

ADDITIONS TO THE SOUTH AFRICAN MUSEUM COLLECTIONS OF MARINE FISHES

BY

F. H. TALBOT, M.Sc.

Barbourisia rufa Parr*

Parr, A. E., Barbourisidae, a new family of deep-sea fishes, *Copeia*, 1945, 127-129, 1 pl.

Two specimens, the locality of one 'off Table Bay 1956', no depth given, and the other $32^{\circ}10'S./16^{\circ}15'E.$, 285 fathoms, 1959. (Registered numbers S.A.M.19967 and S.A.M.22893 respectively.)

As the only record in literature of *Barbourisia rufa* is a single specimen taken from the Gulf of Mexico in 1937, these two examples from the South Atlantic off Cape Town are a most interesting find and greatly extend the distribution of this species. The present two specimens differ slightly from the 180 mm. holotype, the main differences being: slightly smaller orbit, slightly shorter jaws, and shorter gill rakers. In all other measurements and characteristics they show very close similarity (see Table 1) except that in Parr's description of the genus he states '7 soft branchiostegal rays', and the present specimens have eight. As the thick skin covering the rays and their soft nature make counting difficult it is probable that this will prove to be a miscount.

A pseudobranch of a few gill tufts is present. Lateral line pores between 6 and 16 shows the occasional raised pores mentioned by Parr. All pores are small and without flaps, excepting the last which is very large, being the full width of the lateral line tube.

Post-mortem colour is a brilliant scarlet-red (Ridgeway), which fades rapidly on preservation to an off-white.

Pterothrissus belloci Cadenat

Cadenat, J. 1938. Note sur deux poissons nouveaux de la côte occidentale d'Afrique. *Bull. Mus. Hist. nat., Paris* (2), 10, 361-369, 2 pl.

Poll, M. 1953. Poissons. III. Téléostéens Malacoptérygiens. *Résult. sci. Expéd. océanogr. belge Eaux côt. afr. Atlant. S.*, 4 (2), 1-258.

Four specimens trawled off Walvis Bay, $22^{\circ}2'S./13^{\circ}26'E.$, in 80 fathoms (registered number S.A.M.21706). Donated by the Director, Division of Fisheries, Department of Commerce and Industries.

Poll (1953) has found this species to be abundant on the deeper portions of the continental shelf off tropical West Africa. The present specimens are the most southerly record.

*Since the above was written R. R. Rofen, *Galathea Rep.*, 1, pp. 255-260, September 1959, records and plates a specimen of *B. rufa*, from near Madagascar, mid-water, 450-700 metres. This extends the range of the family to the Indian Ocean.

	Type	S.A.M. 19967	S.A.M. 22893
Standard length	180 mm.	297 mm.	294 mm.
Head	35.6	31	32
Snout	11.7	11.1	11.6
Orbit diameter	4	2.7	2.7
Upper jaw length	25.6	22	23
Low jaw length	28	21	21
Greatest width of skull	15	12.8	15
Interorbital distance	12.5	10.4	11.9
Snout to D. origin	64	61	61
Snout to A. origin	69	68	71
Snout to V. origin	54-55	50	50
Dorsal fin base.. .. .	24	26	25
Anal fin base	18	17.5	16.3
Width of V. base	1.3-1.5	1.3	1.7
Width of pectoral base	2.2	1.7	2.4
Length of pectoral rays	6.5-7	7.4	6.1
Length of ventral rays	6-6.5	6.4	5.1
Longest dorsal ray	11	8.4	8.2
Longest anal ray	10.5	8.4	9.5
Depth at shoulder girdle	25	20	23
Least depth caudal peduncle	5	8.1	8.2
D. to procumbent caudal rays	8	7.7	8.2
D. to mid-base of caudal rays	14.5	14.1	15.3
Longest gill rakers	4.2	2.4	2.7
Dorsal count	20	20	20
Anal count	16	17	16
Number of lateral line pores	29	29	30
Branchiostegal rays	7(?)	8	8
Gill rakers	6 + 14	6 + 15	6 + 15

TABLE I. A comparison of proportions of the type of *Barbourisia rufa* (from Parr, 1945) with two South African specimens. Lengths are expressed as a percentage of standard length.

