

Physiculus dalwigkii.

Physiculus dalwigkii, Kaup, in Wieg. Arch., 1858, p. 88.

„ „ Günth., Fish., vol. iv. p. 348.

„ „ Jordan and Gilbert, Synopsis, p. 801.¹

I have three specimens before me, from Madeira, all of which have an exceedingly narrow base to the ventral fin, which is composed of five rays only. The largest of these specimens is only 10 inches long, and it is not known at what depth they were caught.

Physiculus kaupi (Pl. XVII. fig. A).

Physiculus kaupi, Poey, Report Cub., 1865, p. 186.

„ *japonicus*, Hilgendorf, Sitzungs. naturf. Freunde Berlin, 1879, p. 80.

This species has constantly (as far as is shown by our specimens) a broader base to the ventral fins than *Physiculus dalwigkii*, and they are formed of seven rays, of which the longest may or may not reach the anal fin. The fin rays vary within proportionate limits; they are D. 9-10 | 60-66. A. 60-70. There are thirteen series of scales between the anterior dorsal and the lateral line. The peduncle of the tail is shorter and less slender than in the Madeiran form, but otherwise the two species are so similar as to scarcely deserve specific separation.

Habitat.—Poey obtained a specimen at Cuba, and Melliss two at St. Helena. These differ in no respect from five examples found by the Challenger off Inosima in 345 fathoms, and 11 to 16 inches long.²

Physiculus peregrinus.

Pseudophycis peregrinus, Günth., Proc. Zool. Soc. Lond., 1871, p. 669.

With three rays in the ventral fins.

Since the discovery of the typical example at Manado no other specimens have been found. It has so much the characteristic appearance of a deep-sea fish that I cannot hesitate to admit it here.

Phycis, Cuv.

All the species of this genus seem to descend habitually beyond the hundred fathom line; at any rate, the following have been recorded from deep water.

¹ See, with regard to this reference, Jordan, Cat., p. 130.

² Hilgendorf states as one of the characteristics of the Japanese form, that the length of the head is *one-fifth* of the total length. This is not the case in our examples, in which the head forms nearly one-fourth of the total, as in *Physiculus dalwigkii*.