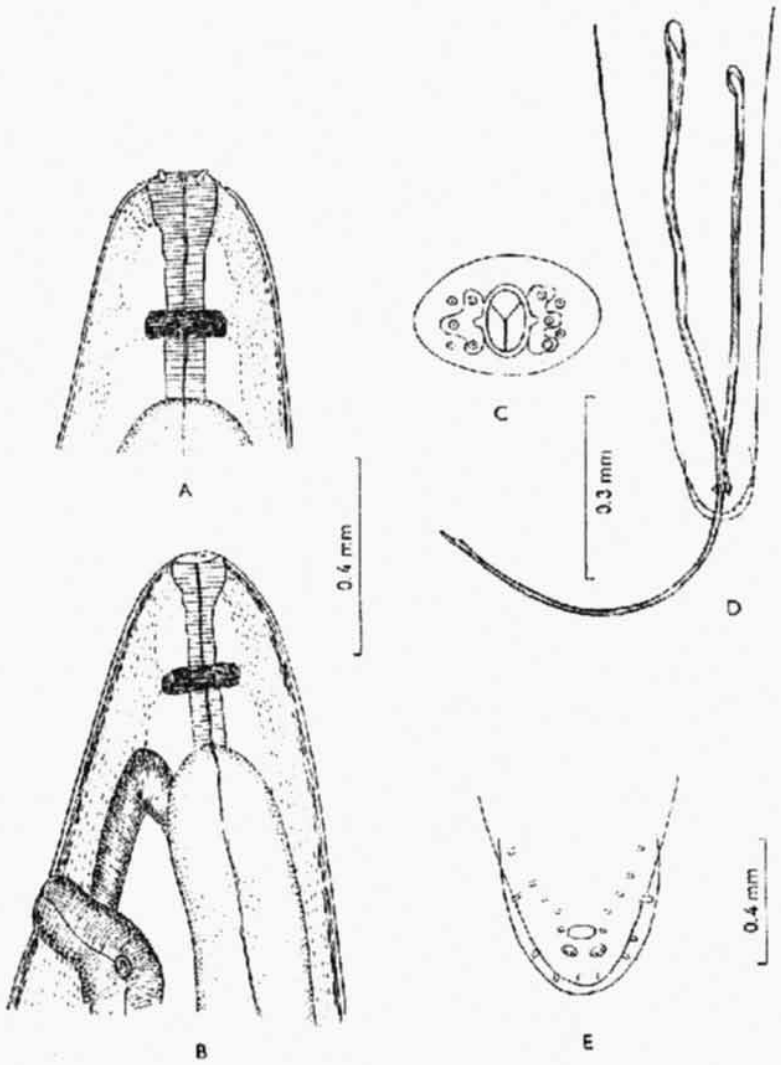

Fig. 1. *Hamatospiculum rysavyi* sp.n. from the host *Athene noctua bacteriana*. A — anterior female end (dorsal view); B — anterior female end (lateral view); C — anterior male end (apical view); D — posterior male end (general view); E — posterior male end (detail). Orig.

Female (allotype): 87 mm length, 0.89 mm greatest width. Width at nerve ring level 0.35 mm, at the end of oesophagus level 0.74 mm. Nerve ring 0.23 mm from anterior end. Overall length of oesophagus 11.95 mm, length of muscular portion 0.40 mm, width at nerve ring level 0.06 mm; length of glandular portion 11.55 mm, greatest width 0.13 mm. Vulva 0.72 mm from anterior end; its margins are slightly elevated. Eggs measuring 0.05 mm × 0.03 mm, contain a larva. Anus atrophied.

Discussion. The species has been assigned to the subfamily Dicheilonematinae (Diplotriaenidae: Filariata) in view of the morphology of the anterior end (the presence of tooth-like elements and epaulette-like formations) and of the thick shell of the eggs containing a larva. With regards to the relatively slender spicules of the species described, to their equal width throughout, and to the caudal alae joining at the posterior end, the new taxon has been assigned to the genus *Hamatospiculum* Skrjabin, 1916.

A conspicuous differentiating feature is the ratio of spicule lengths. In this, our new species (length ratio 2 : 1) differs distinctly from the species *H. insigne* (Schneider, 1866); *H. cylindricum* (Zeder, 1803); *H. leticiae* (Tubangui, 1934); *H. quadriens* (Molin, 1858) and *Hamatospiculum* sp. Sonin, 1968 (= *Lemdana marthae sensu* Mirza, 1939); in all these the ratio of spicule lengths is 1 : 7—10. Closest to our new species is *H. mcneilli* Johnston et Mawson, 1941, parasitic in owls of Australia, but also here, the ratio of spicule lengths is bigger (1 : 4—5) than in our species recovered from owls of Afghanistan. Other differentiating features between these two species are the number and arrangement of the caudal papillae of the male. *H. rysavyi* sp. n. differs from *H. accipitris* Yamaguti, 1941 (described only from a female worm) in the size of the eggs, the distance of the vulva from the anterior end, the structure of the cuticle etc.

The species has been named in honour of B. Ryšavý, Dr. Sc., Corresponding member of the Czechoslovak Academy of Sciences. The type and allotype are deposited in the collection of the Humboldt Museum in Berlin, the paratypes in the collection of the Institute of Parasitology, ČSAV, Prague.

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