

A NEW GENUS AND SPECIES OF NEMATODES PARASITIC IN A "PIKA" FROM AFGHANISTAN.

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A specimen of a rodent locally known as "pika" (*Ochotona* sp.) captured from a hill near Surchashma (a village at the source of Kabul river and about 60 miles south west of the city) was on dissection found to be heavily infected with small white nematode worms in its large intestine.

The worms belong to the family Oxyuridae Cobbold, 1864; and the subfamily Oxyurinae Hall, 1916. They exhibit affinities with the genus *Dermatoxys* Schneider, 1866; in having an oesophageal bulb, caudal alae in males and in the form of tail in the females and the shape of the eggs. They also resemble to some extent the genus *Protozoophaga* Travassos, 1923, in having a circumoral membrane supported by cephalic papillae. They, however, differ markedly from both the genera in the mouth being surrounded by six distinct, small, bilobed lips and in the absence of cervical alae, valvular apparatus and the wide oesophageal cavity. There are neither comb-like crests on the ventral surface nor a terminal process in the males. These differences are of sufficient importance for the creation of a new genus *Labiostomum* for these worms, which appears to be intermediate between the genera *Dermatoxys* and *Protozoophaga* referred to above.

Labiostomum, gen. nov.

Mouth hexagonal, surrounded by six bilobed lips, each supported by chitinous bars; cuticle of the head region inflated all round to form a well-defined cephalic bulb, supported by many cephalic papillae; oesophagus long, club-shaped, followed by a bulb, separated from the rest by a constriction, and without a valvular apparatus. *Male*: tail short, ending in a blunt point; caudal alae long and narrow, with a number of papillae close to the anus; spicule short, lightly chitinised; gubernaculum absent. *Female*: tail long, gradually tapering; vulva in front of the middle of the body; oviparous; eggs asymmetrical with rugose shells, and a plug at one pole.

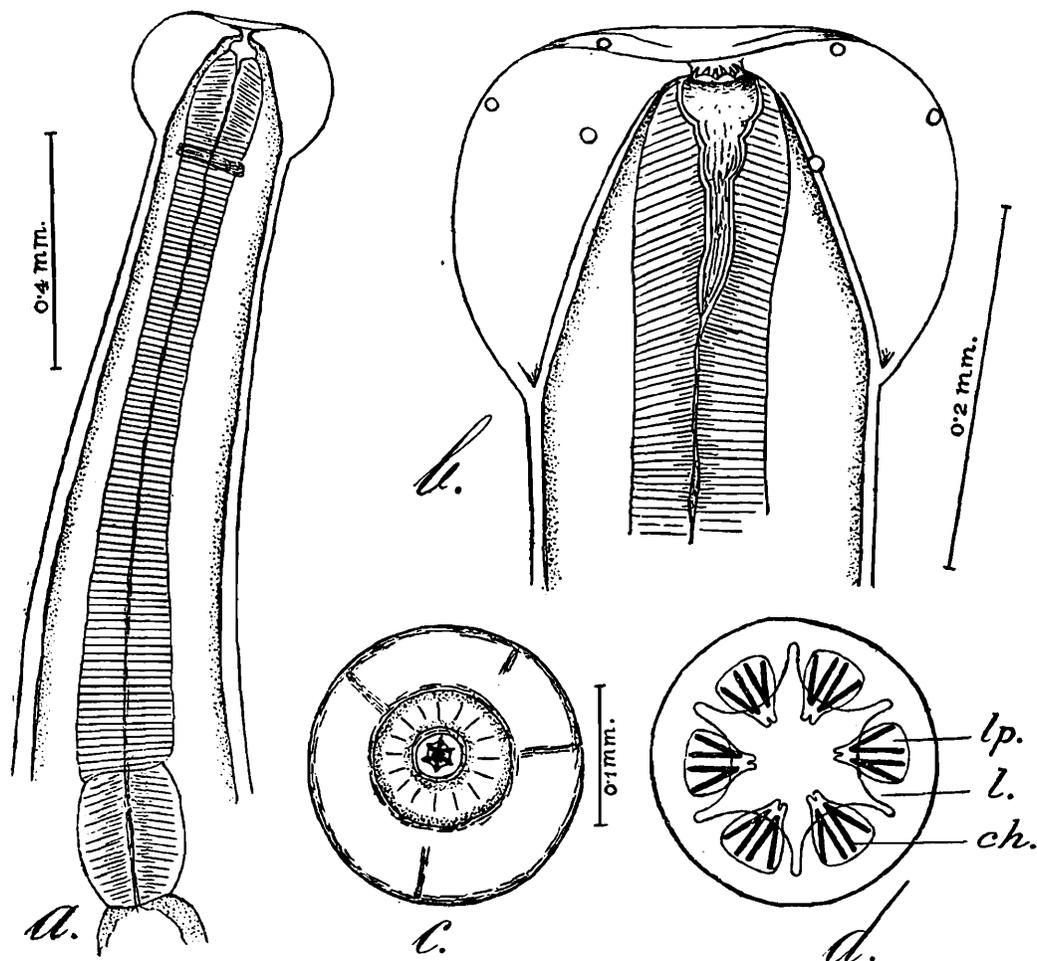
Genotype.—*Labiostomum naimi*, gen. et sp. nov.

Labiostomum naimi¹, gen. et sp. nov.

