

Australian Museum Collection (50 specimens): 85.2, Aust. Mus. regd. no. I.3250, Dee Why, N.S.W.; 95.3, no. IB.3267, Collaroy Beach, N.S.W.; 76.3, 85.2, ca.50.0, nos. IB.4116–IB.4118 respectively, Collaroy, N.S.W., 17/9/58; 83.3, 77.7, 71.8, 82.2, 67.1, 75.3, nos. IB.4136–IB.4141 respectively, Collaroy Beach, N.S.W., 14/10/58; 80.0, no. IB.4183, Collaroy Beach, N.S.W., 6/11/58; 86.6, no. IB.4185, Collaroy Beach, N.S.W., 19/11/58; 85.8, no. IB.4202, Collaroy Beach, N.S.W., 12/12/58; 92.6, no. IB.4502, Collaroy Beach, N.S.W., 13/8/59; 89.3, no. IB.4504, Collaroy Beach, N.S.W., 9/10/59 (1730hrs), tide half-out, alive; 78.2, no. IB.4511, Collaroy Beach, N.S.W., 12/11/59; 71.9–108.8, nos. IB.4512–IB.4515 (32 specimens), Collaroy Beach, N.S.W., 21/11/59; 94.1, no. IB.5038, Collaroy, N.S.W., 22/9/60.

Western Australian Museum Collection (1 specimen): 64.2, West. Aust. Mus. Acc. No. 5280, *Lancelin*, 43 miles west of West End, Rottneest Island, Western Australia, 21/6/62 (0200hrs), larval net, 37m.

DESCRIPTION. 78 specimens: total lengths 6.5mm–108.8mm, myomeres 69–77 + 84–80 = 152–163, last vertical blood vessel at myomere 72–76, anterior margin of gall bladder at myomere 17–20, teeth $\frac{1 + \text{IV-VI} + 7-9}{1 + \text{V-VI} + 4-5}$, dorsal rays 368–415, anal rays 196–233, caudal rays 2 + 3, a-d = + 58 to + 62 (in full-grown specimens). Description made from a 83.3mm specimen, DFO (Cronulla) Collection, *Warreen* Station 24/38 (measurements in mm): head 4.0, snout 1.2, eye 0.8, cleft of mouth 2.0, postorbital 2.1, pectoral 0.4, predorsal 9.7, snout-vent 49.4, depth just before eye 1.6, at pectoral origin 2.6, at midpoint between pectoral and vent 4.1, at vent 5.6. Dorsal rays 382, anal rays 198, caudal rays 3 + 2. Teeth $\frac{1 + \text{V} + 8}{1 + \text{IX}}$. Myomeres 77 + 82 = 159. a-d = + 61. Last vertical blood vessel at myomere 76, anterior margin of gall bladder at myomere 18.

Body relatively elongate, much compressed except along head, shallow, its greatest depth just posterior to midpoint and contained about 15 times in total length, tapering more obviously behind this point than in front of it. Head quite short, 21 in total, moderately well differentiated from trunk; snout not short, 3.3 in head, sharply conical; nasal organ well developed with the two nostrils not yet separated; eye subcircular, its horizontal diameter 1.5 times in snout or five in head length; cleft of mouth slightly oblique and curved, extending to below posterior margin of eye; teeth relatively acute, normally in three groups on each side of upper and lower jaws as follows: in the upper jaw only, a minute, forwardly-directed tooth on the anterior tip of snout, a group of five rather large teeth and then a row of eight much smaller teeth; the pattern similar in the lower jaw. Branchiostegal rays very numerous (more than 14) and curving up over opercular region. Pectoral fin very short, hardly more than a rounded flap; dorsal fin well developed, originating far forwards at myomere 17, with the basal structures easily discernible, the fin ending subterminally; anal fin also well developed with its rays conspicuous, ending subterminally; caudal fin absent; the body instead ends in a conspicuous, nipple-shaped structure covered in most specimens by a loose, alveolar tissue; beneath this are two reduced hypurals and five caudal rays.

Pigmentation in formalin generally inconspicuous with no very large chromatophores but invariably occurring on the snout and jaw, at various positions along the intestine, along the anal base, and below the lateral line on each myoseptum, in detail as follows:—a few small chromatophores on the under surface of the tip of the rostrum; two or three spots on the tip of the lower jaw; along the intestine 20 equally spaced groups (about four segments apart) of about a dozen splanchnic chromatophores each, these groups placed on the underside of the pronephric ducts; the second and fourth groups occur above expansions of the liver and these, as well as each succeeding alternate group of spots (making ten in all), occur above a prominent upward loop and swelling of the intestine; the majority of the bases of the anal fin-rays (and in particular the more posterior ones) have one or two small chromatophores; on each myoseptum from the fifth to the last below the midlateral level, a line of at least two or three minute, compact pigment spots