

Genus 61. *Anthophysa*,¹ Mertens, 1829.

Anthophysa, Mertens, MS. (Russian Acad.) ; Brandt, Prodröm, &c., 1835, 25, p. 35.

Definition.—Anthophysidæ with simple bracts, without nectosac. Cnidonodes of the tentacles involucrate, trifid, with a median terminal vesicle and two lateral horns ; besides a part of the cnidonodes larger, with two dorsal dendritic apophyses.

The genus *Anthophysa* was established by Mertens in 1829 for a large and very interesting Anthophysid, which he observed living (May 12, 1828) in the Northern Pacific, north of the Bonin Islands (lat. 36° 30' N., long. 214° 0' W.). Brandt afterwards (in 1835) gave a short description of it (25, p. 35), and founded upon this genus and the closely allied *Athorybia* of Eschscholtz the family Anthophysidæ. The excellent figures of it executed by Mertens were never published, but I have examined them and compared them with his manuscript. According to this, the vesicular truncus is pyriform and rather large, similar to a small *Alophota* or a young *Physalia*, about two inches in diameter (30 mm. long and 20 mm. high). The purple pneumatophore is surrounded by a corona of numerous sickle-shaped bracts ; and beyond these twelve siphons are visible, each provided with a long articulate tentacle.

The structure of the tentacles in this *Anthophysa rosea* (Mertens) seems to be similar to that of a North Atlantic species which Fewkes described in 1882 under the name *Athorybia formosa*.² This beautiful species differs from the true *Athorybia* in the possession of two kinds of cnidosacs on the tentacles, one of which is similar to that of the latter, the other distinguished by the addition of two dorsal dendritic apophyses.³

A third species of *Anthophysa*, which seems to be closely allied to the two preceding, was found by me in a bottle in the Challenger collection (from Station 334, South Atlantic), and although the only specimen was incomplete and not very well preserved, I will give its description in the following paragraphs.

Anthophysa darwini, n. sp. (Pl. XII. figs. 7–9).

Habitat.—Southern Atlantic ; Station 334, March 14, 1876 ; lat. 35° 45' S., long. 18° 31' W. ; surface.

Corm (Pl. XII. fig. 7, dorsal view ; fig. 8, lateral view from left side ; fig. 9, ventral view).—The complete body of the corm in the spirit specimen which I examined and figured was well preserved, although strongly contracted by the influence of the alcohol. All the parts of the single organs were present, with the exception of the bracts, the majority of which were detached, a few only remaining (fig. 9, b). The entire corm had

¹ *Anthophysa* = Flower-shaped bladder, ἀνθος, φύσα.

² *Bull. Mus. Comp. Zool.*, vol. ix. No. 7, p. 271, pl. v. figs. 3, 4 ; pl. vi. figs. 7–14.

³ *Loc. cit.*, pl. vi. figs. 7, 8.