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A New Bothid Fish from Eastern Tasmania

By

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WITH 1 PLATE

SUMMARY

Arnoglossus andrewsi, sp. nov. is described and characters by which it can be distinguished from *Arnoglossus bassensis*, Norman, are listed.

INTRODUCTION

During the winter of 1952 a newly-found scallop bed in Oyster Bay on Tasmania's east coast was fished commercially for the first time. Mr. E. E. Andrews, Chief Inspector of Fisheries for Tasmania, whilst examining material brought up in the dredges noticed a small flat fish of unusual appearance which he preserved and sent to the author for identification. It was suspected that the specimen belonged to an undescribed species and as the fish was immature, efforts were made to obtain more. Several larger specimens were taken subsequently, but they were extensively damaged by the dredge and it was not until the following year that the series of seven fish used in the following description was obtained. Shortly afterwards another specimen was collected in George's Bay, near St. Helens.

All fish were taken in depths of seven or eight fathoms on weed and sponge bottom and it is of interest to note that, although the same type of fishing gear has been used for several decades in D'Entrecasteaux Channel, the species has never been reported from that area.

It is proposed to lodge the holotype with the British Museum of Natural History and the paratypes with Australian Museums.

DESCRIPTION OF HOLOTYPE

Family BOTHIDAE

Subfamily *BOTHINAE*

Genus **Arnoglossus** Bleeker, 1862

Arnoglossus andrewsi sp. nov.

Dorsal profile of the head evenly curved, notched opposite the centre of the upper eye. Snout a little longer than the eye. Eyes may be level or the lower a little in advance of the upper which is separated from the upper edge of the head by a space equal to one-third its diameter. The eyes, which are set close together, are separated by a prominent bony

ridge. Maxillary, whose upper posterior margin is angular, extends to below anterior third of lower eye. When mouth is closed, lower jaw is level with upper. Teeth uniserial, anterior ones largest and well separated. Some teeth on the ocular side of the jaw movable. Gill rakers short and blunt with inner edges spinulate. Scales of ocular side ctenoid, those of blind side cycloid. The lateral line is well developed and has no accessory branch. All rays in the dorsal fin are simple and scaled on both sides. The first dorsal ray is inserted slightly on the blind side opposite to or a little in front of the anterior nostril of that side. The first ray of the anal fin is inserted level with or a little in front of the posterior margin of the operculum. The left pectoral is in line with the lower eye and the insertion of the posterior anal ray. It is generally greater in length than that of the right side. The anterior ray of the left pelvic is situated behind the posterior margin of the upper eye. The first ray of the right pelvic is opposite the third ray of the left. Caudal fin rounded with a short peduncle.

Colour of dead but freshly dredged specimens pinkish brown with irregular dark blotches and spots on body and fins. There are two conspicuous blotches on the lateral line, one immediately behind the arch and the other approximately half the distance between this and the caudal peduncle. An additional prominent blotch lies just below the pectoral fin. Except for a small area around the pelvic fin in some specimens, the blind side is unpigmented.

The variations in morphological characters found in the series of seven specimens together with the corresponding features of the holotype are given in Table 1.

TABLE 1

Character	6 Paratypes	Holotype
Total length in mm.	28-213	175
Depth of body in standard length	2·3-2·4	2·3
Length of eye in head length	5·0-5·4	5·0
Length of maxillary in head length	2·7	2·7
Number of gill-rakers on lower half of anterior arch	6-7	6
Number of lateral line scales	91-95	94
Height of lateral line arch in length of same	2·5-3·5	2·5
Length of head in standard length	2·4-4·4	4·2
Length of left pectoral in head length	1·7-2·1	1·7
Length of caudal in head length	1·1-1·3	1·2
Depth of caudal peduncle in head length	1·9-2·2	1·9
Number of dorsal rays	90-94	93
Number of anal rays	71-74	73
Number of left pectoral rays	10	10
Number of caudal rays	2/13/2	2/13/2

Discussion

When first examined *Arnoglossus andrewsi* sp. nov. appeared to be either very closely related to or identical with *A. bassensis, Norman* (1926). However, examination of a specimen of the latter, kindly lent by the Australian Museum confirms the view that the differences between it and the specimens to hand, are specific. These differences comprise four meristic characters, the shape of the caudal fin and the nature of the scales. In every case the scales on the ocular side of *A. andrewsi* are larger and distinctly ctenoid. They differ in shape and structure from the cycloid scales found on that side in *A. bassensis.*

The characters by which *A. andrewsi* can be distinguished from *A. bassensis* are given in Table 2.

