



# A NEW SPECIES OF THE GENUS SYPHACIA (SEURAT, 1916) FROM SCIURUS PALMARUM

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## ABSTRACT

The present communication deal with a new species of the genus *Syphacia* (Seurat,1916). The new nematode parasites worm *Syphacia sailuensis n.sp.* is studied from the caecum of *Sciurus palmarum* (Indian Squirrel) from sailu, Parbhani District. It is remarkable difference from other known species of the genera *syphacia*, the present worm moderate length of the body in *S. pallaryi* in the general measurement. Excretory pore is situated at about one fourth body distance. Gubernaculum more than half of the length of spicule, tail is long at about one-eighth from the anterior end.

**Key words:**, *Sciurus palmarum*, Nematode Parasites, *Syphacia sailuensis n.sp*

## INTRODUCTION

The five number nematode parasites were collected from the host *Sciurus palmarum* obtained from Sailu Parbhani District. The genus *Syphacia* described in the species *S. obvelat.* (Rudolphi, 1902) as the type of the genus. Tiner (1948) reviewed the various species of the genus and gave a key to the species. He divided the genus into two groups taking into consideration the number of mamelons present on the ventral side is the pre-clonal region of the male. This key was modified by Khera (1954) who added one more species in the genus. Chabaud and Biocca (1955) split up this genus into two genera (*Sypaoia* and *syphatineria*).

## MATERIAL AND METHOD

During present study five nematodes parasites were collected from caecum of the *Sciurus palmarum* (Indian Squirrel) 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

### *Syphacia sailuensis n.sp*

**General Morphology:** There are small delicate worm males being smaller in size than females. The colour of the worm is white and yellowish. The body is slightly flattened in the anterior region of both male and female posterior portion in both male and female gradually tapers behind the tail region. The head diameter is 0.01-0.02 mm in male and 0.03mm in female. The mouth is trirediate and surrounded by three lips and four cephalic papillae. The amphide is not seen. The mouth opens into oesophagus which measures about 0.15-0.17mm in male and 0.21-0.24 mm in female. The posterior bulb is almost spherical measuring 0.04-0.05mm and 0.07-0.08mm in male and female. At the junction of oesophagus and intestine valves are present. The nerve ring is present at distances of 0.05-0.06mm and 0.06-0.10mm from anterior end in male and female respectively.

**Male:** The body measures 1.75-1.92 mm and the maximum body diameter is 0.15-0.17 mm. Caudal alae are very narrow and limited to the middle portion of the tail. In the pre-clonacal region two mamelons are present on ventral side. A single long and thin spicule is present measuring 0.09-0.11mm. Gubernaculum is also present measuring about 0.04-0.05mm long and is slightly less than half the length of the spicule and stouter than it. There are four pairs of cloacal papillae of which two are ad-clonacal and two pairs of large papillae supporting the narrow. Limited caudal alae. The tail of the male tapering gradually and ends in sharp point, it is 0.18-0.22 mm long.

**Female:** The body length is 2.91-3.12 mm and the body diameter is 0.24-0.28 mm. The vulva is situated at the anterior fourth portion of the body at 0.61-0.64mm from the head end. They are spindle shaped and measuring 0.07-0.10\*0.02-0.02mm. The tail is tapering gradually towards the posterior wide end in a sharply pointed tip. It is 0.37-0.44 mm long on the middle portion of the tail two phasmids are seen.

## DISCUSSION

At present there were eight species under this genus of all these species the present worm comes closer to *S.pallaryi* in the general body measurements. It differs from *S.pallaryi* in the following characters.

- 1) The oesophagus is about one-sixth of the body length whereas in the present worm it is even less than one-tenth of the body length in both male and female.
- 2) The excretory pore is situated at about one-fourth body distance from the anterior end in *S.pallaryi* while in the worm under discussion it is much anterior at about one-eighth from the anterior end.
- 3) In *S. Pallaryi* the gubernaculum is more than half the length of the spicule whereas in the present form it is less than half. The shape of the gubernaculum alae differs in the two spicules.
- 4) The tail in the present form is comparatively longer than in *S.pallaryi*.
- 5) *S.pallaryi* is reported from *Xerus getulus* while the present species is collected from *Seiurus palmarum*. The locality is different in the two cases.

