



TAXONOMIC EVALUATION OF NEW AMPHIBIAN NEMATODE PARASITES *SUBULASCARIS* (FREITAS ET. DOBBIN, 1957) FROM *RANA CYANOPHLYCTIS*

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ABSTRACT:

The genus *Subulascaris* was erected by Freitas et. Dobbin, 1957 to accommodate. Their species *Subulascaris falcaustriformis*. Since then, no other species has been added to this genus. A new species is being reported here with *Subulascaris sailuensis n.sp.* The worm are transparent and are of uniform thickness throughout the length of the body. The anterior end is well developed inflated cuticle, mouth is surrounded three lips, three teeth are present, buccal capsule is absent, In male with caudal alae with sucker and caudal papillae are nine pair, cloaca is subventral, spicule are equal in size. The gubernaculum is absent. In female valve is present posterior half of the tail.

Keywords: *Rana cyanophlyctis*, Nematode Parasites, *Subulascaris sailuensis n.sp.*

INTRODUCTION:

The five number nematode parasites were collected from the host *Rana cyanophlyctis* obtained from Sailu, Parbhani District. The genus *Subulascaris* was erected by Freitas et. Dobbin, 1957 to accommodate Their species *Subulascaris falcaustriformis*. Later on there is no any species added to this genus. Present species differ from known species which is having the arrangement of their caudal papillae, body measurement and length of spicule.

MATERIAL AND METHOD

During present study five nematode parasites were collected from intestine of the host *Rana cyanophlyctis* which was accidentally dead. Nematode parasites were fixed in hot 70% alcohol and preserved in fresh 70% alcohol containing 10% glycerine. The worms were cleared in lacto phenol and mounted in glycerin. Drawings were made with help of the

camera lucida and measurements are expressed in millimeters.

RESULTS:

Subulascaris sailuensis n.sp.

General Morphology: These parasites are small to median sized females longer than males. The body is cylindrical and tapering at the extremities. The worm are transparent and are of thickness through the length of the body except at the anterior and the posterior ends. The anterior end blunt and the posterior end is pointed. The mouth is surrounded by three poorly developed lips. There are three teeth, one on each lip. The buccule is absent. The diameter of the head is 0.05-0.06mm and 0.07-0.08 mm in male and female. The oesophagus is short and muscular throughout its length. It measure about 0.43-0.47mm in male and 0.46-0.48mm in female. The nerve ring is situated at 0.19-0.20mm from the anterior end in the male and 0.20-0.22 mm in the female. The cervical papillae are located in the posterior region of the oesophagus.

Male: The male measure about 10.67-12.45mm in length and 0.26-0.28mm in size. The tail is devoid of caudal alae. A sucker is present at 0.90-1.2mm from the tip of the tail. The sessile caudal papillae are in nine pairs of which six pairs are precloacal and three pairs postcloacal. The precloacal papillae are somewhat asymmetrical in arrangement. While the papillae of the anterior most pairs are lateral the pair nearest to the cloaca is almost subventral. A single papilla is also present in front of the cloaca, midventral in position. The spicule almost equal and are poorly cuticularized. The two measure 0.24-0.28 and 0.23-0.27 mm long. The gubernaculum is absent.

Female: The female larger than male measuring about 16.69-17.19mm. in body length and 0.33-0.46mm in width. The valve opens in the posterior half of the body at 7.31-7.30mm from the tip of the tail. The tail is short and curved being 0.25-0.27mm long. The eggs measure 50µ in length and 40 µ in width.

DISCUSSION:

At present worm differ from known species *S. falcaustrifirmis* (Freitas et. Dobbin, 1957) in the number of single midventral precloacal papilla and two pairs of postcloacals. But in the present form, there are six pairs of precloacals and three pairs post cloacals. In addition to these there is a single midventral papillae in front of the cloaca. In body measurements and also in the length of the spicule the two forms differ. Thus it is self advisable to erect a new

species to accommodate the present form which is named as *Subulascaris sailuensis n.sp* from their locality.

