

## MISCELLANEA

### HYDROZOA.

#### A Short Note on *Hydra oligactis*, Pallas.

On the occasion of a recent visit to Ludhiana (Punjab) I found a few specimens of *Hydra oligactis*, Pallas, in a small pond full of the pond-weed *Potamogeton pectinatus*, Linn. One of these specimens of *Hydra* was rather peculiar in having seven tentacles. Dr. Annandale in his account (*Fauna of British India, Freshwater Sponges, Hydroids and Polyzoa*, p. 159) says that he has not seen any Indian specimen with more than six tentacles, while quite a large number of specimens that I have examined from Lahore and Ferozapore had usually four, and in exceptional cases five tentacles. The manner of capturing food was also observed, it exactly corresponds to Dr. Annandale's account (*Fauna*, p. 152) of *Hydra vulgaris* phase *orientalis*, Annandale. The food consisted of very young individuals of the Aphis *Siphocoryne nymphae* which was infesting the plant in large numbers.

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### BATRACHIA.

#### The larva of *Rhacophorus pleurostictus*, Boul. (*Fauna*, p. 479.)

The tadpoles, which were collected in Coorg, presented some difficulty in the matter of identification. This was due to the absence of any four-legged forms in the collection; but Dr. N. Annandale, who had received a fine collection of tadpoles from Cochin, has by a process of exclusion identified them as the larvae of *Rhacophorus pleurostictus*; as he has pointed out, the character of the feet at once excludes these larvae from the genus *Rana*.

*The head and body* are moderately flattened above and broadly oval, ventrally convex. The snout is rounded. The length of the body is to the breadth as 7 : 5. The body is finely pitted above, perfectly smooth below; but in specimens in which the hind limbs have not sprouted it is smooth above as well as below. Two conspicuous oval parotoids are present.

*The eye and nostril* are both small, dorsally placed, by no means prominent. The nostril is very small, directed almost anteriorly, equidistant between the eyes and the tip of the snout. The internasal space is twice the interorbital.

*The mouth* is subterminal, small. Its greatest width is only slightly greater than the interorbital space (as 7 : 5). The lower

lip is strongly developed, directed backwards; the upper is not prominent. The distribution of tubercles varies; they are generally absent or only sparsely present on the upper lip, while stronger ones fringe the corners and the lower lip. The dental formula is liable to vary. It may probably be expressed thus:—

$$2-3:5-7+5-7 \mid 5-7+5-7:4-6.$$

The uninterrupted tooth rows on both the lips are longest.<sup>1</sup> The lower jaw is V-shaped with granulate or dentate edge. The upper beak is broadly crescentic. Almost every specimen in the

