ABSTRACTS.

1. Additions to the Fish Fauna of New Zealand, by Edgar R. Waite, F.L.S., Curator, Canterbury Museum.

The following are among the more noteworthy species taken in 1907 by the Government trawling expedition, additional to those previously enumerated. Fuller descriptions and figures will be published later.

Chlorophthalmus nigripinnis Günther.

This species was freely taken on two occasions in the Bay of Plenty, and is an addition to the known fauna. The only species of the genus hitherto recognized from New Zealand is *C. gracilis* Günther, but it was not obtained by the expedition.

Macrorhamphosus scolopax Linnaeus.

Not having European examples for direct comparison, I provisionally associate with this species examples netted in the Bay of Plenty. The snipe-fish was but once taken, seventeen examples being secured; great numbers escaped through the large meshes of the trawl net as it was being hauled to the surface, and the majority of those preserved were skimmed off the surface of the water with a hand-net. The genus was previously unknown in the waters of the Dominion.

Syngnathus norae sp. nov.

D., 39; P., 13; C., 8; rings, 18 + 49 = 67.

Length of head 7·4 in the total, 2·6 in head and body, height 2·8 in the same; eye, 7·0; snout, 1·7 in the head. The dorsal begins on the 17th ring, and stands on ten rings. The brood-pouch occupies twelve rings, and measures 5·1 in the tail.

The head is low, being but half the depth of the body; the snout is long, more than twice the post-orbital length of the head; the dorsal begins on the anterior of the two rings occupied by the vent, and its base is not elevated; the opercle is not crossed by a ridge.

Colour green with brown cross bands, five semi-bands on the body; the three middle bands, each of which occupies three rings, have, above the lateral ridge of the body, a brown vertical mark on each of the contributing rings; there are eight complete bands across the tail; a brown line from the eye to the snout, on each side.

The nearest ally of *S. norae* appears to be *S. semistriatus* Kaup, the markings being described thus: "Under the interrupted lateral line, 19 cross stripes; above that line, yellow spots with black borders." In the New Zealand species the body-bands are confined to the upper half of the side. Length, 224 mm.

Netted from Stewart Island northward to Pegasus Bay; also obtained from the stomachs of *Callorhynchus* and *Polyprion*.

Zanclistius elevatus Ramsay and Ogilby.

A single example of this fish was taken in the Bay of Plenty, and constitutes an addition to the known fauna of New Zealand.

Macullochia gen. nom. nov.

In 1872 Castelnau used the name *Richardsonia* generically for *Histiopterus labiosus* Günther, but in 1903 I drew attention to the fact that it had been first applied by Steindachner in 1866 in the *Atherinidae*. I did not, however, move further in the matter. Since that time Dr. Jordan has reviewed the Histiopterid fishes of Japan, and has supplied a key to all the genera of the family. He appears to have overlooked my former note, for he still uses the name *Richardsonia* as

applied by Castelnau. Mr. A. R. McCulloch, whose name I associate with the species, informs me that he has received a large number of specimens, which enable him to pronounce *H. farnelli* as the young of *M. labiosa*, notwithstanding the differences exhibited by the type specimen.

Cepola aotea sp. nov.

D., 74; A., 69; V., i, 5; P., 20; C., 6 + 4.

Length of head, 9·8; height of body, 12·6 in the length; diameter of eye, 3·0; interorbital width, 6·0; and length of snout, 5·1 in the head.

The preopercle is unarmed, and the maxilla extends to below the middle of the eye. The lower jaw protrudes and fits into a notch in the upper one, the anterior teeth remaining without when the mouth is closed; the teeth in the jaws are in single series, but there is a patch in front of the lower jaw, the anterior teeth of which are strongly curved; there are no teeth on the vomer, palatines, or tongue. The dorsal fin arises above the edge of the opercle, the anal less than the length of the head behind it.

The scales are extremely small; no colour remains after the partial digestion of the fish, but there is a conspicuous black spot on the membrane between the maxilla and premaxilla; no mark traceable on the dorsal fin.

The largest specimen was taken from the stomach of a *Zeus;* smaller ones were obtained from *Pagrosomus;* all being taken in the Bay of Plenty.

The genus is new to the waters of the Dominion, and the species is typically a *Cepola* as restricted by Bleeker. The Australian *C. australis* Ogilby differs in having a much smaller number of rays in the dorsal and anal, and also by the absence of the black spot noticed in other species. *C. aotea* may prove to be not distinct from *C. rubescens*, but, pending absolute comparison, may receive a distinctive name.

Pseudolabrus pittensis sp. nov.

D., ix, 11; A., iii, 10; V., i, 5; P., 13; C., 14 + 11; L. lat., 25; L. tr., 4 + 9.

Length of head, 2·7; height of body, 2·6; length of caudal, 3·4 in the total; diameter of eye, 7·0, interorbital space 4·0; and length of snout, 2·9 in the head.

Four series of scales on the cheek, no sheath at bases of vertical fins. Caudal subtruncate the depth of the peduncle, 1·9 in the length of the head.

General colour purplish, darker above, yellow beneath. Six dark bands on the body; they do not reach the lower edge; the first is close behind the head, the last on the caudal peduncle; these bands extend on to the membranes of the dorsal fin. The pectoral has a purple bar across its base, and the distal two-thirds of the ventrals are black. Length, 271 mm.

Caught with hand-line off Pitt Island, one of the Chatham Group.

Pterygotrigla Waite.

In diagnosing *Otohime*, a new genus of gurnards, Drs. Jordan and Starks contrast it with *Chelidonichthys*, but do not mention *Pterygotrigla*, which leads me to infer that they have overlooked the latter genus, of which *Otohime* appears to be a synonym.

Pterygotrigla has thus three species—namely, *P. polyommata* Richardson, *P. hemisticta* Jordan and Starks, and the following:—

Pterygotrigla andertoni sp. nov.

D., vii, 12; A., i, 11; V., i, 5; P., 11 + 3; C., 11 + 8; L. lat. 65, Vert. 10 + 16 = 26.

Length of head, 2·9; height of body, 3·8; length of caudal, 4·8 in the total; diameter of eye 3·2, interorbital space 3·0; and length of snout, 2·1 in the head.

Form and coloration much as in *Pterygotrigla hemisticta*, but maxilla does not extend beyond the anterior margin of the orbit. One large plate in front of the dorsal fin and five pairs of smaller ones bordering the spines. The rays are relatively higher and both pectoral and ventral are longer, while the chiropods (free pectoral rays) are shorter than in that species. The black spot on the dorsal fin of *P. hemisticta* is replaced with small scattered spots like those on the body; the rays bear three rows of spots, and the ventrals and chiropods are also spotted. The pectoral of *P. hemisticta* has two rows of milk-white spots, whereas in *P. andertoni* there are seven black bars.

Length 294 mm. Bay of Plenty; trawled by Mr. Thomas Anderton, of the Portobello Fish-hatchery, Port Chalmers.