

The specimens from localities (2) and (3) are a little doubtful, as they are not in good condition. The following specimen, which is in still worse condition, and cannot be identified, may possibly belong to the present species:—

(5.) June 3, 1874; Station 163B, off Port Jackson, Australia; lat. $33^{\circ} 51' 15''$ S., long. $151^{\circ} 22' 15''$ E.; surface; surf. temp. 69° ; one small specimen (? ?), 3 mm. long (in bad condition).

Doliolum ehrenbergi, Krohn.

Doliolum ehrenbergii (also *Doliolum denticulatum*), Krohn, Arch. f. Naturgesch., Jahrg. 18, Bd. i. p. 57, 1852.

Doliolum denticulatum, Q. and G., Keferstein and Ehlers, Zoologische Beiträge, 1861.

Doliolum ehrenbergii, K., Ussow, Proc. Imper. Soc. of Nat. Hist., &c., vol. xviii. fasc. 2, Moscow, 1876.

Doliolum denticulatum, Q. and G., Grobben, Arb. zool. Inst. Wien, Bd. iv. 1882.

Doliolum ehrenbergii, K., Uljanin, Fauna u. Flora d. Golfes v. Neapel, 1884.

This common species was first found and described in 1852 by Krohn, who, however, was under the impression that he was dealing with Quoy and Gaimard's *Doliolum denticulatum*. About ten years later it was more fully described by Keferstein and Ehlers. Since then the species has been discussed by Ussow, Grobben, and Uljanin.

This species differs from the last (comparing Uljanin's account of *Doliolum ehrenbergi* with Huxley's of *Doliolum denticulatum*) in the branchial sac, which in the present species has a larger number of stigmata (up to forty-five on each side), and extends forward ventrally to the first muscle band (Pl. III. fig. 5).¹ The endostyle is short. It commences one-third of the way from the second to the third muscle band, and only extends to the fourth, so that it does not cover two intermuscular spaces (see Pl. III. fig. 5).

I place in this species, with a certain amount of doubt, the following specimens collected during the Challenger Expedition:—

(1.) June 17, 1874; Station 165, South Pacific, between Australia and New Zealand; lat. $34^{\circ} 50' 0''$ S., long. $155^{\circ} 28' 0''$ E.; surf. temp. $64^{\circ} 5$; one small specimen.

(2.) February 11, 1876; Station 318, South Atlantic; lat. $42^{\circ} 32' 0''$ S., long. $56^{\circ} 29' 0''$ W.; tow-net at trawl down to a depth of 2040 fathoms; bottom temp. $33^{\circ} 7$, surf. temp. $57^{\circ} 5$; eight specimens, in rather bad condition.

(3.) Same place; tow-net at surface; two specimens.

(4.) April 29, 1876; North Atlantic, off the West Coast of Africa, lat. $18^{\circ} 8' 0''$ N., long. $30^{\circ} 5' 0''$ W., at night; surf. temp., at midnight, $73^{\circ} 7$; a dozen specimens. These last have the stigmata extending forwards to between the first and second muscle bands.

(5.) May 12, 1876; North Atlantic, lat. $42^{\circ} 54' 0''$ N., long. $28^{\circ} 54' 0''$ W.; surf. temp. $58^{\circ} 2$; one specimen.

¹ It must be pointed out, however, that Keferstein and Ehlers represent their so-called *Doliolum denticulatum*, which Uljanin identifies with the present species, as having the stigmata extending ventrally only as far forwards as the third muscle band