

IDENTITY OF THE TYPE SPECIMEN OF THE SCYLIIORHINID SHARK, *SCYLLIUM HISPIDUM* ALCOCK

The scyliorhinid shark, *Scyllium hispidum* was described by Alcock (1891) on a young male specimen, 9.5 inches (=240 mm) long collected by the R. I. M. S. *Investigator* from the Andaman Sea. The holotype has surprisingly been claimed as present both in the Zoological Survey of India (Menon and Yazdani, 1968 ; Menon and Rama-Rao, 1975), and the British Museum (Natural History) (Springer and D. Aubrey, 1972 ; Springer, 1979). The objectives of this note are to demonstrate that :

(i) the ZSI specimen is the holotype of *Scyllium hispidum* Alcock and the original of Plate VIII, fig. 3, 3a in *Illustrations of the Zoology of the R. I. M. S. Investigator*, both from its apparent history and study.

(ii) the BM (NH) specimen is one of the specimens also collected by the *Investigator* from the Andaman Sea but from Stn. 233 on 6th December, 1897, a period of six years after the species was described.

(iii) the body length of the type specimen given in the original account of the species, is erroneous.

HISTORICAL RESUME

Alcock (1891 : 21) described *Scyllium hispidum* on a young male specimen, 9.5 inches (=240 mm) long, collected by the *Investigator* from Stn 115 at 118-220 fms (=216-402m).

The specimen figured in *Illustrations of the Zoology of the R. I. M. S. Investigator* (Alcock, 1894, pl. VIII, fig. 3, 3a) is evidently on the above specimen as no further specimens of this species were collected by the *Investigator* upto 1896 (Alcock, 1897 : 310).

Alcock (1899) in the *Descriptive Catalogue of the Indian Deep-Sea Fishes in the Indian Museum*, repeated the original description and refers to additional specimens (with their regd. nos.) and additional locality information, Andaman Sea, 188-220 fathoms, 185 fathoms, 370-419 fathoms, and 405 fathoms ; and the note that '13120 type of male : 119/1 type of female'.

Regan (1908) lists a specimen, 260 mm in total length, of this species in the British Museum.

Menon and Yazdani (1968) followed by Menon and Rama-Rao (1975), catalogued as the holotype the specimen of *Scyllium hispidum* Alcock bearing Indian Museum (now ZSI) registration number 13120 obtained by the *Investigator* from the Andaman Sea, Stn 115 at 188-220 fms on 9th December, 1890.

Springer and D'Aubrey (1972) claimed that the British Museum specimen bearing registration number BMNH 98.7.13.21 (227/1) was the holotype of *S. hispidum* and was previously recognised and segregated as such,

and surmised, "Alcock's type was evidently sent to the British Museum and Regan (1908) stated 'in the British Museum one specimen 260 mm in total length' Rosemary Lowe Mc Connell re-examined the British Museum specimen and noted (in correspondence) that it was the only specimen of the species in the British Museum; that it carried Regan's label, 'Andamans, 185 faths. Indian Museum'; that it had already been separated as the type of *Scyllium hispidum*; and that it was a male, 9.7 inches long with well-calcified claspers projecting 6.4 mm beyond the tips of the pelvic fins. In spite of the discrepancy in lengths given in Alcock's description (1891) as 9.5 inches, in Regan's Synopsis (1908) as 260 mm (=10.25 inches) and the present 9.7 inches we accept the British Museum specimen as the holotype and suspect that the five additional specimens noted in Alcock's later description (1899) as being in the Indian Museum were not available when the original description was published"

DISCUSSION

The fish collections of the R. I. M. S. *Investigator* were deposited in the Indian Museum (Alcock, 1899) and were recorded in two accession registers entitled *Register of Presentations to Indian Museum*, Volume II and Volume III (Talwar, 1977). For each specimen these catalogs give a registration number, name, locality (including *Investigator* station number) and the date of registration; further, there is a comment on their type status. The only modern criterion for *Investigator* types is recognition of those specimens undoubtedly used in the original descriptions. Alcock invariably recorded total length (in inches) and the locality, the depth of capture and sometimes the *Investigator* Station number.

The specimen of *Scyllium hispidum* collected by the *Investigator* upto 1897-98 were accessioned in the Indian Museum (now ZSI) and are listed in Alcock's (1899) *Catalogue*. These are: regd. nos. 13120, F 119/1, F 226/1-F 231/1 and F 382/1-F 385/1. In the *Register of Presentations*, the specimen (13120) is shown as a male from Stn 115, 118-220 fathoms and "n sp type" is indicated against the specific name; no F 119/1 is from Stn 222, 405 fms and indicated as 'Type of female'; F 226-31/1 from Stn 233, 185 fms; and F 382-5/1 from Stn 235, 370-419 fms. A perusal of the details of the *List of Stations*, 1884-1913 of the R. I. M. S. *Investigator* shows that the specimens from Stn. 115 was collected on 9.12.1890, from Stn. 222 on 21.12.1896, from Stn. 233 on 6.12.1897 and from Stn. 235 on 8.4.1898. This data is consistent with the data given in the accession registers. The specimen bearing regd no F 227/1 from Stn. 233, 185 fms, is shown as given to the British Museum in the *Register of Presentations*. This specimen is clearly the specimen which is registered in the British Museum under registration number BM (NH) 98.7.13. 21 (227/1). This registration number is significant and sheds considerable light on the history of this specimen. The BM registration number fortunately bears the Indian Museum registration number (227/1) as a suffix and there, therefore, seems no doubt that these specimens are identical. Since the British Museum specimen of *hispidum* was not the specimen on which the original description of the species was drawn up, it cannot be treated as the holotype as claimed by Springer and D' Aubrey (1972), and Springer (1979). Further, the female specimen bearing ZSI regd no. F 119/1 from Stn 222 collected on 21.12.1896, also cannot

be given type status as contended by Alcock (1899) for the same reason.

The only specimen of *hispidum* that qualifies for type status is the specimen bearing ZSI regd. no. 13120. The data in the *Register of Presentations* is consistent with the data in the original account of the species and further "n sp type" is indicated in the accession register against the specific name *hispidum*. Further evidence of a critical nature is provided by the specimen itself. The specimen is 8.75 inches (=222 mm) (vs 9.5 inches in Alcock) and is a male with the claspers weakly developed and falls 6 mm short of the tips of the pelvic fins. This specimen is clearly the original of Pl. VIII, fig. 3 in the *Illustrations of the Zoology of the Investigator* as it agrees very well with the figure being drawn to the same scale. The specimen is figured in the lateral view and hence the claspers are not depicted. Springer and D' Aubrey (1972) contention, therefore, that the figured specimen is a female is erroneous. There seems to be no doubt that this specimen (13120) is the holotype of *Scyllium hispidum* Alcock, 1891, as this was the only specimen of the species collected by the *Investigator* upto 1896. Alcock's (1891) account that the type specimen of *hispidum* is 9.5 inches (=240 mm) in length is clearly an error.

ACKNOWLEDGEMENTS

The author is grateful to Director and Dr. K. C. Jayaram, Deputy Director, Zoological Survey of India, for their sustained encouragement.

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