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ON A NEW SPECIES OF *PHILOMETRA* (PHILOMETRIDAE: *PHILOMETRA*)

COSTA, 1945 FROM INDIA

by

S. D. KALYANKAR

*Department of Zoology, Marathwada University,
Aurangabad, India*

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While collecting the nematode parasites of the fishes, once a mature female was recovered from the body cavity of the fish, *Callichrous bimaculatus*.

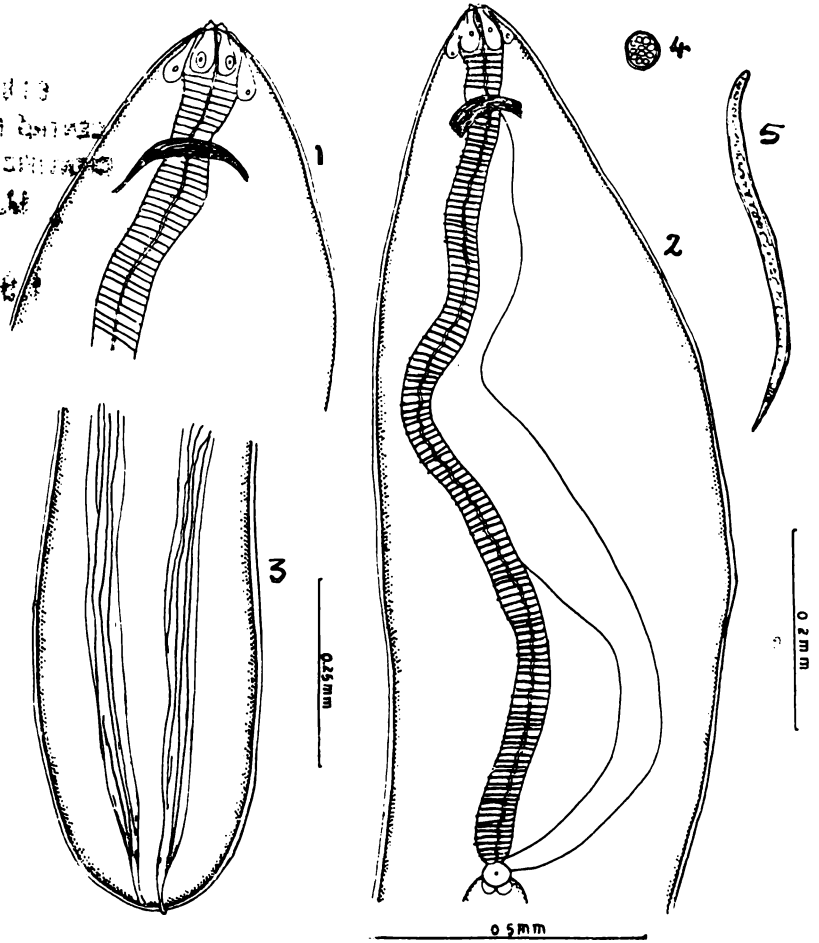
The worm is filliform and measures 31.39 mm in length and 0.64 mm in maximum breadth. The head bears eight papillae in groups of two in the external circle and four in the internal, on the submedian line.

The cuticle is smooth. The anterior extremity is truncated and ends in three sharp teeth. There are two very conspicuous papillae present at the rounded posterior extremity.

The mouth open directly into the oesophagus. There are three lobe-like papillae present at the anterior end of the oesophagus. The papillae measure 0.095 mm in length and 0.025 mm in maximum width. The total length of the oesophagus is 1.90 mm. At the posterior end of the oesophagus there is a small muscular ventriculus, from the posterior end of which a lobed glandular appendix projects into the lumen of the intestine. The oesophageal gland is well developed. The nerve ring is located at the distance of 0.20 mm from the anterior end. The intestine has almost the same diameter and ends blindly near the posterior end.

There are two long ovaries, running in opposite directions and connected with a common uterine duct. The anus and vulva are atrophied. The larvae are 0.35 mm in length and 0.014 mm in maximum diameter. The embryos measure 0.09 mm in length and 0.03 mm in width.

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Philometra (Ph.) suraiyae sp. nov.

