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NOTES ON THE FISHES FROM ANDAMAN SEA COLLECTED DURING FORV *SAGAR SAMPADA* VOYAGE NO. 113

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INTRODUCTION

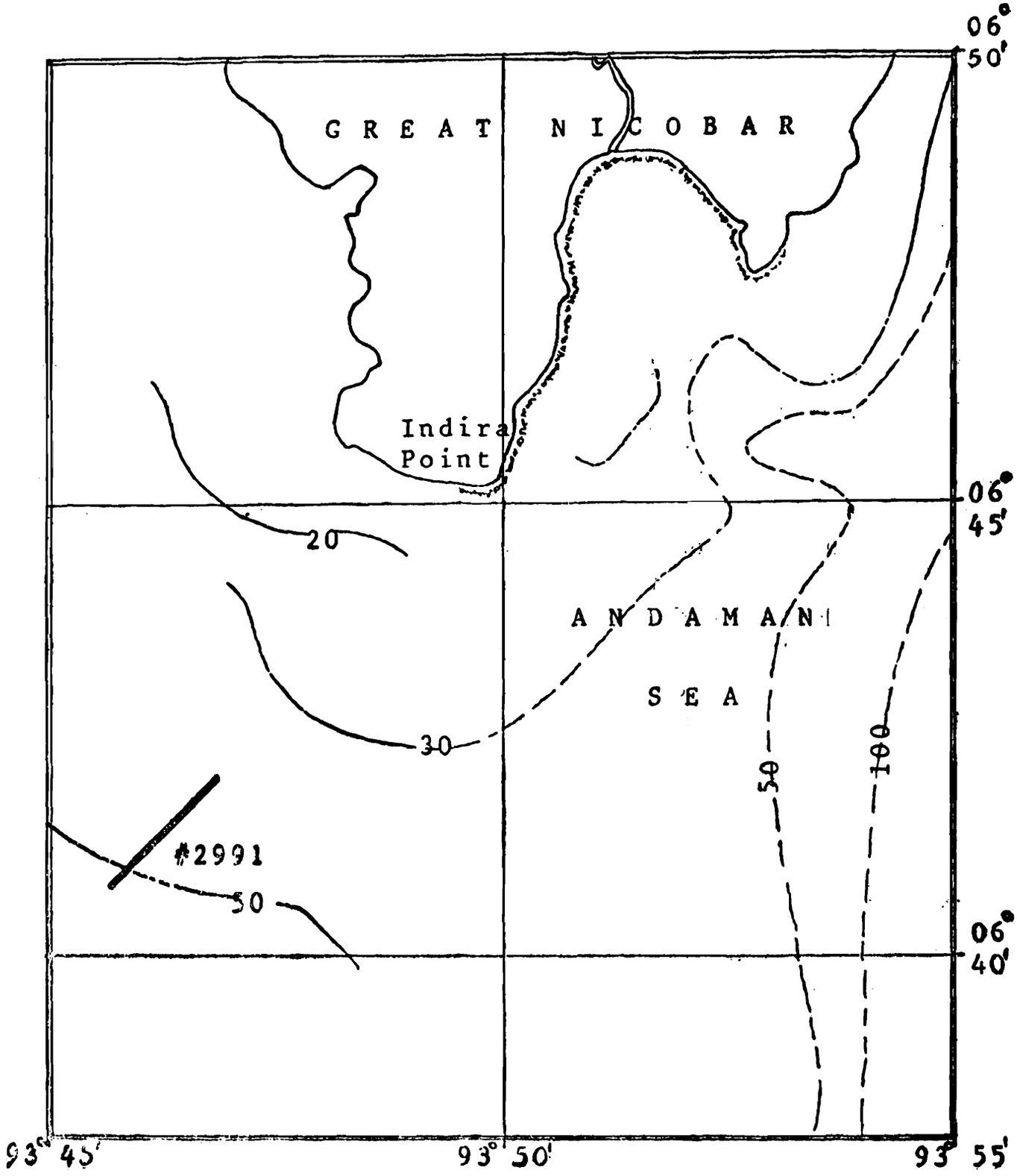
At the early hours of 21 January, 1993 the Danish ship VLCC *Maersk Navigator*, carrying about 300,000 tons of light crude oil from Oman to Japan collided with the Singapore registered empty oil-tanker *Sanko Honour* while negotiating a narrow passage through the small Indonesian islands at the entry point to the Strait of Malacca. As a result, one of its tanks ruptured and an estimated 18,000 tons of oil spilled on the sea over several days. The oil patches were just 16 nautical miles south of Indira Point, The Great Nicobar right within the EEZ of India. In order to assess the long-term impact of the oil-spill a cruise of FORV *Sagar Sampada* (Cruise No. 113) was organised during 21.09.1993 to 10.10.1993 in the Andaman Sea (Map : 1). Fish samples have been collected with a view to identify and to study morphological deformities, if any.

