

REMARKS. The leptocephali included in the group of two species described here are immediately distinguished from all others discussed in the present account in having a well-developed caudal fin and the intestine swollen slightly at four equally-spaced positions along its length rather than looped or festooned at seven or more points. Pigment along the gut is not restricted to its dorsal surface at the levels of the various loops of the intestine or between them as in other ophichthids but tends to be scattered irregularly. A well-developed pectoral is also present.

Nevertheless, the nature of the intestinal swellings, the general shape of the head and snout suggests a relationship with the Ophichthidae. Apart from the genus *Muraenichthys*, the leptocephalus of which has already been characterised, there is only one genus of ophichthids which has the caudal fin present. This is *Myrophis* Lütken, 1851, known from *M. uropterus* (Temminck & Schlegel, 1842), the currently-recognised single species in the Indo-Pacific. *M. australis* Castelnau, 1879 from N.S.W., Australia, is probably identical.

The present species is characterised by having a relatively low number of preanal myomeres compared with the total, indicating a probable short preanal length in the metamorphosed eel. *M. uropterus* has a relatively short preanal length and taken together the presence of a well-developed caudal and the general similarity to ophichthid larvae, an identification of the two species described here with the genus *Myrophis* is suggested.

Vertebral counts in *Myrophis* are unknown and specific identification is therefore out of the question at this point, but two species are indicated here, separated mainly by a significant difference in number of myomeres and in dorsal and anal fin-rays.

L. *Myrophis* sp. (143–145 myomeres).

MATERIAL EXAMINED. *Centre d'Océanographie de l'Institut Français d'Océanie Collection (2 specimens)*: 29.8mm total length, IFO Station P As 11, 17° 55' S, 160° 37' E, 13/5/58 (1859hrs), S1/2mO, 0m–300m; 75.5, St S 1m A, 10 miles west of Bulari Pass, New Caledonia, 28/11/61, S1mH, ca. 106m.

DESCRIPTION AND REMARKS. Two specimens: myomeres 46 + 97–99 = 143–145, first vertical blood vessel at myomere 16, last at myomere 45–47, anterior margin of gall bladder at myomere 17–18, teeth $\frac{1 + \text{IV-VII} + 3-6}{1 + \text{III-V} + 3-4}$, dorsal rays 353, anal rays 293, caudal rays 4 + 3, a-d = + 21.

The present species would, in the metamorphosed eel, probably have a longer tail relative to head and trunk than in the preceding species, even though the preanal vertebrae would probably be similar in number. This would account for the considerably greater number of dorsal and anal rays in this second species.

DISCUSSION

The ophichthid larvae studied in the preparation of this paper, like the muraenids, are more characteristic of collections made in the New Caledonia area and northwards than they are of collections made off the Australian coast. No ophichthid larvae are known from the New Zealand area. The general areas in which these collections were made are as follows: (a) the New Caledonia area from 10° S, to 23° S, and between 158° E to 166° E (collections made by the Centre d'Océanographie de l'Institut Français d'Océanie, Nouméa, from the *Orsom III*), (b) off the east Australian coast and in the New Guinea-Solomons