Figs. 1. Female: Anterior end, showing oesophageal teeth. 2. Female: Anterior end, showing oesophagus and oesophageal glands. 3. Female: posterior end. 4. Embryo. 5. Larva. Scale: 0.5 mm applies to fig. 2. 0.2 mm applies to figs. 4 and 5. 0.25 mm applies to figs. 1 and 3.

DISCUSSION

Rasheed (1963) revised the genus *Philometra* and has retained the following 21 species as valid.

Type species: *Philometra* (Ph.) *globiceps* (Rud. 1819).

1. *Ph.* (Ph.) *acipenseris* (del Lupo, 1898)
2. *Ph.* (Ph.) *amazonica* Travassos, 1960
3. *Ph.* (Ph.) *bergensis* Wulker, 1930
4. *Ph.* (Ph.) *cylindracea* (Ward and Magath, 1916)
5. *Ph.* (Ph.) *fujimotoi* Furuyama, 1932
6. *Ph.* (Ph.) *filliformis* (Stossich, 1896)
7. *Ph.* (Ph.) *fusca* (Rud. 1819)
8. *Ph.* (Ph.) *inimici* Yamaguti, 1941 (syn. *Ph. cryptocentri* Yamaguti, 1961a)
9. *Ph.* (Ph.) *jordani* (López-Neyra, 1951)
10. *Ph.* (Ph.) *lateolabracis* Yamaguti, 1945 (syn. *Ph. scomberomori* Yamaguti, 1935, *Ph. sciaenae* Yamaguti 1941)
11. *Ph.* (Ph.) *managatuwo* Yamaguti, 1941
12. *Ph.* (Ph.) *mariae* Layman, 1930
13. *Ph.* (Ph.) *obturans* (Prenant, 1888)
14. *Ph.* (Ph.) *ovata* (Zeder, 1803)
15. *Ph.* (Ph.) *parasiluri* Yamaguti, 1935, (syn. *Ph. opsariichthydis* Yamaguti, 1935)
16. *Ph.* (Ph.) *pellucida* (Jagerskiold, 1893) (syn. *Ph. sebastisci* Yamaguti, 1941)
17. *Ph.* (Ph.) *percalates* Johnston and Mawson, 1940
18. *Ph.* (Ph.) *pinnicola* (Yamaguti, 1935) Yamaguti, 1941. (syn. *Ph. serranellicabriliae*, Janiszewska, 1949)
19. *Ph.* (Ph.) *rubra* (Leidy, 1856)
20. *Ph.* (Ph.) *spari* Yamaguti, 1961a
21. *Ph.* (Ph.) *zebrini* Yamaguti, 1961a

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Of these, only two species, *Philometra (Ph.) parasiluri* Yamaguti, 1935 and *Philometra (Ph.) sydney* Rasheed, 1963, possess oesophageal lobes. The present worm agrees in certain characters with *Ph. (Ph.) parasiluri* and others with *Ph. (Ph.) sydneyi*, but differs from both in some important characters. The comparative statement given below indicates the similarities and the differences.

Character	<i>Ph. (Ph.) parasiluri</i> Yamaguti, 1935	<i>Ph. (Ph.) sydneyi</i> Rasheed, 1963	<i>Ph. (Ph.) suraiyae</i> sp. nov.
Oesophageal teeth	Absent	Present	Present
Tail papillae	Present	Absent	Present
Cuticular papillae	Present	Absent	Absent
Host	<i>Parasilurus asotus</i> <i>Mogurnda obscura</i>	"Large white fish" (Scientific name is not given)	<i>Callichrous bimaculatus</i>
Locality	Japan	Sydney (Australia)	Bombay (India)

In view of the vital differences it is regarded advisable to propose a new species to accomodate it. It is named as *Philometra. (Ph.) suraiyae* sp. nov.

Host *Callichrous bimaculatus*
Habitat Body cavity
Locality Bombay, Maharashtra, India.

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SUMMARY

Philometra (*Ph.*) *suraiyac* though resembling *Philometra* (*Ph.*) *parasiluri* and *Philometra* (*Ph.*) *sydneyi* in the oesophageal lobes differs from both in one character or other i.e. oesophageal teeth, tail papillae, and cuticular papillae.

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