

REMARKS. The deep brown body colouration speckled with minute, irregular spots makes the moray described above a very distinctive eel. It clearly belongs in *Gymnothorax* in having the dorsal fin originating a little in advance of the level of the branchial aperture and the teeth sharp with some even canine-like. As far as I can determine from the literature there is only one species of *Gymnothorax* with such a colour pattern as shown by the above specimen; this is *G. griffini* Whitley & Phillipps, 1939, from off White Island, Bay of Plenty, New Zealand. Griffin (1927, p. 138) originally described this species from a single specimen under the name *G. meleagris* (Shaw, 1795), but as Whitley & Phillipps (1939, p. 229) point out, the pattern of teeth in Griffin's specimen shows that it cannot be referred to this widespread Indo-Pacific species. I fully support Whitley & Phillipps in their separation of *G. griffini* from *G. meleagris* although I consider the difference in colour pattern between the two to be a much stronger distinction than the tooth pattern. I have examined Griffin's type (Auckland Institute and Museum Acc. No. Ps 29.1) as well as two other specimens from the Kermadec Islands and find that they all have a similar colouration to that described above for the *Tui* specimen.

One other species of *Gymnothorax* is known from the Kermadecs; this is *G. euptera* (Günther, 1870), but this species has a plain brown colouration, and in view of the stability of the colour pattern in *G. griffini*, even after long preservation, I am satisfied that there can be no confusion between these two species.

Family OPHICHTHIDAE

Muraenichthys australis Macleay, 1882

1882. *Muraenichthys australis* Macleay, *Proc. Linn. Soc. N.S.W.* (1881), 6: 272.

MATERIAL EXAMINED. One specimen: total length 188.1mm, *Tui* Station AUZ 029, off Norfolk Island, 9/7/62, cone dredge.

DESCRIPTION. Proportional measurements (in per cent of total length): head 9.5, snout 1.8, eye 0.6, interorbital 0.9, cleft of mouth 3.1, postorbital 6.9, branchial aperture 0.6, branchial interspace 0.6, snout-vent 46.5, predorsal 49.9, depth just before eye 1.1, at branchial aperture 1.7, at vent 1.3, at midpoint of caudal region 1.2. Lateral line pores before level of branchial aperture 9, before level of vent 64, total 152. Teeth uniserial on all bones; on maxilla 10, on dentary 12, on premaxillary-ethmoid 4, on vomer 5. Colour in life generally creamy-white, speckled with brown chromatophores above lateral line, the tail tip tinged with yellow.

REMARKS. Following Gosline (1950, p. 313) with regard to the relationship of *Muraenichthys* to the ophichthid eels I have placed this species in the family Ophichthidae. In having a caudal fin present but nevertheless rudimentary the species is further referable to the subfamily Echelinae (in contrast to the Ophichthinae which have a hard, pointed caudal region with the caudal fin absent). A pectoral fin is absent from the present specimen and this distinguishes it as belonging to *Muraenichthys* Bleeker, 1853, rather than to *Myrophis* Lütken, 1851, which possesses pectorals. There are teeth on the premaxillary-ethmoid and vomer, a distinguishing feature of the subgenus *Muraenichthys*; eels of the subgenus *Schultzidia* Gosline, 1951, lack teeth on this bone. Furthermore, the present specimen conforms well with descriptions of *Muraenichthys* (*M.*) *australis* Macleay, 1882, by Griffin (1936, p. 24) and other authors. The dorsal fin originates clearly behind the level of the vent but the anal-dorsal distance is not outside the range shown for specimens of *M. australis* occurring in the New Zealand region.