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Occurrence of Atrobucca marleyi in the Deep Sea Trawl Catches off Northwest Coast of India

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African blackmouth croaker *Atrobucca marleyi* (Norman) in fishable concentrations were found off northwest coast of India in September 1992. The fish were captured using a 50 m high opening demersal trawl at catch rates ranging from 50 to 1000 kg h⁻¹ and the size of the fishes ranged from 205 to 350 mm.

Three species belonging to the genus Atrobucca (Family: Sciaenidae) have been reported from Indian waters: A. nibe (Jordan & Thompson) from shallow coastal waters off east coast of India, particularly off Orissa, and off northwest coast; A. trewavasae Talwar & Sathiarajan from deeper waters (250 m) off southeast coast and A. alcocki Talwar, a rare species with no commercial significance, from the waters off Bombay (Bapat et al, 1982; Talwar & Kacker, 1984).

African blackmouth croaker Atrobucca marleyi (Norman) so far has not been reported from Indian EEZ. Fishable concentration of this species was located during experimental fishing operations off northwest coast of India, in September 1992. Demersal trawling operations were conducted using a 50 m high opening trawl (Kunjipalu et al., 1994), from FORV Sagar Sampada (71.5 m LOA; 2285 hp) during its cruise No. 103.

A. marleyi was represented in 15 hauls out of 32 operations conducted in the cruise area,18°05' - 23°02' N lat; 70°42' - 67°06E long., off northwest coast. Catch rates ranged from 50 to 1000 kg h⁻¹ (Table 1) and consisted of adults varying in size from 205 mm to 350 mm in total length. Catches were obtained between 56 to 128 m depth, particularly above 100 m, in 23°02 - 21°10' N lat. 68°55' - 67°06'E long.

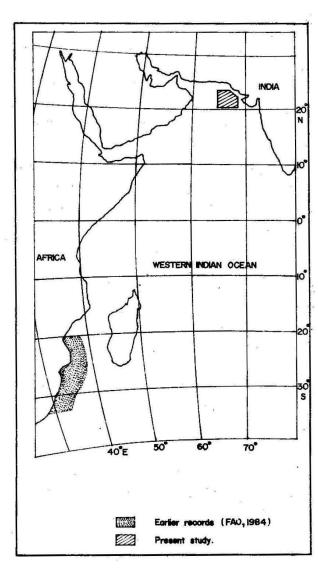


Fig. 1. Distribution of Atrobucca marleyi in Western Indian Ocean

Table 1. Occurrence of Atrobucca marleyi in demersal trawl catches during cruise No. 103 of FORV Sagar Sampada, in the EEZ off northwest coast of India

Date	Depth, m	Lat.	Area Long.	Course	Catch rate of A. mar- leyi, kg h-1
14-9-1992	113	21°10′N	68°55′E	305°	100
	114	21°16′N	68°50E	300°	1000
••	113	21°19′N	68°46′E	290°	50
15-9-1992	117	21°17′N	68°45′E	300°	200
**	114	21°19′N	68°37′E	200°	200
16-9-1992	128	21°16′N	68°19′E	280°	60
17-9-1992	117	21°36′N	68°14′E	350°	100
11	115	22°18′N	67°38′E	250°	100
11	117	22°19′N	67°37E	300°	100
18-9-1992	117	22°29'N	67°26′E	335	100
n	120	22°41′N	67°16′E	320°	100
**	125	22°53′N	67°06′E	330°	400
19-9-1992	125	23°02′N	67°09′E	350°	400
m	96	22°45′N	67°27′E	305°	1000
	56	22°45′N	67°57′N	275°	500

Among the species constituting the genus, A. nibe supports a fishery in northwest Pacific with landings of nearly 7000 tonnes per year (FAO, 1991). A marleyi is caught in bottom trawls along southeast coast of Africa (20-32° S lat.) in the western Indian ocean at depths up to 100 m (FAO, 1984) (Fig. 1). The present evidence of its occurrence in deeper waters off northwest coast of India and the magnitude of catch rates obtained indicate the need for further studies on its distribution and potential as a fishery resource.

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References

Bapat, S.V., Deshmukh, V.M., Krishnamoorthi, B., Mutthaiah, C., Kagwade, P.V., Ramamrithram, C.P., Mathew, K.J., Krishna Pillai, S. & Mukundan, C. (1982) Bull. Cent. Mar. Fish. Res. Inst. 33, 45

FAO (1984) FAO Species Identification Sheets for Fishery Purposes - Western Indian Ocean (Fishing Area 51), Vol. IV, (Fischer, W. & Bianchi, Eds.) FAO, UN, Rome

FAO (1991) FAO Yearbook 1989, Fishery Statistics - Catches and Landings, Vol. 68, FAO, UN, Rome

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Kunjipalu, K.K., Boopendranath, M.R., George Mathai, P., Varghese, M.D. Syed Abbas, M., Pillai, N.S. & George, V.C. (1994) Paper 86 presented at the Second Workshop on Scientific Re-

sults of FORV Sagar Sampada (CMFRI & CIFT), Cochin, India, 15-17 Feb Talwar, P.K. & Kacker, R.K. (1984) Commercial Sea Fishes of India, Zoological Survey of India, Calcutta