

On a New Nematode, *Tachygonetria agraisis* n. sp.,
from Intestine of *Uromastix hardwicki* (Gray)

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Out of nine specimens of *Uromastix hardwicki* (Gray), collected from District Agra, one examined on 4.5.70 was found infected with an oxyuroid nematode. The site of infection being intestine. As these worms present a new species of the genus *Tachygonetria*, they are described here as such.

Material and Method

The nematodes were obtained from the intestine of a sand lizard. They were fixed in hot 70% alcohol, cleared and mounted in Glycerine. Camera lucida sketches were made.

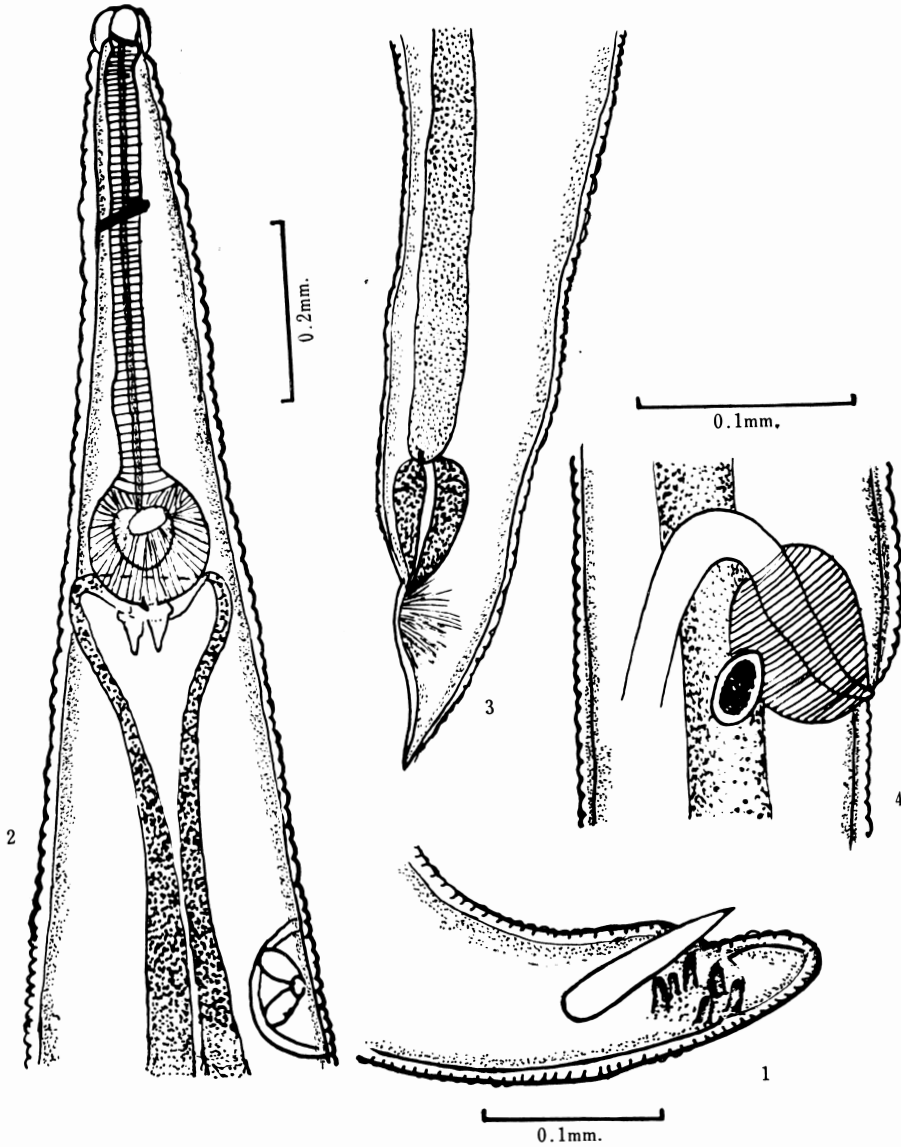
***Tachygonetria agraisis* n. sp.**

Numerous mature and immature male and female worms were collected. Worms small with elongate body tapering towards front and end. Cuticle finely striated. Lateral flange absent. Triangular mouth with three bilobed lips present, buccal cavity short, oesophagus elongate, oesophageal bulb well developed with a valvular apparatus, intestine dilated anteriorly, rectum short with 3 unicellular rectal glands. Excretory pore near the oesophageal bulb.

