Ctenogobius candidianus.

Depth of body 5 in the length, length of head $3\frac{1}{2}$ to $3\frac{3}{4}$. Snout decurved, nearly twice as long as the eye, the diameter of which is 5 in the length of head; jaws equal anteriorly; mouth little oblique. Opercles naked; nape covered with small scales. Dorsal VI, I S. Anal I S. None of the rays of the spinous dorsal produced; soft dorsal and anal rather low. Caudal rounded. Pectoral a little shorter than the head; ventrals extending less than $\frac{1}{2}$ the distance from their base to the origin of anal. 34 to 36 scales in a longitudinal series. Ten specimens, the largest 80 mm. in total length, from

Lake Candidius, Formosa, collected by Herr Sauter.

Very similar to the Japanese C. hadropterus, Jord. & Snyd., but with the scales on the nape and the anterior part of the body smaller. Some specimens show traces of markings on the head like those of C. hadropterus.

XXV.—Descriptions of Four new Freshwater Fishes from British New Guinea. By C. TATE REGAN, M.A.

THE freshwater fishes of New Guinea have recently been made the subject of an extensive memoir by Prof. Max Weber (Expéd. Sci. Néerland. Nouvelle-Guinée, v. Zool. 1907). A small series from British New Guinea brought home by Dr. Seligmann is of some interest, inasmuch as it contains examples of four species which appear to be new to science and of three others not included in Max Weber's list; the latter are Sicydium cynocephalum, C. & V., and Eleotris tanioptera, Blkr., from the Wedau River, and Eleotris compressa, Krefft, from Agajambo. The fishes are from four localities, those from the Wedau River and the Fly River having been presented to the British Museum by Major W. Cooke Daniels, those from Agajambo by C. A. W. Monckton, Esq., and those from Sogeri by Captain F. R. Barton.

Neosilurus bartoni.

Depth of body $6\frac{1}{2}$ in the length, length of head $5\frac{2}{3}$. Head much broader than deep, its breadth 11 in its length, diameter of eye 4_3^2 , length of snout 2_4^3 -3, interorbital width 2_5^4 -3. Lower jaw shorter than the upper. Nasal and inner mandibulary barbels subequal, a little shorter than the head;

maxillary and outer mandibulary barbels as long as the head. 12 or 13 gill-rakers on the lower part of anterior arch. Dorsal I 5, the spine nearly $\frac{3}{5}$ the length of head, with a few weak denticulations anteriorly, nearly smooth or very finely denticulated posteriorly; procurrent part of caudal commencing above the middle of anal, anteriorly very low and without distinct rays. Anal 85–90. Pectoral not extending to the base of ventrals, its spine similar to but a little longer than that of the dorsal; ventrals extending a little beyond the origin of anal. Uniformly greyish.

Two specimens from Sogeri, total length 122 mm., presented to the British Museum by Captain F. R. Barton.

The recently described N. novæ-guineæ from the northern part of the island is said to have the head as deep as broad, the diameter of eye $2\frac{1}{4}$ to $2\frac{1}{2}$ in the interorbital width $(1\frac{2}{3})$ in N. bartoni), the dorsal spine $\frac{1}{2}$ the depth of body $(\frac{3}{5})$ in N. bartoni) and longer than that of the pectoral.

The genus Neosilurus, Stdr., established in 1867 for N. hyrtlii, Stdr., includes also Copidoglanis brevidorsalis, Gthr., and C. novæ-guineæ, M. Weber. Copidoglanis differs in having the procurrent part of the caudal fin well developed and similar to the anal.

None of the Siluridæ have more than one rayed dorsal fin, if we except those forms in which rays are developed in the adipose fin. The Plotosinæ have been described as having a long second dorsal fin, but this is really an extension forward of the caudal fin, as is proved by the structure, basalia (interneurals) being absent. In quite a different group, the Chacinæ, the caudal extends forward some distance both above and below, so that the genus *Chaca* has been said to have two dorsal and two anal fins. *Clarias* has been wrongly associated with the Plotosinæ, for the long dorsal fin of this genus is supported by basalia and is the homologue of the short dorsal of the allied *Saccobranchus*.

Arius (Hemiarius) danielsi.

