

Nematode Parasites of Fishes

2. On Two New Species of the Genus *Indocucullanus* Ali, 1956

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(Received for publication ; December 2, 1974)

Indocucullanus puriensis n. sp.

(Plate 1, Figs. 1-3)

Only one male and two female specimens were collected from the body cavity of a marine fish Tangan, *Arius platystomus* Richardson from Pentkota, Puri, Orissa.

Description: Body elongated, medium sized, tapering slightly in oesophageal region and terminating in a broadly rounded head end. Mouth a dorsoventral slit, bounded by two large lateral lips each with three papillae. Pseudo-buccal capsule formed by swelling of anterior end of oesophagus with a pair of conspicuous lateral teeth. Posterior portion of oesophagus claviform. Cuticle thin and finely striated.

Male: Body 8.9 mm long, 0.81 mm wide. Dorsoventral diameter of head 0.275 mm. Pseudobuccal capsule 0.31 mm long, 0.26 mm wide. Entire oesophagus 1.0 mm long, 0.183 mm wide. Nerve ring at 0.53 mm and excretory pore 0.66 mm from anterior end. Tail conical, 0.257 mm long. Nine pairs of sessile caudal papillae with three pairs preanal and six pairs postanal. Spicules sub-equal, similar, broad at anterior end and narrow, sharply pointed at posterior end. Left spicule, 0.31 mm long. Right

spicule, 0.322 mm long. Gubernaculum, 0.14 mm long.

Female: Body 15.13 to 16.38 mm long, 0.45 to 0.61 mm wide. Dorsoventral diameter of head, 0.325 to 0.41 mm. Pseudo-buccal capsule, 0.275 to 0.315 mm long, 0.282 to 0.3 mm wide. Entire oesophagus 1.37 to 1.52 mm long, 0.253 to 0.32 mm wide. Nerve ring at 0.5 to 0.69 mm and excretory pore 0.7 to 0.84 mm from anterior end. Tail conical, 0.31 to 0.49 mm long. Vulva post-equatorial, 6 to 6.627 mm from posterior end with two prominent lips. Eggs unsegmented, 0.051 to 0.062 mm long and 0.037 to 0.052 mm wide.

Host: Tangan, *Arius platystomus* Richardson.

Location: Body cavity.

Locality: Pentkota, Puri, Orissa.

Discussion: The new form is referred to the genus *Indocucullanus* Ali, 1956. The new form differs from the genotype *I. jaiswali* Ali, 1956 in having nine pairs of caudal papillae instead of five pairs, spicules alate, sub-equal, instead of non-alate and equal, vulva in posterior half of body instead of slightly posterior to middle of body and female specimens of larger size. Accordingly it is regarded as a new species with the specific name *Indocucullanus puriensis* n. sp.

Indocucullanus ariusi n. sp.

(Plate 2, Figs. 1-2)

The paratype and holotype specimens of the forms described in this paper will be deposited in Dr. G. S. Thapar's Helminthological collection, 14 Mahatma Gandhi Road, Lucknow, India.

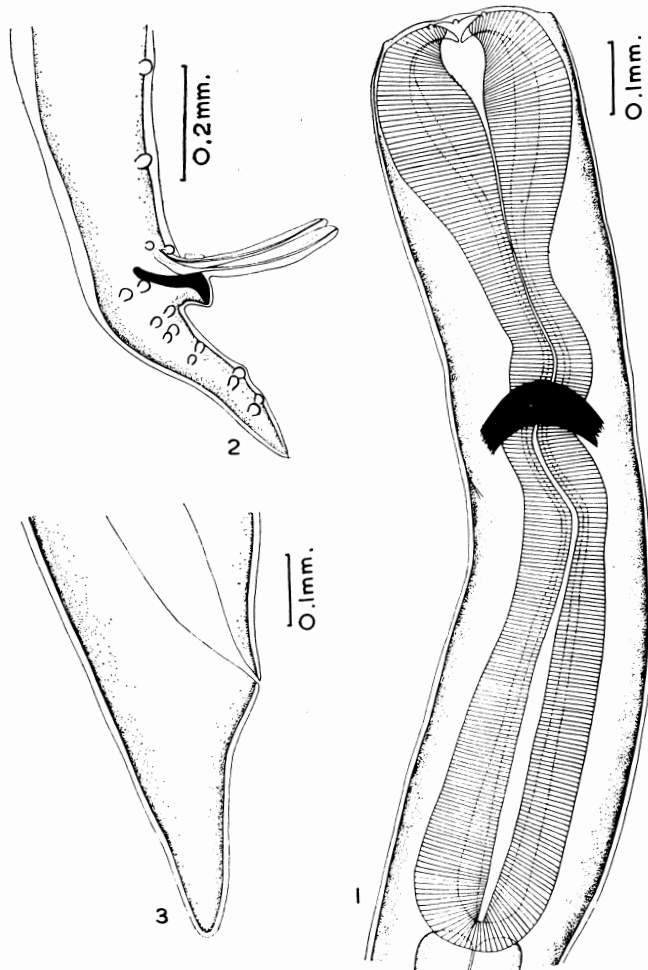


Plate 1. Figs. 1-3 *Indocucullanus puriensis* n. sp.
 Fig. 1 Anterior end of male. Lateral view.
 Fig. 2 Posterior end of male. Lateral view.
 Fig. 3 Female tail. Lateral view.