Allothunnus fallai Serventy

Serventy, D. L. 1948. *Allothunnus fallai*, a new genus and species of tuna from New Zealand. *Rec. Canterbury (N.Z.) Mus.*, 5, 131-135.

One specimen, fork length 835 mm. taken by spear gun in 3 fathoms off Millers Point, Cape Peninsula, on 8 April 1958, and donated by Mr. D. Hammond (registered number S.A.M.21546).

The Slender Tunny, with its reduced dentition and high gill-raker count, is stated by R. A. Falla (in a note appended to Parrot, 1958, *Rec. Dom. Mus., Wellington* 3, p. 119) to be 'not uncommon in southern New Zealand seas, but rarely caught'. Serventy's original 3 specimens were from South Island, New Zealand, south of 43°, and Falla mentions sight and photographic records from the Auckland Islands (50° S.), so it can presumably be considered a cold-water tunny. This is the first South African record.

The present specimen shows some small differences from the original description (see Table II), but there seems no doubt that it is conspecific.

Scaling is not as complete as in the type. Behind the distinct corselet of larger scales the body is covered in fine scales on its upper half to below the lateral line and the lower half of the sides and the belly are naked. The vomer and palatines are slightly rough to the touch, being covered in microscopic granular teeth. Serventy doubtfully gives a vertebral count of 41. X-ray photographs of the present specimen show 39 vertebrae however.

Fin counts: Dorsal XVII 12 plus 7; anal 13 plus 7. Gillrakers 23 plus 48 left, and 22 plus 53 right.

The specimen is a mature male.

Post-mortem colour was steely blue above shading to silver below, and with no distinctive markings. A photograph taken immediately after death shows a dark line from the pectoral tip, running longitudinally and upwards to the 3rd dorsal finlet.

	Type	S.A.
Fork Length (snout to caudal fork)	616 mm.	850 mm.
Diameter of eye	3.7	3.6
Head Length	26	26
Snout to origin of pectoral	27	28
Snout to origin of first dorsal	31	30
Snout to origin of second dorsal	63	59
Snout to origin of ventral	28	31
Snout to vent	64	61
Depth of body at origin of first D. (= approx. greatest depth)	21	20
Depth of body at vent	18.8	17.4
Length of pectoral	10.5	11.2
Length of pectoral alongside body	12.2	12.2
Inter-orbital distance	7.8	7.2
Length of maxillary	9.3	9.3
Snout to hinder edge of pre-opercle	20.1	19.8
Height of first dorsal	10.4	8.1
Height of second dorsal	7.9	7.5
Height of anal	7.8	7.8
Snout to anterior nostril	4.6	4.9
Snout to posterior nostril	6.8	6.9
Longest gill raker	4.5	4.2

TABLE II. A comparison of the proportions of the type of *Allothunnus fallai* with the South African specimen. Fork length is in mm. and all other measurements are expressed as a percentage of fork length.



Talbot, Frank Hamilton. 1960. "Additions to the South African Museum collections of marine fishes." *Annals of the South African Museum. Annale van die Suid-Afrikaanse Museum* 45, 257–259.

View This Item Online: <https://www.biodiversitylibrary.org/item/127020>

Permalink: <https://www.biodiversitylibrary.org/partpdf/76286>

Holding Institution

Smithsonian Libraries and Archives

Sponsored by

Biodiversity Heritage Library

Copyright & Reuse

Copyright Status: In Copyright. Digitized with the permission of the rights holder.

License: <http://creativecommons.org/licenses/by-nc-sa/3.0/>

Rights: <https://www.biodiversitylibrary.org/permissions/>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.