cricket (*Gryllotalpa*) called in the Punjab *ghū*, *ān*. Tethered by a thread to a peg it moves to and fro and by its restlessness attracts notice. It should however be kept in the shade as if exposed for many minutes to a fierce sun it will perish. Perhaps this is the reason that some bird-catchers prefer the great grasshopper with curved wings (*Schizodactylus monstrosus*) called *Mirag* in the Chach-Hazara district and *labāna* [1] in the Punjab. For some of the smaller insect-eating birds it must be too large and terrifying, but it is said to be hardy and to stand the sun far better than its rival for favour, the mole-cricket.

D. C. Phillott.

Fish.

Macrones menoda var. *trachacanthus* (Cuv. et Val.)—The specimen described below was received in the Museum for identification from Mr. Kinnear of the Bombay Natural History Society nearly a year ago, and as it showed some very interesting features and was a proof against Day's charge of misprint and wrong description concerning Cuvier and Valenciennes' species *B. trachacanthus*, it was thought desirable to wait for more specimens; but this short note need not be kept back any longer.

In all essential particulars, including the proportionate length of the barbels and the remarkable filamentous prolongation of the lower lobe of the caudal fin, this fish resembles the species which Cuvier and Valenciennes described in 1839 as a new species from Bengal in their Histoire Naturelle des Poissons, vol. xiv, p. 419, under the name *Bagrus trachacanthus*. The character of the lower lobe of the caudal fin was thus distinctly stated on page 420: "Le lobe inférieur de la caudale depasse l'autre de près d'un tiers et se termine en filet."

Dr. Gunther in 1864 included this species of Cuvier's in a footnote under the genus *Macrones* as one of the doubtful species (Brit. Mus. Cat. Fish, vol. v, p. 75), but it was left to Day definitely to assert that Cuvier's description was a misprint and a wrong one, especially with regard to the filamentous prolongation of the lower caudal lobe. The specimen under examination refutes the charge and is a proof positive that Cuvier's description was not a misprint.

In 1822 Hamilton (Buchanan) published the plates illustrating his descriptions of the fishes of the Ganges. Below fig. 72 of Plate i of these illustrations the name "*Mugil corsula*" occurs in print. Edward Blyth in 1858, in supplying an additional description of the fish represented by this published figure of Hamilton (Buchanan) points out that under the original drawing of this fish of which fig. 72 is a print, the name "*Pimolodus menoda*" occurs in Hamilton (Buchanan's) own handwriting. Moreover fig. 97 of Plate ix of the same set of illustrations is correctly named "*Mugil corsula*," which is described by Hamilton (Buchanan) in his Gangetic Fishes under the same name (p. 221, Gangetic Fishes Text, and

[1] In Chach *labāna* is the name for small bird.

fig. 97, Plate ix of the Illustrations). The species *Pimolodus menoda* represented by fig. 72, Plate i, was described by Hamilton (Buchanan) on page 203 of the Gangetic Fishes, additional description being supplied by Blyth in 1858 as already alluded to above. Priority of the specific name "*menoda*" was recognized also by Gunther in 1864 in the footnote on page 64 of Brit. Mus. Cat., vol. v. In spite of all this it is difficult to understand how in 1869 Dr. Day could describe this species under the name "*Macrones corsula*" (H. B.) based on Hamilton (Buchanan's) fig. 72 of Plate i of *M. menoda* and three specimens obtained from the Mahanaddi at Cuttack (Proc. Zool. Soc., 1869, p. 307). However, in this description of "*Macrones corsula*" no reference is made of Cuvier's species. But later on in the Fishes of India both the prior name *M. menoda* and Cuvier's *B. trachacanthus* are included by Day as synonyms of "*M. corsula.*" In doing this he had several difficulties to encounter and explain away—the most obvious one of which he disposed of in a curious manner. Whereas Hamilton (Buchanan's) species *M. menoda* in his description (Gangetic Fishes, p. 203) and in the drawing (fig. 72 of Plate i) was represented as having the upper lobe of the caudal fin longer than the lower—the lower lobe of the same fin of Cuvier's species was described by him to be filamentous and very much prolonged. Thus the only way by which Dr. Day could fit it in with his decision that it should be considered as the same species as his "*M. corsula*" was to declare that Cuvier's description about the filamentous prolongation of the lower caudal lobe was a misprint (Proc. Zool. Soc., 1869, p. 307). The specimen which is the subject matter of this note, however, proves that Cuvier's description regarding the proportionate length of the barbels and the filamentous prolongation of the lower lobe of the caudal fin is true and could not have been due to a misprint.