Only one male specimen was collected from the body cavity of a marine fish, Tangan, *Arius platystomus* Richardson from Pentkota, Puri, Orissa.

Description: Body elongated, thick, tapering slightly in oesophageal region and terminating in a broadly rounded head end. Mouth a dorso-ventral slit bounded by two large lateral lips each bearing three papillae. Pseudo-buccal capsule formed by swelling of anterior end of oesophagus with a pair of conspicuous lateral teeth. Posterior portion of oesophagus claviform. Lateral alae through-

out body present. Cuticle thin, finely striated.

Male: Body 2.526 mm long, 0.645 mm wide. Dorsoventral diameter of head 0.31 mm. Pseudobuccal capsule, 0.248 mm long, 0.17 mm wide. Entire oesophagus 0.615 mm long, 0.145 mm wide. Nerve ring at 0.35 mm and excretory pore, 0.38 mm from anterior end. Tail conical, 0.154 mm long. Seven pairs of caudal papillae, with three pairs pedunculated preanal and four pairs postanal papillae. Of postanal papillae three pairs pedunculated lying symmetrically and

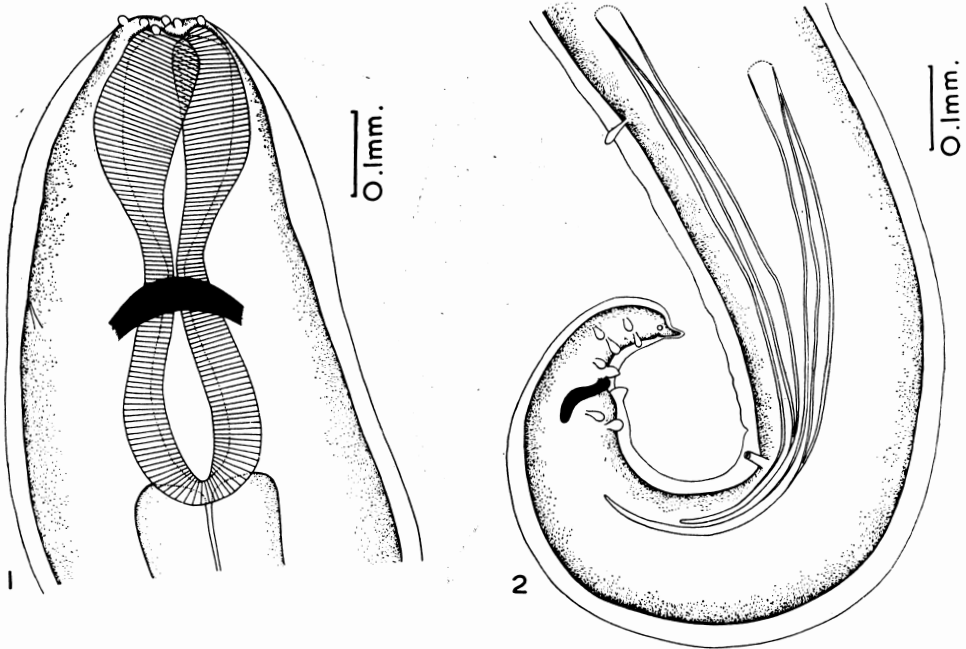


Plate 2. Figs. 1-2 *Indocucullanus ariusi* n. sp.

Fig. 1 Anterior end of male. Lateral view.

Fig. 2 Posterior end of male. Lateral view.

one pair sesile near tip of tail. Spicules sub-equal, similar, broad at anterior end and narrow sharply pointed at posterior end. Left spicule 0.727 mm long. Right spicule 0.744 mm long. Gubernaculum, 0.071 mm long.

Host: Tangan, *Arius platystomus* Richardson.

Location: Body cavity.

Locality: Pentkota, Puri, Orissa.

Discussion: The new form has a close resemblance with *Indocucullanus puriensis* n. sp. in having sub-equal spicules but differs from it in having seven pairs of pedunculated caudal papillae instead of nine pairs sessile papillae, spicules non-alate instead of alate, lateral alae throughout body instead of being absent. Accordingly it is regarded as a new species with the specific name *Indocucullanus ariusi* n. sp.

The new species is named after its host

Arius platystomus.

Summary

Two new species of the genus *Indocucullanus* Ali, 1956 viz. *Indocucullanus puriensis* n. sp. and *Indocucullanus ariusi* n. sp. from the body cavity of *Arius platystomus*

Richardson from Puri, Orissa have been described.

References

- 1) Ali, S. M. (1956): Studies on the nematode parasites of fishes and birds found in Hyderabad state. Ind. J. Helminth., 7, 1-83.
- 2) Yamaguti, S. (1961): The nematodes vertebrates. Systema Helminthum Part 1 and 2. Vol. 3, 1-1261, Inter Science Publishers Ind. New York and London.

昭和51年度本会誌「寄生虫学雑誌」のレフェリーとしてご協力を賜った下記の先生方に編集委員会から厚くお礼を申し上げます。

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(ABC 順, 敬称略)