

strated that this monogastric Calyconecta is the detached free Eudoxia of a polygastric Monophyid, which was first described in 1859 by Huxley as *Sphæronectes köllikeri* (9, p. 50). He called it *Monophyes gracilis* (compare below the descriptions of Genera 18 and 19). The peculiar metagenesis of these two forms of Calyphoridae was afterwards accurately described by Chun (86, 87).

A few Eudoxiæ of this genus were found by me in a bottle in the Challenger collection, taken in the Tropical Pacific, Station 274. Since the same bottle contained a specimen of *Sphæronectes köllikeri*, it is probable that they were detached from the latter. I call them *Diplophysa köllikeri*.

Diplophysa differs from all other Eudoxidæ in the hemispherical, or nearly spherical, form of its bract, and the simple ovate or cylindrical shape of its phyllocyst, which ascends vertically in the axis of the bract. In the centre of the shallow subumbral cavity of the bract is suspended a hemispherical gonophore, of about the same size, and between these two, at the ventral face of the latter, is a simple siphon with its tentacle.

Genus 11A. *Eudoxella*,¹ Haeckel, 1888.

Eudoxella, Hkl., System der Siphonophoren, p. 32.

Definition.—Eudoxidæ with a mitriform, helmet-shaped, or hemispherical bract, the exumbrella of which is smooth and without sharp edges. Phyllocyst with four radial canals arising from its base. (Eudoxiæ of the genus *Praya*?)

The genus *Eudoxella*, as defined in my System, comprises free Eudoxiæ, the bract of which is essentially identical with that of the sessile cormidia of *Praya* (Pl. XXXII.). I suspect, therefore, that this genus is the monogastric generation of a true polygastric *Praya*. But the well-known species of this latter (*Praya galea*, *Praya maxima*, *Praya cymbiformis*) are generally assumed to possess eudoxomes, which become mature whilst still attached to the common stem. The question, however, whether this holds good as a general rule, requires further accurate examination.

A bottle in the Challenger collection, containing surface animals taken in the Tropical Atlantic (Station 343, April 10, 1876), contained a few specimens of a *Eudoxella*, which is very similar to the sessile eudoxome of *Praya galea* (Pl. XXXII.). But the helmet-shaped bract was more highly vaulted, and the four radial canals, arising from the base of the phyllocyst, were shorter and more equally disposed. The main difference was indicated by the remarkable fact, that each Eudoxia exhibited no trace of the stem of a *Praya*, and contained a large, completely mature gonophore. It is therefore probable that this Eudoxia, which I call *Eudoxella didyma*, may be the detached cormidium of some unknown species of *Praya* (*Praya cymbiformis*?), the gonophores of which are not brought to maturity whilst sessile on the stem.

¹ *Eudoxella* = Small Eudoxia.