

NOTES ON NEW ZEALAND FISHES.

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(Plate iv and Fig. 1.)

The following notes and figures are based upon specimens of several fishes from New Zealand waters, belonging to various families, which have been examined by us jointly.

*Family* HISTIOPTERIDAE.

PSEUDOPENTACEROS RICHARDSONI *Smith*.

(Plate iv, fig. 1.)

*Pentaceros richardsoni* Smith, Illustr. Zool. S. Africa, Pisces, 1849, pl. xxi. *Id.* Hutton, Trans. N. Zeal. Inst. xxii, 1890, p. 277.

A young example, 70 mm. long from the snout to the end of the caudal fin, is apparently referable to this species, though it differs considerably from the adult form as figured by Smith.

D.xiv/9-10; A.iv/8-9; P.18; V.i/5; C.17. The depth at the ventrals is 2.3 in the length to the hypural joint; head 2.7 in the same. Eye almost 3 in the head, slightly longer than the snout, and 1.2 in the interorbital width. Fourth dorsal spine 1.08, and ventral spine 1.1 in the head. All the exposed surfaces of the bones of the head and shoulder girdle are rugose with radiating spinate ridges, which are arranged as illustrated in the accompanying figure. A few small depressible teeth form a band in each jaw, and several similar teeth occur on the vomer; palatines toothless. The scales covering the cheeks and the body are minute and finely spinose, and the spines of the fins are coarsely carinate. The body bears numerous, well-defined, dark markings, which tend to form irregular rings, but they are differently arranged on each side. The spinous portions of the dorsal and anal fins and the whole of the ventrals are blackish.

*Locality*.—Nelson, New Zealand. Collected by Mr. F. G. Gibbs.

*P. richardsoni* was first recognised from New Zealand by Hutton, who identified specimens in the Canterbury Museum.