Hence it is regarded as a new species and is named as *Syphacia sailuensis n.sp.*

Type species	-	<i>Syphacia sailuensis n.sp</i>
Host	-	<i>Sciurus palmarum</i> (Indian Squirrel)
Habit	-	Caecum
Locality	-	Sailu Dist. Parbhani (M.S.) India

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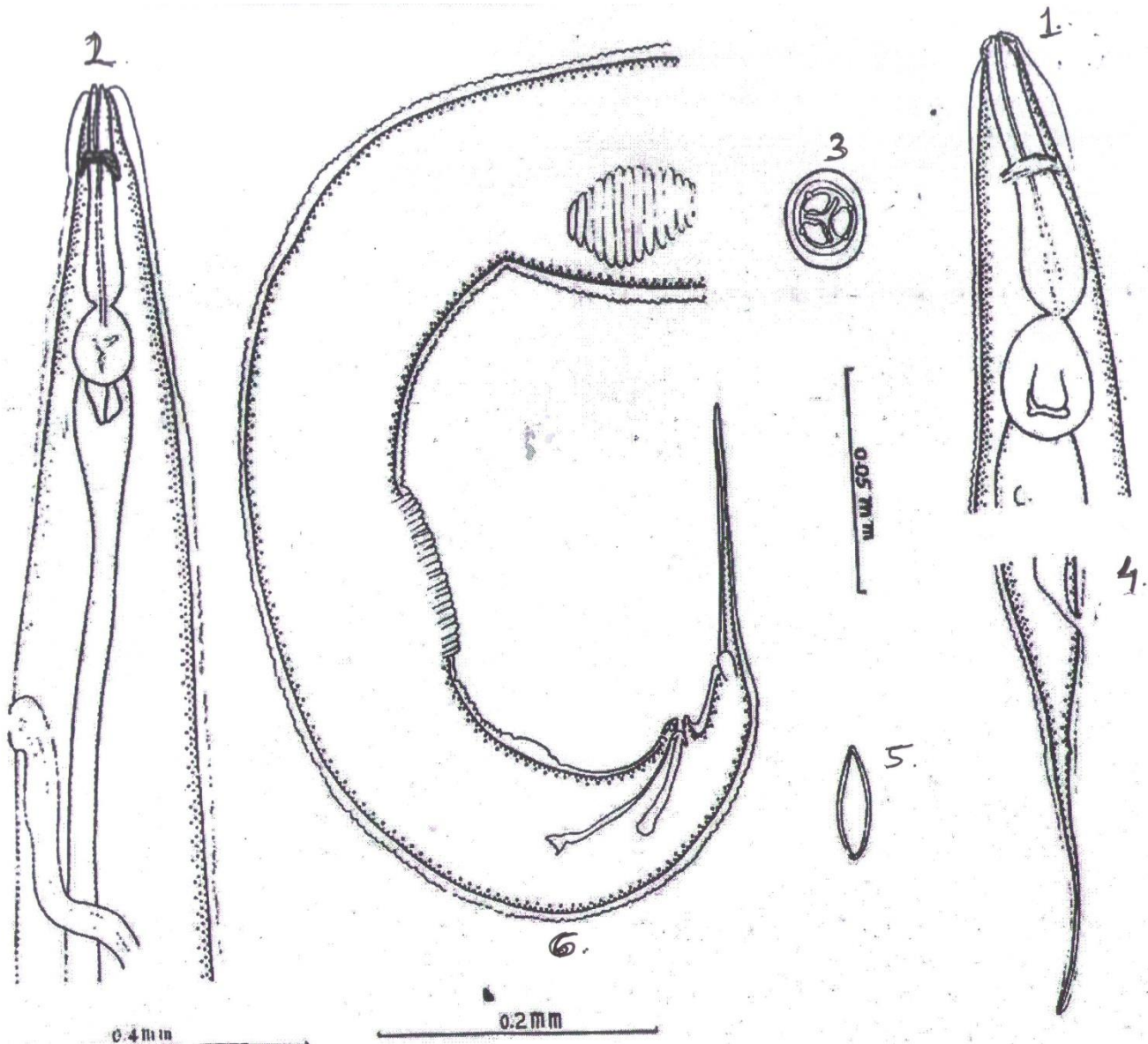
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*Syphacia sailuensis n.sp*

Fig.

*Syphacia sailuensis n.sp*

1. Anterior region of male, ventral view
2. Female Anterior end lateral view.
3. End -on View.
4. Female tail lateral view.
5. Egg.
6. Male tail lateral view