TABLE 2

Character	*Arnoglossus bassensis*	*Arnoglossus andrewsi* sp. nov.
Number of dorsal fin-rays	98-99	90-94
Number of anal fin-rays	77-78	71-74
Number of gill-rakers	7-9	6-7
Nature of scales on ocular side	cycloid	ctenoid
Shape of caudal fin	obtusely pointed	rounded

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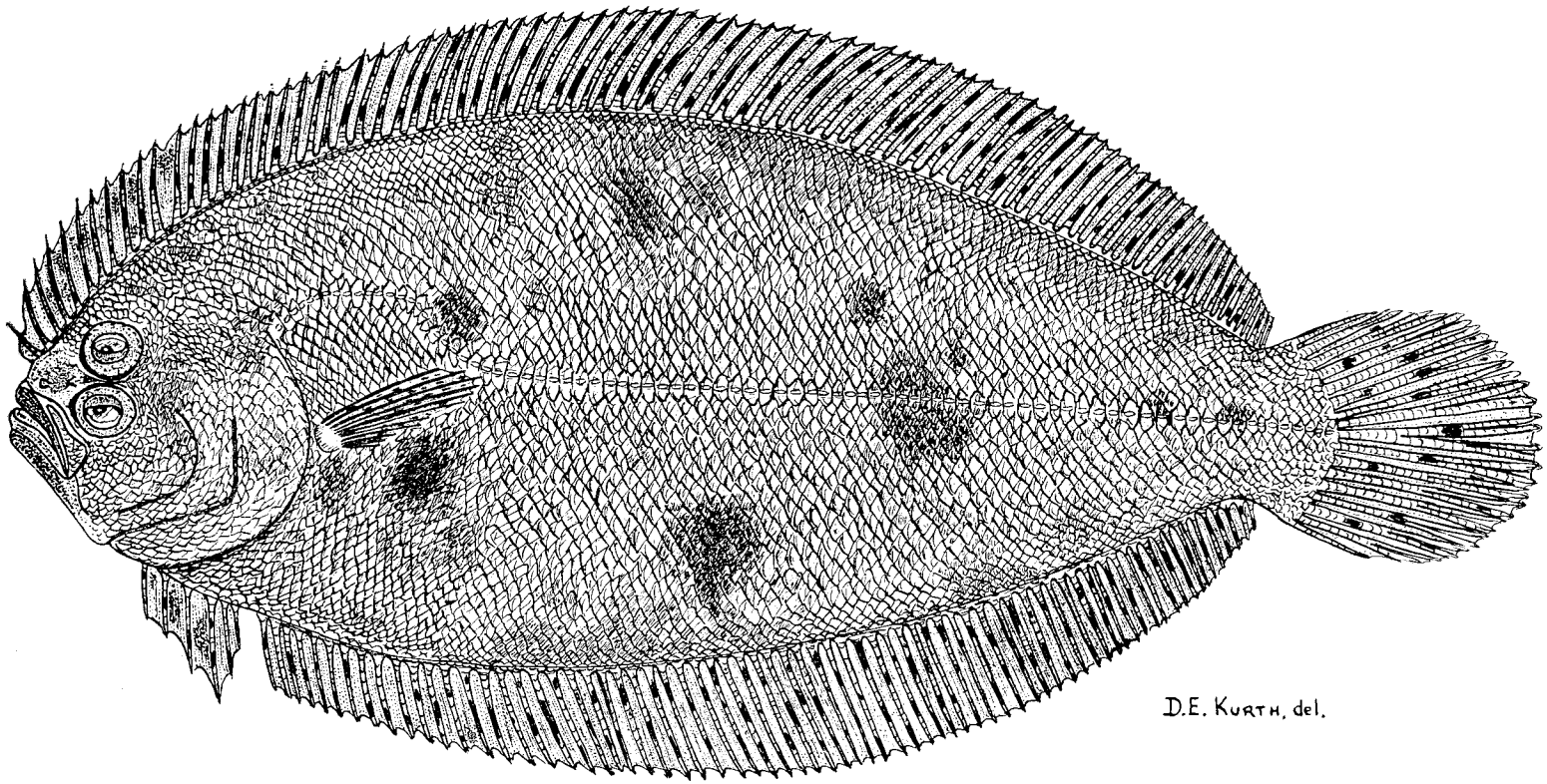

ARNOGLOSSUS ANDREWSI sp. nov.

Holotype of *Arnoglossus andrewsi* sp. nov. viewed from left side.