MATERIAL AND METHODS

The fish samples have been collected by deployment of bottom trawl net operated from FORV *Sagar Sampada* hauling at a speed of approximately 4 knots per hour in the Grid No. 2991 (06°40·76′N, 93°45·67′E to 06°42·08′N, 93°46·91′E) where the depth was 50 ± 3 mts. The net was damaged due to the uneven bottom topography and the salvaged specimens have been studied.

RESULTS

Altogether 21 samples belonging to 3 families, 4 genera and 5 species have been collected and identified. One sample of each species has been brought and



Map 1 : Collection Station # 2991.

deposited with the Marine Biological Station, Zoological Survey of India, Madras while the rest have been handed over to other participating agencies. None of the samples exhibited any teratogenic phenomenon, stunted growth, visible tar deposit and meristic variations. The samples with MBS/ZSI, Madras have been identified as under.

Class : OSTEICHTHYES

Order : PERCIFORMES

Family : LETHRINIDAE

Genus : Gymnocranius Klunzinger, 1870

1870. *Gymnocranius* Klunzinger, *Verh. Zool. Bot. Ges. Wien.*, 20 : 764 (Type : *Dentex rivulatus* Ruppell, 1838=*Cantharus grandoculis* Valenciennes, 1830).

1. Gymnocranius grandoculis (Valenciennes, 1830)

1830. *Cantharus grandoculis* Valenciennes *in* Cuvier and Valenciennes, *Hist. nat. poiss.*, 6 : 341 (Seychelles).

1974. *Gymnocranius robinsoni* (Gilchrist and Thompson) : Fischer and Whitehead, *FAO species Identification sheets for fishery purposes. Fishing Areas 57, 71 (E. Ind. Ocean and W. Cent. Pacific)*, 3 : PENTAP Gymno 2.

1989. *Gymnocranius grandoculis* : Carpenter and Allen, *FAO Fish. Synop.*, (125) 9 : 27.

Material examined : 1, 275 mm in SL, off Indira Point, 29.09.93.

Distinguishing characters : D X, 10 ; A III, 10 ; P 14 ; V I, 5 ; GR 2+5 ; LL 48+2 ; Ltr $5\frac{1}{2}/17$; cheek scale 5 ; depth 2·6 in SL ; head 2·9 in SL ; eye 3·0 in head.

Distribution : Widely distributed in Indo-west Pacific.

Remarks : This species has been referred to as *G. robinsoni* (Gilchrist and Thompson, 1908) in recent literature. The sample is 2·64 times in SL deviating from the range (2·4 to 2·5) prescribed by Carpenter and Allen (1989).

Genus : **Lethrinus** Cuvier, 1829

1829. *Lethrinus* Cuvier, *Regne Animal.*, 2 : 184 (Type : *Sparus choerynchus* Bloch and Schneider, 1801 = *Lethrinus nebulosus* (Forsskal, 1775).

2. **Lethrinus conchyliatus** (Smith, 1959)

1959. *Lethrinella conchyliatus* Smith, *Rhodes Univ. Ichth. Bull.*, 17: 292, pl. 22, fig. E (Pinda, Mozambique).

