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ANOTHER COLOR VARIETY OF THE SEA SNAKE PELAMIS PLATURUS FROM PANAMA BAY

CHAIM KROPACH

THE sea snake *Pelamis platurus* (Linnaeus) is known in many color varieties. FitzSimons (1912) listed seven color groups, Wall (1921) described four varieties, Smith (1926) described seven, each with its respective geographical range, and Deraniyagala (1960) recognized "at least ten color varieties"; Taylor (1950) described three color forms from Ceylon and suggested that *Pelamis platurus* represents more than one species.

The known specimens show variations on the basic *Pelamis* pattern of black dorsal coloration, yellow-brown ventrolateral coloration, and black bars and spots on a yellow tail. Variants differ in the relative abundance and specific configuration of their black, brown and yellow surfaces. Specimens with reduced melanin are reported (Minton, 1966). Many intermediate forms exist among the recognized color groups (Smith, 1926; pers. observ.).

Recently I encountered a different variety of *Pelamis platurus* in Panama Bay, at 8° 44.6' N, 79° 30.7' W. It is a female, 608 mm total length (65 mm tail) which is almost entirely yellow. Black pigment is present only in the eyes (mixed with yellow), in small spots on each supraocular plate and on the frontal and parietal shields, and in several small black or brown spots along the body. Black pigment is absent on the tail; none of the spots covers more than three scales, and most cover fewer. Dorsally, only four thin black segments occur at 153, 189, 223, and 252 mm from the snout. They are 5, 15, 11, and 10 mm (4, 11, 9, and 8 scales) long respectively, and 1–4 scale rows wide (Fig. 1). In all other respects this specimen is within the known *Pelamis* norm. The specimen is now at the American Museum of Natural History (AMNH 106682).

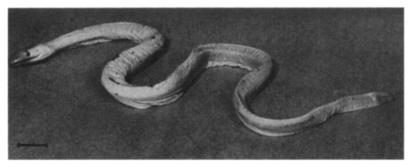


FIG. 1.—A new color variety of *Pelamis platurus* from Panama Bay, represented by this yellow female. Line = 2 cm.

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I observed all-yellow snakes only in one other locality (Golfo de Dulce, Costa Rica, 8° 20.5' N, 83° 09.3–11.3' W), where they made up over 3% of the population (9 in a sample of 278 snakes). A snake from this locality was placed at the United States National Museum (USNM 192279) and one each at the herpetological collections of the Hebrew University, Jerusalem, and the University of Tel Aviv, Tel Aviv.

Relatively little attention was given to the function of color in *Pelamis*. It was generally considered to be protective or disruptive, depending on the color variety (Wall, 1921; Volsøe, 1956; Paulson, 1967). Recent field observations and laboratory experiments have suggested that *Pelamis* color pattern is aposematic (Rubinoff and Kropach, 1970). It is possible that any black-yellow combination acts aposematically and that there is no selection for one particular pattern. This could account for the great variability in coloration found in *Pelamis*.

Possibly the yellow color of the new variety is also aposematic. Resemblance of the snakes to floating vegetation may be another protection from predation.

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Department of Biology, Queens College, CUNY, Flushing, New York 11367