

# FIRST RECORD OF BROAD-SNOUDED SEVEN-GILLED SHARK FROM CANANÉIA, COAST OF BRAZIL

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A young female (T.L. 753 mm) of the broad-snouted seven-gilled shark, *Notorynchus pectorosus* (GARMAN, 1913), was caught on June, 1968, in a gill net at depth of 6 m off Cananéia (25°S, 47°52'W). The bottom water temperature at the the time of capture was 20.6°C.

Together with it some other sharks, *Rhizoprionodon porosus* Poey, *Rh. lalandei* Val., and *Carcharhinus porosus* (Ranzani), were captured, all adult males.

The species *Notorynchus pectorosus* is distributed in the Pacific and Indian Oceans, as well as in the southern Atlantic, off Argentina (LAHILLE, 1928) and South Africa (SMITH, 1953), while it was not recorded from other parts of the Atlantic (BIGELOW & SCHROEDER, 1948; MANDAY, 1968; TORTONESE, 1956; CADENAT, 1950; and others), and not from Brazil (FOWLER, 1942) nor from the region of Cananéia (SADOWSKY, 1967).

The specific characters of the shark from Cananéia correspond perfectly to those of Garman's description (1913, p. 20-21); however, they show some differences concerning the morphological proportions compared with the description of the same species given by LAHILLE (1928) and CHEN (1963) under the name of *Heptranchias pectorosus* GARMAN, 1884. These differences might be due to allometric growth, as the examined specimens were of quite different sizes: that from Cananéia was 753 mm long, those of CHEN and of LAHILLE, 1930 mm and 2070 mm, respectively.

As the nomenclature of the genus to which the species belongs is doubtful, I adopt the one recently used by GARRICK & SCHULTZ (1963).

As the scientific literature does not yet contain detailed data referring to the morphology of young specimens of the species, I give the measurements of the present material (Table I) according to the indications of BIGELOW & SCHROEDER (1948) and others (TORTONESE, 1956; SADOWSKY, 1968), and add a short description of the observed peculiarities.

In fresh state the color of the back of *N. pectorosus* (Fig. 1) was greyish violet, the ventral side greyish white (lead or ice). During preservation in formol 10% the color of the back changed to yellowish pink, while the ventral side retained its color. The dark spots scattered irregularly on the dorsal side are roundish; their diameter varies from 2-18 mm. On the central part of the head, a little in front of the spiracula, there are two small endolymphatic pores, with an interspace of 4.5 mm. The upper edge of the caudal fin is protected by 3 or 4 series of enlarged dermal denticles. The same denticles, only a little less stout, occur also on the edges of the anterior border of all the other fins.

The dental formula is: (9)-6-1-1-1-6-(8) for the upper teeth, and: (7)-6-1-6-(6) for the lower teeth. The numbers in brackets indicate the series of very small teeth which form a plate of about 12 mm in length. In the upper jaw there is a central tooth. The central series and the two para-central ones each have 2 typical functional teeth, the other series, only one. The lower median tooth has a median notch and 3 cusps on either side.

The specimen is preserved in the collection of the Oceanographic Station at Cananéia.

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TABLE I — Dimensions of *Notorynchus pectorosus* in per cent of the total length

Total length .....	753 mm	Labial fold:	
Distance from snout tip to:		upper .....	2.0%
outer nostrils .....	1.3%	lower .....	3.9%
eye .....	4.4%	Gill openings length:	
mouth .....	5.2%	1st .....	5.5%
endolymphatic pores .....	10.3%	2nd .....	5.0%
spiracles .....	11.7%	3rd .....	4.7%
1st gill opening .....	15.3%	4th .....	4.3%
7th gill opening .....	19.6%	5th .....	3.9%
pectoral fin origin .....	19.5%	6th .....	3.5%
ventral fin origin .....	40.8%	7th .....	3.0%
cloaca .....	47.9%	Distance between 1st and 7th gill openings:	
anal fin origin .....	52.4%	upper corners .....	4.7%
lower caudal origin .....	65.6%	lower corners .....	5.0%
upper caudal origin .....	65.7%	Spiracle length .....	0.4%
Distance between bases of fins:		Dorsal fin:	
dorsal and caudal .....	10.5%	height .....	3.8%
anal and caudal .....	6.5%	length of base .....	6.9%
Distance from origin to origin:		anterior margin .....	7.9%
pectoral and ventral fins .....	22.2%	distal margin .....	3.7%
ventral and anal fins .....	12.2%	inner margin .....	5.2%
Trunk at origin of pectoral:		fin tip to origin of caudal .....	8.5%
height .....	10.4%	Pectoral fin:	
breadth .....	10.6%	outer margin .....	12.5%
Trunk at ventral origin, breadth .....	6.2%	distal margin .....	9.3%
Trunk max. height .....	11.2%	inner margin .....	5.2%
Eye:		length of base .....	7.8%
horizontal diameter .....	2.5%	breadth .....	9.5%
vertical diameter .....	1.0%	Anal fin:	
Mouth:		height .....	2.7%
breadth .....	9.1%	length of base .....	6.6%
height .....	3.7%	anterior margin .....	6.0%
Internarial space, width .....	4.2%	distal margin .....	3.3%
Distance interorbital .....	7.7%	inner margin .....	1.6%
Head max. breadth .....	10.2%	fin tip to origin of caudal .....	4.8%
Ventral fin tip to anal origin .....	3.7%	Caudal fin:	
		upper margin length .....	34.3%
		lower lobe length .....	8.3%
		Caudal peduncle:	
		height .....	4.1%
		breadth .....	3.2%

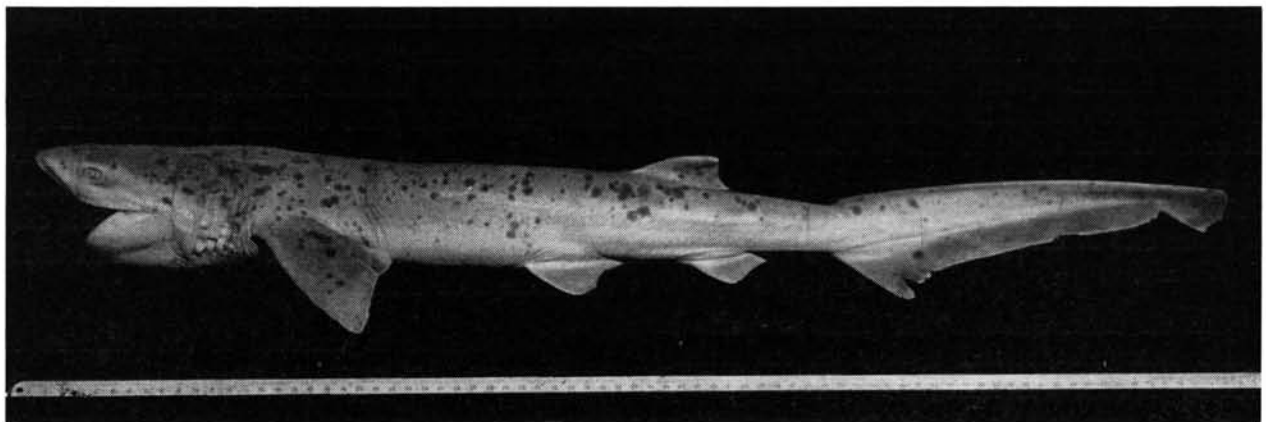


Figure 1 — *Notorynchus pectorosus* ♀ T.L. 753 mm.

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