Depth of body $4\frac{1}{2}$ in the length, length of head $3\frac{3}{5}$. Breadth of head $1\frac{1}{4}$ in its length, length of snout 3, diameter of eye $7\frac{1}{2}$, interorbital width 2. Upper surface of head granulated; occipital process with median keel, $1\frac{1}{2}$ as long as broad, extending to the small basal bone of the dorsal spine. Lower jaw shorter than the upper; teeth on the vomer forming 2 small round separate patches, contiguous to the palatine bands, which are rather more than twice as long as

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broad. Maxillary barbel extending to the extremity of the pectoral; outer mandibulary barbels nearly as long. Dorsal I 7; the spine strong, 3 the length of head, with an anterior and a posterior series of denticulations, which become small and indistinct inferiorly. Pectoral spine strong, as long as that of the dorsal, with a feeble outer and a strong inner series of denticulations. Anal 23 (VI 17). Ventrals extending a little beyond the origin of anal. Caudal forked, the longest ray 3 times as long as the middle ones. Caudal peduncle 13 as long as deep. Purplish above, silvery below ; fins yellowish.

One specimen, 162 mm. in total length, from the Fly River, presented to the British Museum by Major W. Cooke Daniels.

This species resembles the Sumatran A. stormi, Blkr., in general appearance and in the dentition, but is distinguished by the longer barbels, much longer anal, less elevated dorsal, &c.

Rhombatractus weberi.

Depth of body $2\frac{2}{3}$ -3 in the length, length of head $3\frac{2}{3}$ -4. Snout as long or nearly as long as the eye, the diameter of which is $2\frac{3}{4}-3\frac{1}{3}$ in the length of head, interorbital width about 23. Lower jaw shorter than the upper; maxillary completely hidden by the præorbital, extending to or nearly to the vertical from the anterior margin of eye. Scales 34-37/11. Dorsal V (VI), I 12-14; origin of spinous dorsal above first branched ray of anal, a little nearer to tip of snout than to base of caudal; first spine stout, as long as the postorbital part of head, the others slender and longer; second dorsal separated from the first by 2 scales, preceded by a stout spine which is nearly as long as the eye; soft rays gradually increasing in length posteriorly. Anal I 22. Pectoral $\frac{2}{3}-\frac{3}{4}$ the length of head; ventrals $\frac{1}{2}-\frac{2}{3}$ the length of head, extending a little beyond the origin of anal. Caudal emarginate. Caudal peduncle as long as or a little longer than deep. Olivaceous above, silvery below; a blackish band from the snout, through the upper part of the eye, to the base of the caudal, becoming gradually broader posteriorly, covering 21 series of scales on the caudal peduncle; a blackish blotch on the lower part of the side above the anal fin; vertical fins dusky at the base.

Six specimens, 65-110 mm. in total length, from Sogeri, presented to the British Museum by Captain F. R. Barton.

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I have named this species after Prof. Max Weber, in recognition of his work on the fishes of New Guinea.

Perhaps the most nearly allied species is R. goldii, Macleay, from the same locality, which has been stated by both Macleay * and Perugia † to have six spines in the first dorsal fin, a number found in only one of the specimens described above; moreover, in R. goldii the black lateral band is said to run above and below the eye.

The skeleton is extremely similar to that of more typical Atherinidæ, and the skull, pectoral arch, and vertebral column present few features of special interest. The vertebræ number 35, 20 præcaudals and 15 caudals. The pelvic bones are suspended from the third and fourth pair of ribs; the last eleven pairs of ribs meet ventrally and support the basalia (interhæmals) of the anal fin, as in the Ophiocephalidæ.

Eleotris (Caulichthys) moncktoni.

Depth of body 32 in the length, length of head 44. Breadth of head 2 in its length. Snout a little shorter than eye, the diameter of which is 4 in the length of head and a little less than the interorbital width. Mouth small, oblique, the lower jaw slightly projecting, the maxillary not extending to below the eye. Head covered with scales, which become much smaller anteriorly. Scales 29/12. Dorsal VI, I 8; origin of spinous dorsal equidistant from extremity of snout and base of last soft ray; second spine the longest, a little longer than the third and $\frac{3}{5}$ the length of head; soft fin highest anteriorly, the first branched ray a little more than 2 the length of head, the last $\frac{1}{2}$ length of head. Anal I 10. Pectoral nearly \$ the length of head; ventrals as long, not extending to the anal. Caudal truncate. Least depth of caudal peduncle twice in its length. Each scale of the body yellowish, with a broad dark brown margin; dark edges of the scales forming a narrow blackish bar on the base of pectoral; vertical fins blackish, the caudal with small light spots.

A single specimen, 73 mm. in total length, from Agajambo, presented to the British Museum by C. A. W. Monckton, Esq.

Closely allied to *E. guentheri*, Blkr., which has a longer snout and larger eye.

* Proc. Linn. Soc. N. S. Wales, viii. 1883, p. 269.

† Ann. Mus. Genov. (2) xiv. 1894, p. 548.



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