

23. ON THE OCCURRENCE OF MUMMIFIED EELS IN  
THE INTERNAL ORGANS OF *POLYDACTYLUS*  
*INDICUS* (SHAW) AND *POMADASYS* SP.<sup>1</sup>

Accidental inclusions of foreign objects in the body cavity of fishes have been reported by various authors. These include mummified specimens of sand eels (*Ammodytes* sp.) and pipe-fish on the walls of the abdominal cavity of Cod and Haddock (Atwood, 1857), while a variety of other objects like vertebral column of fish, fish hooks, knife and even hermit crab have been found in the body cavity and visceral mass of cod, haddock and pollock (Atwood, 1859, 1869; Collins, 1884; Barret, 1885 and Williamson, 1911). Earlier literature has been reviewed by Gudger (1922). Deraniyagala (1932) found some mummified remains of *Ophichthys apicalis* (Benn.) in the body cavity of large percoid fishes. Smith (1953) observed that *Ophisurus serpens* (L.) has the habit of piercing into the body of other fishes.

During an investigation of the biology of some of the trawl fishes landed at Bombay, certain hard, flattened bodies, apparently resembling small eels were found embedded in the mesenteries and other internal organs of *Polydactylus indicus* and *Pomadasyis* sp. On closer examination of the material in the laboratory they were found to be mummified eels, probably belonging to the genus *Ophichthys*. Though the material was shrunk, stiff and to some extent distorted in shape, it was in a remarkable state of preservation which rendered identification possible. The following table (page 200) gives the details of observations.

All the fishes that harboured these eels were closely examined to find if there existed any wound or mark on the walls of the stomach through which they might have entered the body cavity. No such wounds were visible, nor was there any apparent sign of ill-health in any of them.

Coming to the question as to how these eels may have reached such situations normally inaccessible to them, Barret (1855) explains that they might have been swallowed by the host and that with the help of their pointed jaws they might have penetrated the walls of the stomach and worked their way into the body cavity. Though Williamson (1911) is satisfied with this explanation as far as pointed objects are concerned, he thinks that it is hardly the way a hermit crab might have reached the body cavity. The crab, he thinks might

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<sup>1</sup> Published with the permission of the Chief Research Officer, Central Marine Fisheries Research Station, Mandapam.

T A B L E

Date	HOST			MUMMIFIED EELS.		Location.	Remarks.
	Species.	Length cm.	No. of specimens.	Length cm.	Colour.		
19-12-'52	<i>Polydactylus indicus</i> (Shaw).	115.4	1	9.9	Brownish.	Abdominal mesenteries	Shrunk.
8-11-'52	"	106.7	1	13.4	Black.	Fringe of right ovary.	Flattened and dried.
"	"	106.3	1	10.2	Grey.	In between the hepatic caeca.	Round and well preserved.
22-12-'52	"	113.4	2	11.6	Grey.	Abdominal mesenteries, tail piercing liver.	...
			1	8.5	Brown.	Mesentery.	Crumpled.
			2	11.2	Brown.	Hepatic caeca.	...
			3	11.6	Blackish.	Mesentery.	...
			4	7.9	Dull Yellow.	Left ovary.	Very well preserved, Possibly recent inclusion.
			5	9.2	Brown.	Do.	...
1- 2-'53	"	108.6	6	11.3	Deep Brown.	Mesentery to liver.	...
			1	12.1	Black.	Do.	Crumpled to an earthy crust.
2-11-'53	<i>Pomadasys</i> sp.	54.3	2	10.3	Grey.	Right ovary.	Round and well preserved.
			1	11.6	Greyish yellow.	Right ovary and visceral mass.	Well preserved. Portion in between ovary and visceral mass slightly decayed.

have passed through the walls of the stomach at a point where the tissue was weakened, possibly by the attack of some intestinal parasites. So far as the present observations are concerned the earlier explanation given by Barret (op. cit.) seems to hold good, firstly because of the very pointed snout of these eels and secondly because eels often formed an item of food of the adult *P. indicus* wherein this phenomenon was commonly observed (Mohamed, 1955).

My grateful thanks are due to Dr. N. K. Panikkar for his encouragement and guidance.

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