Male: (Fig. 1) The body measures 1.82–4.38 mm. The posterior extremity prominently truncated ventrally at the level of the cloaca and ends in tail. Cuticle finely striated throughout the body but on both the sides of the genital pore expanded to form caudal alae. Head not sharply offset

from the body and measures 0.01–0.02 mm in diameter. Mouth leads into a short buccal cavity. The long oesophagus measures 0.28–0.39 mm in length. The oesophageal bulb measures 0.03–0.08 mm provided with 3 triangular oesophago-intestinal valve. Nerve ring surrounding the oesophagus placed at 0.09–0.25 mm from the front end. Excretory pore present behind the oesophageal bulb, 0.82–1.61 mm from the front end. Cloaca conical in shape located posteriorly. The single testis leads into a wider vesicula seminalis and ductus ejaculatorius. Three pairs (Fig. 1) of anal papillae, one pair pre anal and two pairs post anal, present. Single spicule with a broad anterior and a tapering posterior region measures 0.023–0.041 mm. V-shaped gubernaculum present.

Female: Body measures 2.17–6.21 mm × 0.11–0.42 mm. The tail (Fig. 3) 0.21–0.27 mm long and tapers behind the anus. Cuticle finely striated. Head not sharply offset from the body and measures 0.02–0.03 mm. Three bilobed prominently developed lips form a prominent mouth. The oesophagus measures 0.38–0.41 mm, the oesophageal bulb measures 0.05–0.16 mm. Vulva transverse, placed behind the middle of the body, leads into an elongated vagina. Vagina continues as long ovjector, bend on itself and ending opposite the anterior limit of the vagina. The wide ovaries narrow towards their extremities and occupy most of the space between the oesophageal bulb and ovjector and lead into uteri. Ova large and measure 0.013–0.05 mm. Eggs and larva



Explanation of Figures

- Fig. 1 *Tachygonetria agragensis* n. sp. caudal region of a male specimen.
- Fig. 2 *T. agragensis* anterior region of a female specimen.
- Fig. 3 *T. agragensis* caudal region of a female specimen.
- Fig. 4 *T. agragensis* a portion of a female specimen enlarged, showing vulvar region.

present in vulva.

Host : *Uromastix hardwicki* (Gray)
 Habitat : Intestine
 Locality : Agra, India
 Date : May 4th, 1970
 Remarks : A number of species have been

described under the genus *Tachygonetria* from the different parts of the world but *T. agragensis* n. sp. comes closer to *T. expansa* Rees, 1935 and *T. indica* Agrawal, 1966. It can be distinguished from them, in the shape and size of the spicule, and its viviparity.

Therefore, the present form is regarded a new species.

Summary

A new species of the nematode genus *Tachygonetria* has been described from the intestine of *Uromastix hardwicki* collected from district Agra. The species is characterised on the basis of shape and size of spicule and its viviparity.

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References

- 1) Agrawal, V. (1966) : Three new reptilian nematodes from Lucknow. Trans. Amer. Micros. Soc. 85, 107-114.
- 2) Rees, F. G. (1935) : Two new species of *Tachygonetria* from Indian Tortoise. Proc. Zool. Soc. London, 3, 559-603.
- 3) Yamaguti, S. (1961) : The nematodes of vertebrates. Systema Helminthum Interscience Publishes, New Yoik & London, 3, 1261 pp.