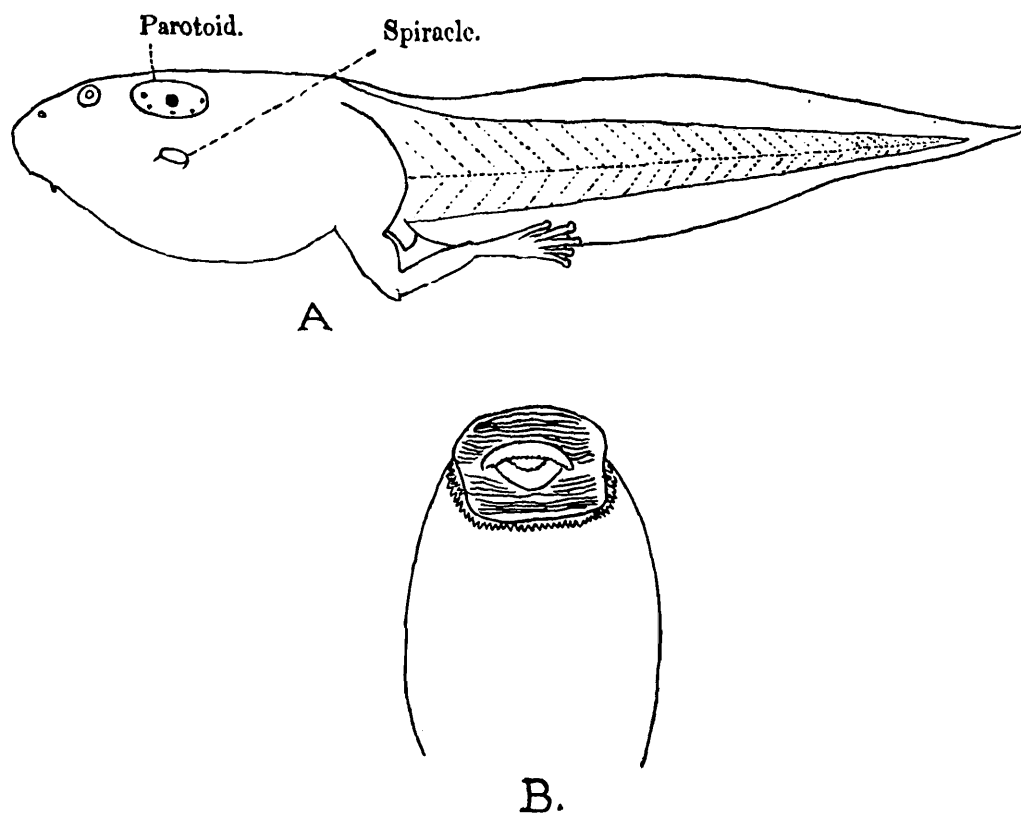


FIG. 1.—Tadpoles of *Rhacophorus pleurostictus*.

A. Lateral view. B. Mouth, showing the beak, tooth-rows and tubercles.

collection shows the lower jaw to be cornified, but the upper beak is very fully developed. No glandular swellings are present at the corners of the mouth.

*Skin and glands.*—In specimens in which the hind limbs have not developed, the skin is smooth and no whitish glandular pits occur. When the hind limbs have grown, the dorsal surface is beset with numerous cutaneous glands, which are distributed over the head as well. Two most conspicuous large oval parotoids, twice the diameter of the eye, are present; they may be

<sup>1</sup> In the specimens in my collection I could discover no horny teeth, only bare ridges; but Dr. Annandale, to whom examples have been sent, states that he has found patches of small teeth in a few.

yellow or darker in colour. One or two irregular rows of white round glandular swellings exist on both the caudal crests.

*Spiracle*.—Sinistral, large, very slightly tubular; opens just below the parotoid; nearer to it than to the eye. The opening is directed slightly upwards, not visible from above or below, quite as large as the eye.

*Vent*.—Tubular, median or slightly dextral, quite as large as the spiracular opening.

*Tail*.—Gradually pointed or only slightly rounded at the tip. The muscular portion is very strongly developed, the membranous crests are thin and transparent. The total length of the tail is nearly  $1\frac{1}{2}$  times the length of the body and head, and the muscular part is only  $\frac{1}{2}$  the total width. Both crests are strongly convex and of equal depth.

*Colouration*.—The young tadpoles are nearly transparent and the parotoids are bright yellow with a dark central spot. A few dots occur on the tail. In older specimens, the body is dull grey (slightly bluish in spirit specimens) with more numerous blotches on the back and the muscular part of the tail. Generally there is a ring of small dots with a bigger one in the centre on the parotoids. The central surface is dirty white, in most specimens immaculate.

*Dimensions*.—The measurements of (A) an individual in which the hind limbs have not sprouted, and of (B) an individual in which they have fully grown are as follows:—

|                         | A.     | B.     |
|-------------------------|--------|--------|
| Total length            | 52 mm. | 92 mm. |
| Length of head and body | 24 mm. | 36 mm. |
| Length of tail          | 28 mm. | 56 mm. |
| Maximum breadth of body | 13 mm. | 25 mm. |
| Maximum depth of body   | 11 mm. | 20 mm. |
| Maximum depth of tail   | 10 mm. | 16 mm. |

*Biological*.—These tadpoles occur in abundance in tanks in the vicinity of houses where fish are reared. The bottom of the tanks being more or less clayey, the tadpoles can hardly be made out in the water. Water snakes destroy them in large numbers.

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## BIRDS.

### An Albino Bulbul.

A very fine specimen of an Albino Bulbul, *Molpastes burmanicus*, has recently been sent to the Museum from Mr. A. H. Ricketts.

The bird was captured when only just commencing to learn to fly, and was at that time wholly white, with the typical white bill, feet and claws and bright red eyes of a true albino.