

Occurrence of Triggerfishes in Wadge Bank Trawl Catches

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Substantial quantities of triggerfishes (Family: Balistidae) were caught in the Wadge Bank off the southwest coast of India using a 50 m high opening trawl during cruise no. 110 of FORV *Sagar Sampada* in July 1993. Average CPUE of triggerfishes was 1482 kg h⁻¹ constituting 69.5% of the landings in the grounds where they were caught.

The geographic distribution of triggerfishes (Family: Balistidae) has been reported along the coast of East Africa, Madagascar, Seychelles, Reunion, Mauritius, Red sea, Lakshadweep, off southern tip of India and Sri Lanka, in the Western Indian Ocean (FAO, 1984). Triggerfishes inhabit waters near reefs and on flat sponge covered bottoms.

A 50 m high opening trawl (Kunjipalu *et al.* 1994) was used for the fishing operations. This gear which is a scaled up version of 25 m high opening trawl (Kunjipalu *et al.*, 1990) has been successfully field tested in the Indian EEZ in earlier cruises (99, 103 and 105-A) of FORV *Sagar Sampada*. In this study the gear was operated from FORV *Sagar Sampada* (71.5 m LOA; 2285 hp) during cruise No. 110 in July 1993.

Details of the catch recorded in 10 hauls are given in Table 1. Average CPUE of triggerfishes was 1481 kg h⁻¹ and constituted 69.5% of the landings in the grounds where it was caught. Two species constituted the catch of triggerfishes. *Odonus niger* (Ruppel), the red-toothed triggerfish formed the majority of the catch, followed by *Sufflamen fraenatus* (Bloch & Schneider), the masked triggerfish. Total length of *O.*

niger in the landings ranged from 125 mm to 170 mm. Maximum reported size for this species is 600 mm and the common size 300 mm. *S. fraenatus* is reported to reach a maximum size of 500 mm and the common size is 200 mm (FAO, 1984).

Joseph, *et al.* (1987) estimated the composition of balistids at 0.64% of the demersal fishery resources in Wadge Bank. Sulochanan & John (1988) included balistids along with others contributing less than 1% in the fishery resources of Wadge Bank. Sivaprakasam (1986) estimated the CPUE of balistids as 19.2 kg h⁻¹ in Wadge Bank, while it was only 1.1 kg h⁻¹ (0.8%) in Gulf of Mannar. Sivaprakasam *et al.* (1991) while updating the fishery resources off the lower east coast of India have estimated balistids as 29.6 kg h⁻¹ (24.2%) in grounds less than 50 m depth and 32.6 kg h⁻¹ (39%) in 50-100 m in depth in Wadge Bank, while it was 22.4 kg h⁻¹ (14.5%) in 20-50 m depth in Gulf of Mannar. Earlier reports on availability of balistids and the magnitude of the present landings (range: 50-3700 kg h⁻¹) is indicative of its potential as a fishery resource in Wadge Bank.

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Table 1. Catch of triggerfishes (Family : Balistidae) in 50 m High opening trawl operated during cruise No. 110 of FORV Sagar Sampada in Wadge Bank

Date	Area Lat.	Long.	Depth	Dura- tion of haul, min	Total catch, kg	Catch of trigger fishes, kg	Per- cent- age
14.7.93	07°41' N	77°36' E	61	60	174	100	57.1
15.7.93	07°44' N	77°46' E	55	60	2460	1860	75.7
16.7.93	07°44' N	77°43' E	60	60	90	50	55.5
"	07°40' N	77°58' E	61	60	4000	3700	92.5
17.7.93	07°40' N	77°56' E	60	60	1065	450	42.2
17.7.93	07°40' N	77°54' E	60	60	2500	350	14.0
19.7.93	07°41' N	77°55' E	60	60	2550	2200	86.2
19.7.93	07°40' N	77°53' E	60	60	5000	3350	67.0
"	07°42' N	77°56' E	58	60	1500	1375	91.7
20.7.93	07°48' N	77°34' E	52	10	200	150	75.0
Total					19,540	13,585	69.6

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