It is therefore identified as Cuvier's *trachacanthus* which must be regarded as a distinct variety, if not a species—being included under Hamilton (Buchanan's) species *Macrones menoda* which through a mistake Day called "*Macrones corsula*" in the Fishes of India—the mistake being continued unnoticed in the Fauna of British India.

The specimen should therefore be identified as *Macrones menoda* (H. B.) var. *trachacanthus* (Cuv. et Val.), for which the following short description may be supplied:—

Macrones menoda (H. B.) var. *trachacanthus* (Cuv. et Val.).

Depth of body $4\frac{3}{7}$ in the length, length of head 4. Snout $3\frac{2}{7}$ in the length of head, $1\frac{1}{2}$ as long as the eye the diameter of which is $4\frac{3}{5}$ in the length of head. Barbels eight, nasal extends far beyond the hind edge of the orbit, maxillary to middle of ventral, external mandibular to the middle of pectoral fin and internal mandibular to posterior extremity of opercle. Dorsal I 7, the posteriorly serrated spine is $\frac{5}{8}$ of the length of head. Pectoral I 9, spine posteriorly

denticulated, nearly as long as the head. Ventral 6, does not reach the anal. Anal 12. Caudal 17, deeply lobed, the lower lobe being much longer than the upper and ends in a filamentous prolongation. Adipose dorsal is high and pointed, length of the base being slightly shorter than the base of the anterior dorsal fin. Colour in spirit superiorly greyish brown and inferiorly dull white. Fins stained with black.

B. L. CHAUDHURI.

REPTILES.

AQUATIC TORTOISES OF THE MIDDLE GANGES AND BRAHMAPUTRA.—From enquiries from the actual catchers it appears that there are at least nine distinct species of water-tortises recognized by them in the beds of the Ganges up to Sahebgunge, the Kosi up to Jogbani (Anchra Ghat), the Mahanada in Maldah District and the Brahmaputra up to Goalpara. Of these six species were secured during a trip to Rajmehal undertaken in March, 1912. For the identification of the tortoises I am indebted to Dr. N. Annandale.

Among the hard-shelled species four are distinguished :—

1. The *Sál* or *Sail* (*Kachuga lineata* (Gray) grows to three feet by twenty inches, weighs 20 to 30 seers and is easily distinguished by its larger size and very smooth and oily back from the *Dhoor* which is the common medium-sized species with rough back. The *Sál* does not breed and is not found with eggs until it reaches a much bigger size than the adult *Dhoor*. Two specimens of *Sál* were secured. Dr. Annandale thinks that *Batagur baska* (Gray) is probably confounded with this species by the tortoise-catchers.

2. The *Dhoor* (*Kachuga dhongoka* (Gray)) is a smaller species than the *Sál*. It grows to sixteen inches by twelve inches and weighs eight to ten seers. It has a slightly rough back with pointed knobs in the middle line ; the males are said to be very much smaller, not growing more than ten inches in length. The eggs are oval and very long, measuring 5·5 × 3·3 cm., and 30 to 35 are deposited at a time. Twenty-eight specimens of *Dhoor* were secured together with several eggs dug out of sand banks. Some individuals brought forth eggs while being packed. The shell of the egg is very brittle and there is a large air-space inside it, the external surface is obscurely pitted.

Both the *Sál* and *Dhoor* breed in March and deposit eggs on the sand bank of the Ganges but as they leave trailing marks behind, the hiding places of the eggs are easily discovered. Both *Sál* and *Dhoor* have long (oval) eggs, the *Sâl's* being much bigger than those of the *Dhoor*. The young ones come out in May or June. They are occasionally caught in the fine nets in the month of June or July.

3. The *Chapaut* or *Chauputa* (*Kachuga smithii* (Gray)) is the smallest species but otherwise very similar to the *Dhoor*. It