Body is cylindrical, finely striated transversely and with lateral alae. The cuticle of the head region is inflated to form a well-defined cephalic bulb, supported by about six cephalic papillae. Mouth hexagonal, surrounded by six small, conical and bilobed lips, each of which is supported by four chitinous bars, two placed laterally and two medially

¹ The species is named after H. E. Sardar Mohd. Naim Khan, Minister of Education, Afghanistan.

near each other. Buccal cavity present; oesophagus club-shaped with a distinct posterior bulb, separated from the rest by a constriction. The bulb is without a valvular apparatus, and the intestine is simple and straight. The nerve ring is situated a little above the termination of the cephalic bulb or near the beginning of the narrow lateral alae.



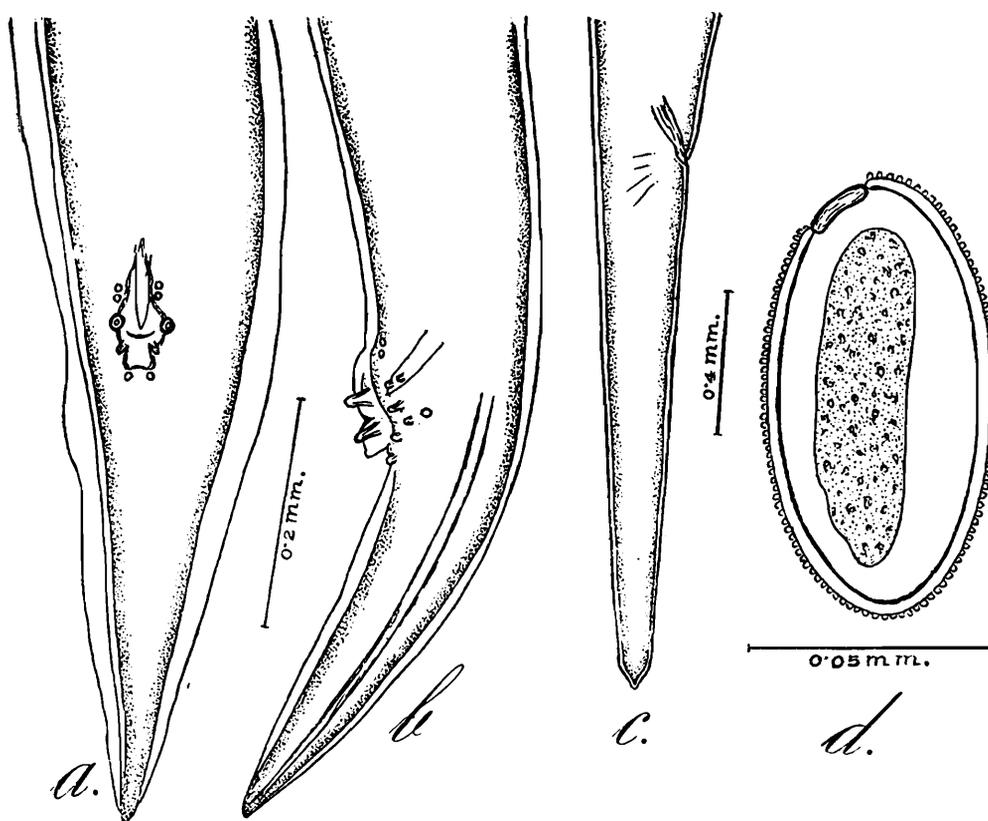
Text-fig. 1.—*Labiostomum naimi*, gen. et sp. nov.

a. Anterior extremity of female, lateral view; b. Anterior extremity of female, lateral view, more enlarged; c. Head, front view; d. Mouth, front view, diagrammatic.

ch., chitinous bar; l., ledge; lp., lip.

The male is smaller than the female; it is 3.397 mm. long and 0.283 mm. thick. The diameter of the cephalic bulb is 0.245 mm. The length of the vestibule is 0.020 mm. and that of the oesophagus 0.832 mm. The posterior bulb is 0.150 mm. in length and 0.130 mm. in diameter. The length of the tail is 0.436 mm. The tail is short, alate and incurved; it ends in a blunt point. The caudal alae are long and narrow. The spicule is short and lightly chitinised, it is 0.067 mm. long. The gubernaculum is absent. The caudal papillae are grouped in the vicinity of the cloaca where the cuticle is somewhat thicker. There are about eleven pairs of caudal papillae with the following arrangement:—Five pairs pre-anal, three pairs ventral and two pairs lateral; three pairs adanal, situated rather laterally; and three pairs post-anal, one pair

lateral and two pairs ventral. The papillae of the third pre-anal pair and the first post-anal pair are larger than others.



TEXT-FIG. 2.—*Labiostomum naimi*, gen. et sp. nov.

a. Posterior extremity of male, ventral view; b. Posterior extremity of male, lateral view; c. Posterior extremity of female, lateral view; d. Egg.

The female is 14.960 mm. long and 0.445 mm. thick. The cephalic bulb is 0.290 mm. in diameter. Narrow lateral alae extend posteriorly to the level of anus. The vestibule is 0.025 mm., and the oesophagus 1.333 mm. long. The posterior bulb is 0.183 mm. long and 0.143 mm. thick. The vulva is prominent and situated at a distance of 6.867 mm. from the anterior end of the body. The tail is long and ends into a short blunt cone. Its length is 1.240 mm. The eggs are asymmetrical with rugose shells and a plug at one pole, measuring 0.090 x 0.043 mm.

Type-specimen.—No. W 3443/1, Zoological Survey of India (*Ind. Mus.*), Calcutta.