

The origin of the dorsal fin is midway between the extremity of the snout and the adipose fin, a little in advance of the root of the ventral; its last ray is in advance of the vent. Pectoral fin short, not extending to the ventrals. Scales perfectly smooth, those of the lateral line not larger than the others. Lateral luminous spots at some distance below the lateral line.

Black; mandibles whitish, with a black cross-band below the eyes.

The phosphorescent organs are arranged in the following manner:—One on the præoperculum, near to its lower angle; three between the root of the pectoral and the isthmus; one above the pectoral; three in a series on each side of the median line of the abdomen in front of the ventrals, and an isolated one higher up on the side; three on each side of the median line of the abdomen between the ventrals and the vent, and two or three others higher up the sides; three in an oblique series running from the vent towards the lateral line; a series of eleven along the base of the anal and on each side of the lower part of the tail; one higher up the side opposite to a break in the series last described; and four on the root of the lower caudal rays. All these eye-like pearl-coloured organs are divided into two by a septum of black pigment. A large whitish, gland-like organ occupies the place in front of the eye below the nostrils.

*Habitat.*—Philippine Islands, Station 200; depth, 250 fathoms. One specimen, 6½ inches long.

### *Scopelus dumerilii.*

*Scopelus dumerilii*, Bleek., Act. Soc. Sci. Indo-Neerl., i., Manado en Makassar, p. 66.

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This species is closely allied to *Scopelus engraulis*, and for some time I was inclined to refer the following specimen to that species, taking the larger size of the eye merely as a sign of its immaturity, but the difference in the position of the lateral phosphorescent organs seems to indicate specific distinctness.

The diameter of the eye is two-sevenths of the length of the head, equal to the width of the interorbital space and much more than the length of the snout. The origin of the dorsal fin is rather nearer to the adipose than to the end of the snout. Pectoral fin reaching somewhat beyond the root of the ventral, and the latter beyond the anterior anal rays. The phosphorescent spots are arranged as in *Scopelus engraulis*, but the four which are placed on the sides are not at a distance below the lateral line, but almost on it, one corresponding to the root of the pectoral, the second to that of the ventral, the third to the origin, and the fourth to the end of the anal fin. None of the organs have a black septum in this species.

*Habitat.*—Off Matuku, Fiji Islands, Station 173; depth, 315 fathoms. One specimen, 3 inches long.