1963. *Lethrinella conchyliatus* : Silas and Toor, *J. mar. biol. Assoc. India*, 4 (1 & 2): 243, fig. 1 (Andamans).

1989. *Lethrinus conchyliatus* : Carpenter and Allen, *FAO Fish. Synop.*, (125) 9 : 53.

Material examined : 1, 323 mm in SL, off Indira Point, 29.09.93.

Distinguishing characters : D X, 9 ; A III, 8 ; P 13 ; V I, 5 ; GR 4+5 : LL 48 ; Ltr $4\frac{1}{2}/16$; depth 3·3 in SL ; head 2·8 in SL ; eye 4·9 in head.

Distribution : Indian Ocean—Tanzania, Madagascar, Chagos, Andamans to southern Indonesia.

3. **Lethrinus microdon** Valenciennes, 1830

1830. *Lethrinus microdon* Valenciennes, *Hist. nat. poiss.*, 6 : 295 (Bourou).

Material examined : 1, 324 mm in SL, off Indira Point, 29.09.93.

Distinguishing characters : D X, 9 ; A III, 8 ; P 13 ; V I, 5 ; GR 4+5 ; LL 48 ; Ltr $4\frac{1}{2}/16$; depth 3·4 in SL, head 2·9 in SL ; eye 5·0 in head.

Distribution ; Wide-spread in Indo-west Pacific.

Order : TETRAODONTIFORMES

Family : BALISTIDAE

Genus : **Pseudobalistes** Bleeker, 1866

1866. *Pseudobalistes* Bleeker, *Ned. Tijdschr. Dierk.*, 3 : 11 (Type : *Balistes flavimarginatus* Ruppell, 1829)

4. **Pseudobalistes flavimarginatus** (Ruppell,1829)

1829. *Balistes flavimarginatus* Ruppell, *Atlas Reise N. Afrika* : 33 (Red Sea) : Day, 1878. *Fishes of India* : 690.

1986. *Pseudobalistes flavimarginatus*: Smith and Heemstra, *Smith's Sea Fishes* : 880, pl. 136, fig. 263.11.

Material examined : 1, 420 mm in SL, off Indira Point, 29.09.93.

Distinguishing characters : D III+26 ; A 24 ; P 15 ; LS 32 ; Ltr 20 ; depth 2·0 in SL, 2·6 in TL ; head 3·0 in SL ; eye 5·8 in head.

Distribution : Wide-spread in Indo-Pacific.

Family : OSTRACIIDAE

Genus : **Ostracion** Linnaeus, 1758

1758. *Ostracion* Linnaeus, *Syst. Nat.* (ed. 10), 1 : 330 (Type : *Ostracion cubicus* Linnaeus, 1758) .

5. **Ostracion meleagris** Shaw, 1796

1796. *Ostracion meleagris* Shaw *in* Shaw and Nodder, *Nat. Miscell.*, 7 : pl. 253 (South Pacific).

1878. *Ostracion punctatus* Bloch and Schneider : Day, *Fishes of India* : 696,

1955. *Ostracion lentiginosa* Bloch and Schneider : Munro, *The marine and freshwater fishes of Ceylon* : 277.

1962. *Ostracion meleagris* : de Beaufort and Briggs, *Fish. Indo-Aust. Archip.*, 11 : 356.

Material examined : 1, 28·5 mm in TL (22·2 mm in carapace length), off Indira Point, 29.09.93.

Distinguishing characters : D 9 ; A 9 ; P 10 ; C 10 ; depth 2·0 in TL, 1·02 in width ; head 3·2 in TL ; eye 2·25 in head ; carapace 4-ridged and spineless, ridges blunt ; dorsal ridge absent ; back convex ; mouth opening in carapace less than eye.

Colour : Greenish-brown to black with white spots.

Remarks : This is the first record of occurrence from Andaman and Nicobar group of Islands.

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