with a series of large black spots lying in pairs along the ventral surface. According to Weber and Beaufort (1922), *S. gracilis* has two pairs of pigments between pectoral and ventral and five pairs between ventral and anal fins.

The total number of vertebrae found in adult *S. gracilis* are 47 of which 17 are post anal. In the larvae 30+17 myotomes are noted. Thus, the finer hexagonal meshes of the egg membrane, seven pairs of black pigment spots in front of anus and the total number of myotomes found in the larvae enables the eggs and larvae dealt with here as that of *S. gracilis*. Partly spawned *S. gracilis* were also obtained in large numbers in trawl catches in the inshore waters of Tuticorin coast when planktonic eggs were recorded.

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REFERENCES

BAPAT, S. V. 1955. *Indian J. Fish.*, **2** : 231-255.

DELSMAN, H. C. 1938. *Treubia*, **16**: 415-420.

GOPINATH, K. 1946. *Proc. Nat. Inst. Sci. India*, **12**: 7-21.

JONES, S. 1950. *J. Zool. Soc. India*, **2**: 39-41.

KUTHALINGAM, M. D. K. 1959. *J. Zool. Soc. India*, **11**: 116-124.

MITO, S. 1961. *Sci. Bull. Fac. Agrl. Kyushu Uni.*, **18**: 285-310.

————1967. *Inform. Bull. Planktal. Japan*, **14**: 34-49.

NAIR, R. V. 1952. *Proc. Indian Acad. Sci.*, **35** *B*:. 181-208.

NORMAN, J. R. *Proc. Zool. Soc. London*, pp. 99-135.

SANZO, L. 1915. *Mem. R. Com. Thalass. Ital.* **49**.

VIJAYARAGHAVAN, P. 1957. *Ph. D. Thesis, Univ.* Madras, 79 pp.

VENKATARAMANUJAM, K. AND K. RAMAMOORTH 1981. *Rapp. P - V. Renn. Cons. int. Explor. Mar.*, **178**: 578 - 579.

WEBER, M. AND DE BEAUFORT 1922. *The Fishes of Indo-Australian Archipelago*. Lieden, 4.

DEFORMED SPECIMEN OF *MEGALASPIS CORDYLA* (LINNAEUS) FROM VERAVAL WATER

ABSTRACT

A distinctly abnormal specimen of horse mackerel *Megalaspis cordyla* without third dorsal finlet and a prominent hunch, measuring 312 mm total length is reported from Saurashtra waters.

VARIOUS deformities particularly at the tail region have been reported by George *et al.* (1979), Jones and Silas (1962), Noble (1972) and Kulkarni (1976) in marine fishes. This is the first report of distinct deformity at the tail portion in *Megalaspis cordyla* (Linnaeus).

Table 1. *Comparative morphometric (in mm) and meristic (numbers) details of abnormal and normal specimens of* M. cordyla (Linnaeus)

Characters	Abnormal specimen	normal specimen
Total length	312	312
Fork length	277	278
Standard length	254	262
Head length	69	66
Greatest depth of body	74	66
Snout to 1st dorsal	87	82
Length of pectoral fin	102	84
1st dorsal fin base	28	32
Pre 2nd dorsal distance	127	124
Post 2nd dorsal distance	196	184
Pre pelvic distance	81	76
Post anal distance	154	163
Caudal peduncle Horizontal / longitudinal	10/22	7/18
Distance between last finlet-1st caudal ray	20	15
Eye diameter	16	17
Second dorsal fin	I/X	I/XI
Scutes	53	54
Dorsal finlets	8	9
Anal finlets	6	7
Weight (g)	306	255

During the course of investigation on the fishery of horse mackerel *M. cordyla* (Linnaeus) a single male specimen was observed at Bhidia (Veraval). This fish was caught in the trawl net at 60 metres depth.

The morphometric and meristic counts of this specimen as well as that of a normal specimen of equal length are furnished in the Table. The specimen tapers abruptly from the post second dorsal region and narrows down to caudal peduncle. The caudal peduncle is twisted and flexed. The length of pectoral fin in fork length of abnormal specimen was 7% more than that of the normal specimen.

Jones and Silas (1962) noticed loss of one or more dorsal finlets due to injury and increase in the number of dorsal and anal finlets due to 'twisting' of caudal peduncle. Noble (1972) observed decrease in finlet number in *Rastrelliger kanagurta* (Cuvier). In the present specimen the third dorsal finlet is absent, though there is no sign of external injury evident there.

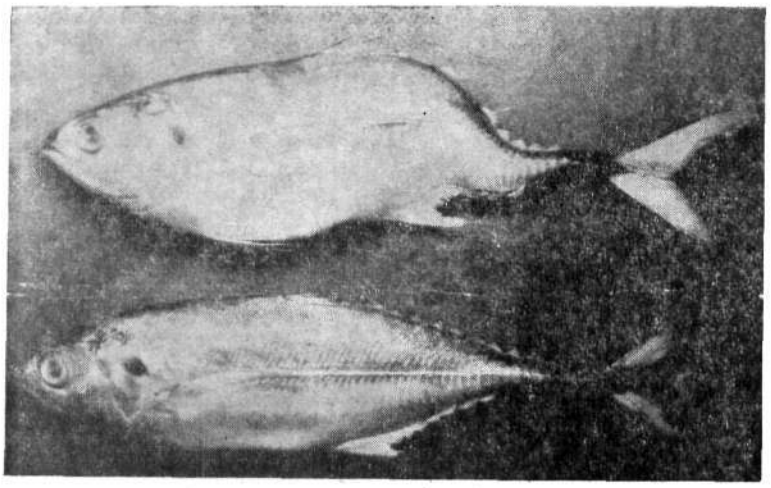

Fig. 1. *Megalaspis cordyla :* abnormal and deformed specimen (top) and normal one (bottom).

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REFERENCES

GEORGE, P. C. *et al.*, 1979. *J. Bombay Nat. Hist. Soc.*, **76** (1): 32-38.

JONES, S. AND E. G. SILAS 1962. *Proc. Symp. Scombroid fishes*, MBAI, 1: 255-282.

KULKARNI, G. M. 1976. *Indian J. Fish.*, **23** (1 & 2): 269-270.

NOBLE, A. 1972. *Ibid.*, **18** (1 & 2): 187 - 191.

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UNUSUAL LANDING OF OIL SARDINE *SARDINELLA LONGICEPS* VALENCIENNES, ALONG PARANGIPETTAI (PORTO NOVO), SOUTHEAST COAST, INDIA

ABSTRACT

Unusually abundant landings of oil sardine *Sardinella longiceps* Valenciennes, hitherto not reported along east coast is observed at Parangipettai coast during June-August 1986 and reported presently.

THE INDIAN oil sardine *Sardinella longiceps* valenciennes which forms 10 to 18 % of the total fish landings in India, usually occurs in shoals along the west coast of India. Only meagre catches of oil sardine have been reported from east coast. To the best of my knowledge no earlier report is published about the abundant occurrence of oil sardine along east coast excepting the recent report of its occurrence from Pondicherry (Anon., 1985) and hence the present report.

While investigating the biology and population identification of Indian mackerel *Rastrelliger kanagurta* along east coast, the author has observed unusual catches of oil sardine at Parangipettai coast. It is seen from the landings that though the oil sardine catches were observed from June to August 1986 at Parangipettai the maximum landings were observed during August.

On enquiry, the shoals were caught in the gillnets in depths ranging from 6 to 8 metres. Though the oil sardines were caught mainly by catamarans, kavalai valai and thattakavalai valai with the mesh size ranging from 2.5 to 4 cm were also employed along Parangipettai coast.