

Philosophical Transactions for 1851, and it is to that account we must go for information as to the characters of the present species.

Huxley represents the branchial aperture as surrounded by about nine rounded denticulations, while the atrial has a larger number of narrower and more pointed processes. The endostyle commences anteriorly a little behind the second muscle band, and extends back nearly to the fourth.¹ The stigmata of the branchial sac commence dorsally a little in front of the second muscle band, and extend back to about the sixth; they then reach forwards ventrally as far as the third muscle band, thus overlapping the posterior half of the endostyle. The alimentary canal forms a V-shaped loop between the fifth and seventh muscle bands. The intestine appears to curve dorsally, anteriorly, and to the right.² The testis is long and narrow; it lies on the left side ventrally, and extends anteriorly nearly as far as the first muscle band. The dorsal tubercle and the spirals of the peripharyngeal bands are placed between the first and second muscle bands. These are the more important characters of this species which can be made out from the description and figures given by Huxley.

Although several authors since 1851 have described specimens under the name of *Doliolum denticulatum*, yet a careful examination of their figures and descriptions shows that they all refer to species other than the true *Doliolum denticulatum*. Krohn's *Doliolum denticulatum*, for which he also proposed the name *ehrenbergii*, is not the same as Huxley's, and therefore becomes the type of the new species *Doliolum ehrenbergi*. The *Doliolum denticulatum* of Keferstein and Ehlers was probably, as Uljanin points out, Krohn's *Doliolum ehrenbergii*; and Grobben's *Doliolum denticulatum* was probably also the same species. The species found by the "Triton" Expedition in the North Atlantic in 1882, and which I referred at the time with some hesitation to *Doliolum denticulatum*, is, I now consider, not that species. Consequently the true *Doliolum denticulatum* has apparently not been recorded since Huxley's paper was published in 1851.

During the Challenger Expedition the following specimens were collected which I refer to this species:—

(1.) August 11–12, 1874; off Kandavu, Fiji; surface; surf. temp. 77°·5; one specimen, 4 mm. long, 3 mm. broad.

(2.) April 2, 1874; Station 162, off East Moncœur Island, Bass Strait; lat. 39° 10' 30" S., long. 146° 37' 0" E.; surface; surf. temp. 63°·2; two rather narrow specimens (?), 5 mm. long, 2 mm. broad.

(3.) April 11, 1876; Station 350, tropical Atlantic, lat. 7° 33' 0" N., long. 15° 16' 0" W.; surface; surf. temp. 84°; six small rather narrow specimens (?).

(4.) April 29, 1876; tropical Atlantic, lat. 18° 8' 0" N., long. 30° 5' 0" W.; surface; surf. temp. 74°; one small specimen.

¹ I number the muscle bands one to eight consecutively, beginning at the branchial aperture. Huxley does not count the first and eighth, and numbers the others one to six, consequently his third is my fourth.

² In reading Huxley's description it is necessary to remember that he called the dorsal surface ventral and the ventral dorsal. The right and left sides must also be reversed.