A note on the genus Xenopharynx Nicoll, 1912, with a key to the species

by

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A new genus, Xenopharynx, was created by NICOLL (5) in 1912, for a solitary trematode parasite Xenopharynx solus, which he had obtained from the gall-bladder of an Indian cobra, Naja tripudians. He assigned the new genus to the family Dicrocoeliidae. KHALIL (4) obtained the same parasite from the gall-bladder of another Indian cobra, Naja bungarus and redescribed the same pointing out Nicoll's error of considering the right testis as the ovary. He further stated that his specimen from Naja bungarus was examined by Nicoll, and he had agreed that the two specimens were possibly identical, and that the mistake of identifying ovary as testis was due to the macerated condition of the type specimen. Unfortunately, Khalil's description was also based on a single specimen, and the thin walled cirrus sac and the seminal vesicle were perhaps unnoticed. According to the position of the ovary, Khalil transferred the genus Xenopharynx from Dicrocoeliidae to Telorchidae under the sub-family Telorchiinae.

SIMHA (6) collected two specimens of X. solus Nicoll, 1912, from Naja naja and redescribed it in detail, and considered Khalil's species to be identical with that of Nicoll's. CHATTERJI and KRUIDENIER (3), created a new genus Neopisthorchis for Khalil's specimen and transferred it to Opisthorchiidae. They also described in the same paper three new species of Xenopharynx, viz. X. birakudensis, X. sambalus, and X. dhaini. While describing these species, they have not taken into account the earlier work of the writer on Xenopharynx in 1958 (6).

Comparing the type description of X. solus Nicoll, 1912, N. solus (Khalil, 1923), X. birakudensis, and X. sambalus Chatterji et Kruidenier, 1961, with the material at the disposal of the author collected on numerous occasions

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from the gall-bladder of Dhamin and also on four occasions from the Indian Cobra, the writer has come to the following conclusions:

1. X. solus Nicoll, 1912, is identical with that X. solus described by Khalil in 1923; hence the new genus Neopisthorchis Chatterji et Kruidenier, 1961, falls into synonymy.

2. X. hirakudensis Chatterji and Kruidenier, 1961, is identical with X. solus Nicoll, 1912; therefore it is a synonym of X. solus.

3. X. sambalus Chatterji et Kruidenier, 1961, tallies as to description and figure with X. pyriformis Simha, 1958; accordingly X. sambalus falls into synonymy.

4. It is not possible at present to decide the validity of the species X. dhamini Chatterji et Kruidenier, 1961, as the description is based on only one specimen. Polymorphism in X. pyriformis Simha, 1958, parasitic in the gall-bladder of Dhamin is of common occurrence. It is for the future observer having access to a greater number of specimens of X. dhamini to decide the question.

**Xenopharynx solus** Nicoll, 1912.


*Xenopharynx hirakudensis* Chatterji & Kruidenier, 1961.

The author collected on four occasions the parasites from the gall-bladder of the Indian cobra, *Naja naja*. The species show polymorphism in characters. (Fig. 1 and 2).

**HOST:** *Naja tripudians, N. bungarus* and *N. naja*.

**LOCALITY:** India.

**HABITAT:** Gall-bladder.

**Xenopharynx pyriformis** Simha, 1958

*Xenopharynx sambalus* Chatterji & Kruidenier, 1961

These forms were collected, on numerous occasions by the writer, from the gall-bladder of the Indian rat-snake, *Ptyas mucosus*. This species also shows polymorphic characters. (Figures: 3, 4 & 5).

**HOST:** *Ptyas mucosus*

**HABITAT:** Gall-bladder.

**LOCALITY:** India.
KEY TO THE SPECIES OF **XENOPHARYNX** Nicoll, 1912

1. Oral sucker larger than the ventral sucker ........................................... 2
   Oral sucker smaller than the ventral sucker ........................................... 4

2. Caeca much dilated ................................................................................. 3
   Caeca not much dilated; testes in the posterior half of the body ..... X. *solus* Nicoll, 1912

3. Testes in the anterior half of the body ..... *X. biliphaga* Srivastava, 1954.
   Testes in the posterior half of the body..... *X. heterovitelatus* Simha, 1958

4. Body pyriform; testes large; uterine coils extend to posterior third of
   the body ............................................................. *X. pyrijormis* Simha, 1958.
   Body elliptical; testes small; uterine coils extend up to the middle of
   the body ............................................................. *X. piscator* Bhalerao, 1926.
   (*X. dhamini* is not included in the key).

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**SUMMARY**

*Neopisthorchis solus* and *Xenopharynx hirakudensis* Chatterji & Kruidenier, 1961, are considered to be synonyms of *X. solus* Nicoll, 1912. *X. sambalus* Chatterji & Kruidenier, 1961, is also considered to be synonym of *X. pyriformis* Simha, 1958.

**RESUMEN**

El autor, comparando las descripciones y redescripciones publicadas con numerosos ejemplares obtenidos por él, concluye que *Neopisthorchis solus* Chatterji & Kruidenier, 1961 y *Xenopharynx hirakudensis* Chatterji & Kruidenier, 1961, son sinónimos de *X. solus* Nicoll, 1912, mientras que *X. sambalus* Chatterji & Kruidenier, 1961 es sinónimo de *X. pyriformis* Simha, 1958.

**REFERENCES**

1. **Bhalerao, G. D.**,

2. **Chatterji, P. N.**
3. **Chatterji, P. N. & F. J. Kruidenier**  

4. **Khalil, M.**  

5. **Nicoll, W.**  

6. **Simha, S. S.**  

7. **Srivastava, N. N.**  

Figs. 1-2 *Xenopharynx solus* Nicoll, 1912.
Figs. 3-5. *X. pyriformis* Simha, 1958.