

with beautiful deep black tegmina and very rich red front to head, mesonotum, and abdomen.

Gen. *Scieroptera*, Stål.

12. *S. splendidula*, Fabr.

Four specimens from Singla. They are of the variety named as *cuprea*, with very distinct yellow costal membranes to the tegmina.

HOWARD ASHTON.

BATRACHIA.

LARVA OF *Rana curtipes*, Boul. ("Fauna," p. 458).—According to Dr. Boulenger, *R. curtipes* is reported to occur in the West Coast of India, and all the specimens in my collection were taken in Coorg. It is not essentially aquatic, but is found concealed under stones and dry vegetation, coming out in the night for food. The species is often mistaken by natives for *Rhacophorus maculatus* (the chunam or tree frog) and, because of the superficial resemblance, is often called "kal therai." The frog enters the water during the breeding-season, which begins with the appearance of the S. W. monsoon. The males which are smaller are very lively and their call notes may be denoted by the short syllables "Thrub, Thrub," quite characteristic of the species. Last May, specimens of larvae were secured illustrating practically the different stages in the metamorphosis.

Larva.—The tadpoles are plentiful in small jungle streams and occur in April, May and June. They may be described as follows:—

Head and Body.—The body is oval; the dorsal and ventral surfaces are flat. It is much longer than broad. Snout broadly rounded. Mouth ventral. Tip of tail moderately rounded. Skin quite smooth.

Nostril and Eye.—Interorbital space slightly more than twice the distance between the eye and nostril. Eyes moderate, dorso-lateral. Pupil round, becoming horizontal as the forelegs develop. Nostril dorsal, nearer the eye than to snout. (In the adult, the nostril is nearer the snout, and the interorbital space less than $1\frac{1}{4}$ times the distance between the eye and nostril).

Mouth.—Ventral, fairly large, with the lower lip better developed. It is directed slightly backward. The upper margin of the upper lip devoid of papillae; but the sides of the upper lip and corners of the mouth fringed with two or three rows of big tubercles. Smaller ones fringe the lower lip. The dental formula may be expressed thus; 3 : 3—5 + 3—5 | 1 + 5 : 5—7, meaning that in the upper lip there are from three to five inner broken and three outer complete rows of short horny teeth, and in the lower lip there is one inner interrupted and from five to seven complete series. The beak consists of an upper and a lower horny provi-

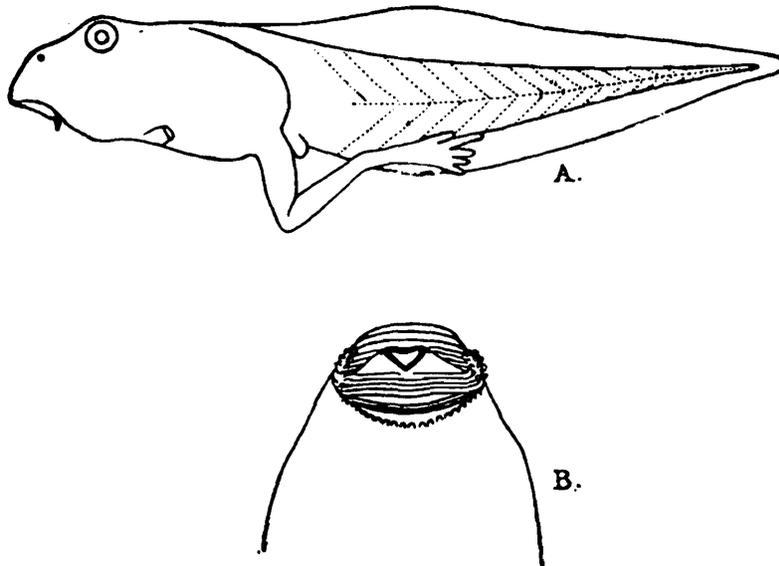
sional jaw; the latter is crescentic in form and both are finely serrated or granulate.

Glands.—No definite glands can be made out in any regular series, except a few pits on the head of some tadpoles and the parotoids, which, however, are by no means conspicuous. A row of fine white roundish glandular masses along the outer margins of the dorsal and ventral crests of the tail.

Spiracle tubular, sinistral, opening backwards and slightly upwards. Somewhat low on the side.

Anus situated in median line in front of the lower tail lobe.

Tail almost $1\frac{1}{2}$ times the length of the body. The muscular portion is stout and tapers to a fine point. Tip moderately rounded. In the middle part of the tail the upper and lower lobes nearly equal in depth. Both are strongly arched. In individuals in which the hind limbs are not fully developed, the dorsal fin begins beyond the root of the tail.



Dimensions of an individual (A) in which the hind limbs are just sprouting and (B) in which they are fully developed:—

	(A)	(B)
Length from snout to tip of tail	55 mm.	68 mm.
„ of head and body	23 „	27 „
„ of tail	32 „	41 „
Maximum breadth of body	14 „	16 „
„ depth of body	10 „	12 „
„ „ of tail	10 „	13 „

Colouration.—Dorsal part of the body uniformly dark with a few darker spots. Ventral dirty white. The muscular parts and the lobes are blotched.

Biological.—The tadpoles are active swimmers, but are easily caught. They are mainly found in shoals near the margins of the stream, browsing on weeds. They do not object to but greedily take animal food.

The tail persists in this species as a short stumpy process even when the frog has reached almost the maximum size.

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REPTILES.

NOTES ON AQUATIC CHELONIA OF THE INDUS SYSTEM.—In the volume on the Reptiles and Batrachia (1890) in the "Fauna of British India," Boulenger records six species of aquatic Chelonia (*Emyda granosa*, *Damonia hamiltonii*, *Hardella thurgii*, *Kachuga dhongoka*, *K. smithii*, *K. tectum*) from the Indus without comment, while he includes this river in the area of distribution of two others (*Trionyx gangeticus* and *Chitra indica*) with some doubt. *Trionyx gangeticus* has been definitely recorded from the Indus system by Dr. Siebenrock in his "Synopsis der Rezenten Schildkröten" (*Zool Jahrbucher*, Jena, 1909) and by Dr. Annandale in *Rec. Ind. Mus.*, Vol. vii (1912). I have also found it in rivers of the same system; in which I have recently taken specimens of *Chitra indica*. The following notes refer to these two species and others that I have recently obtained in the Punjab.

The following are the six Chelonia that I found in the Indus system:—

Trionychidae.	Testudinidae.
<i>Trionyx gangeticus</i> , Cuvier.	<i>Kachuga smithii</i> (Gray).
<i>Chitra indica</i> , Gray.	<i>Kachuga tectum</i> (Gray).
<i>Emyda granosa</i> (Schoepff).	<i>Damonia hamiltonii</i> (Gray).

I have to thank Dr. N. Annandale for the very great help he gave me in the preparation of this paper, and for the kindness, and the facilities given me while working in the Indian Museum for a few days.

Trionyx gangeticus (Cuvier).

Boulenger, *Fauna*, p. 12: Siebenrock, p. 596: Annandale, (2)
p. 157.

The Indus, the Ganges and their tributaries, probably also the Brahmaputra system. The form from the Mahanaddi River has been separated as *Trionyx gangeticus mahanaddicus* by Dr. Annandale (*Rec. Ind. Mus.*, Vol. vii, Part iii, No. 25). Specimens of the typical form were obtained from the following places:—

Ferozepore (Rivers Sutlej and Beas united).
Makhu. " "
Lahore (Ravi and Chota Ravi stream).
Ludhiana (Budha stream).

Food:—On the whole it is carnivorous in habit.

A large specimen from the Chota Ravi on being dissected showed bones of some bird in its stomach, another from the