XVIII NOTES ON A SMALL COLLECTION OF PENTASTOMIDS FROM THE INDIAN MUSEUM, CALCUTTA.

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The majority of the Pentastomids in this collection from the Indian Museum have already been described by other observers. Several, however, were unnamed specimens which could be referred to four different species; namely: *Porocephalus pattoni*, Stephens, *Porocephalus moniliformis*, Diesing, *Porocephalus kachugensis*, Shipley, and *Raillietiella bifurcata* var. *orientalis*, Hett. A few points of interest in each of these are worth noting.

Porocephalus moniliformis, Diesing.

(*a*) One specimen from the stomach of a python. This is of interest owing to the fact that adult *Porocephalus* are found as a rule in the air-passages or body-cavity of their host. Their occurrence in the stomach and intestine has been recorded in a few instances, but this situation is unusual.

(*b*) A larval specimen encysted on the stomach of *Tragulus javanicus*. It may be noted that *T javanicus* is a new host for this species.

Porocephalus pattoni, Stephens.

Adult.

(*a*) Two ♀, one ♂ from the lung of *Zamenis* sp.

(*b*) Two ♀ from the coelom of *Z. mucosus*.

Larval forms.

(*c*) Encysted specimens from the mesentery of the rat-snake.

(*d*) ,, ,, on the stomach wall of *Bungarus fasciatus*.

In (*c*) the specimens were too young to be identified with absolute certainty, but I have little doubt that they belong to *P. pattoni*. It may be noted with reference to (*d*) that *Bungarus fasciatus* is a new host for *P. pattoni*.

The occurrence of the encysted forms of this species in snakes (the final host) is also interesting in that it lends support to the view that in at least some species of *Porocephalus* the life-history is normally carried out in one host.

Raillietiella bifurcata var. orientalis, Hett.

A number of specimens from the lungs, intestine and coelom of the common cobra (*Naia tripudians*); also from the coelom of

the rat-snake, together with an encysted specimen from the body-cavity of the cobra. Here again the presence of encysted specimens in the snake points to a single host.

Porocephalus kachugensis, Shipley.

From the liver of *Batagur baska.*

I have made a careful examination of these specimens, and, by the courtesy of the authorities of the Indian Museum, Calcutta, I have also had an opportunity of examining the type specimens from *Kachuga lineata.* I am therefore able to add the following particulars to the original description.

1. The mouth is rounded and slightly narrowed anteriorly.

2. Stomata are numerous and scattered irregularly over the whole surface of the body.

3. One specimen (presumably a male) had an anterior genital aperture.

4. The annulations, according to Shipley, were confined to the ventral surface, but I find that, though partially obliterated, they are in many places visible the whole way round the body. They are more conspicuous on the ventral surface owing to the presence in that region of the fine chitinous rods mentioned by Shipley, but the whole body is clearly annulated as in the majority of Pentastomids.

I am inclined to think that this is the larval form of *Porocephalus megacephalus*, Baird, with which it agrees in shape and number of rings. In his species the annulations were faintly marked on the dorsal surface, and the ventral surface was flattened and wrinkled. Length 20—25 mm., breadth of head 8—10 mm., body diminishing rapidly in size towards the tail. In *B. kachugensis* the length of body is from 9—12 mm. and breadth of cephalothorax about 4 mm. These proportions resemble those of *P. megacephalus*, the difference in size being easily explained by difference in age. In *P. kachugensis* the hooks are markedly double, while those of *P. megacephalus* are single, but larval forms frequently have double hooks which are shed at metamorphosis and replaced by single ones in the adult.

The host of *P. megacephalus* is the Soonderbund crocodile, *Crocodilus palustris*, while *P. kachugensis* has been found in the mud-turtles *Kachuga lineata* and *Batagur baska*, all from the same zoo-geographical region.

Baird described the male *P. megacephalus* as larger than the female, and as possessing a posterior genital aperture. I have examined Baird's specimens in the British Museum, and have little doubt that his statements were based on a misconception of the true relations of the organs. *P. kachugensis* certainly has an anterior genital aperture in the male.