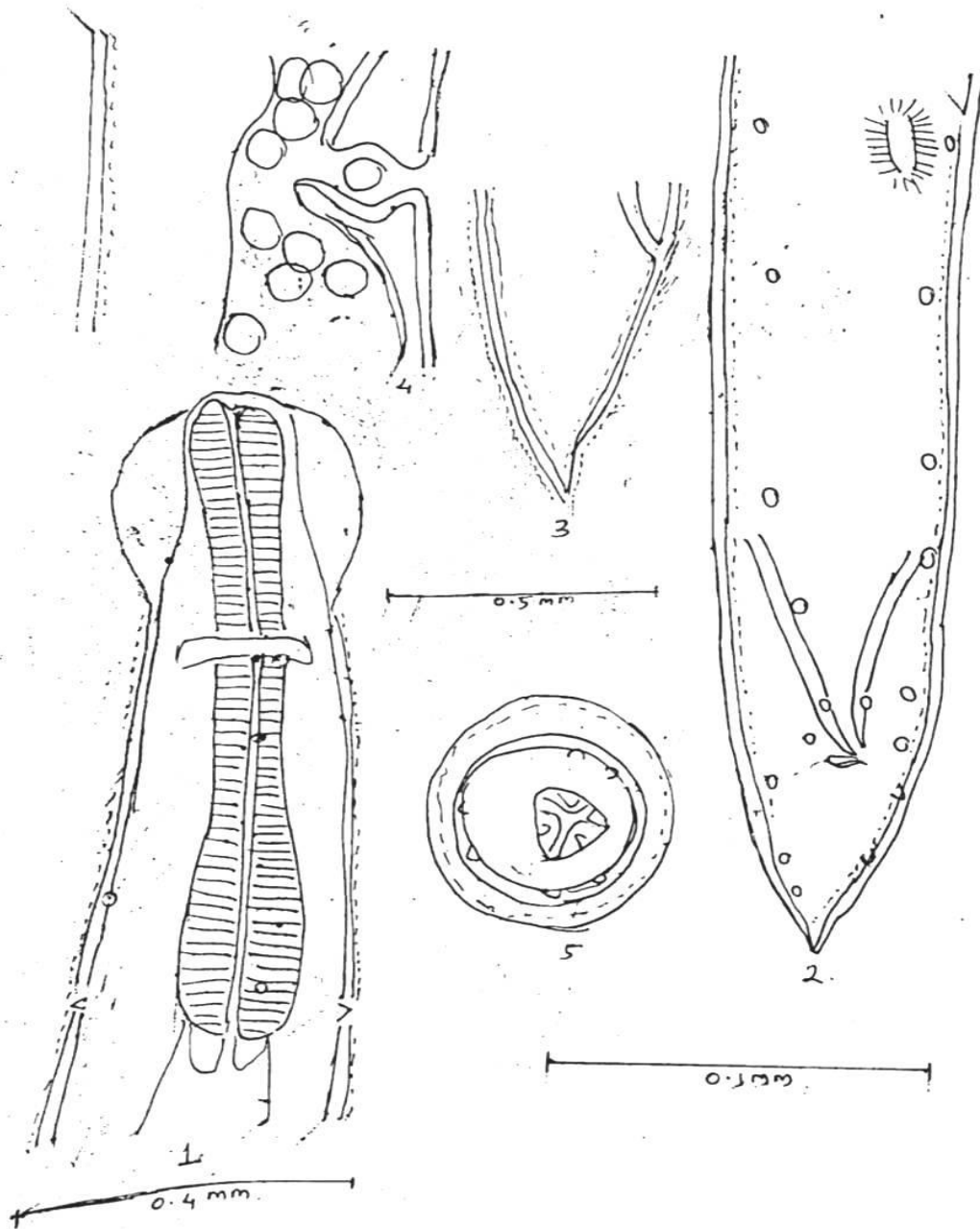
Type species- *Subulascaris sailuensis n.sp*
Host - *Rana cyanophlyctis*
Habit - Intestine
Locality - Sailu Dist. Parbhani (M.S.)
India

ACKNOWLEDGEMENT:

The author are thankful to the Principal Nutan Mahavidyalaya sailu, for providing laboratory facilities.

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Subulascaris sailuensis n.sp

1. Anterior region of male, lateral view,
4. Female Valva lateral,

2. Male tail lateral view,
5. End of View.

3. Female tail lateral view,