

CLASSIFICATION OF CUVIER, 1817 and 1830.

It was Cuvier who first separated the Acalephs as a distinct class, in the first edition of the "Règne animal," published in 1817. There he divides these animals into three orders, as follows:—

- 1st Order. **FIXED ACALEPHS:**—Actinia, Zoanthus, Lucernaria.
 2d Order. **FREE ACALEPHS:**—Medusæ: Medusa, Æquorea, Phoreynia, Foveolia, Pelagia; Cyanea, Rhizostoma, Cassiopea; Geryonia, Lymnorea, Favonia, Orythia, Berenice, Eudora; Carybdea; Beroë, Callianira, Cestum;—Diphyes;—Porpita, Velella.
 3d Order. **HYDROSTATIC ACALEPHS:**—Physalia, Physophora, Rhizophysa, Stephanomia.

The Hydroids are referred to the class of Polyps; and some genuine Polyps, Actinia, and Zoanthus are ranked among the Acalephs.

In the second edition of that work, published in 1830, Cuvier, excluding now the Actiniæ from this class, but still leaving the Hydroids out of consideration, admits the following arrangement for the genuine Acalephs:—

- 1st Order. **SIMPLE ACALEPHS:**—Medusa, Æquorea, Pelagia, Cyanea, Rhizostoma, Cephea, Cassiopea.—Astomes: Lymnorea, Favonia, Geryonia, Orythia, Berenice, Eudora.—Carybdea.—Beroë, Idya, Doliolum, Callianira, Janira, Alcinoë, Oeyroë, Cestum.—Porpita, Velella.
 2d Order. **HYDROSTATIC ACALEPHS:**—Physalia, Physophora, Hippopus, Capulites, Racemides, Rhizophysa, Stephanomia.—Diphyes, Calpe, Abyla, Cuboides, Navicule.

A glance at the works of Schweigger is sufficient to satisfy any one that his investigations are to be valued chiefly for their minuteness and accuracy, and that his systematic arrangement of the lower animals is not the result of matured principles, or deep insight into their affinities.

CLASSIFICATION OF SCHWEIGGER, 1820.

Schweigger was one of the naturalists who knew the soft-bodied Invertebrates best, during the first quarter of this century. In his extensive journeys on the coast of the Mediterranean, he had collected vast stores of materials to illustrate their natural history, and his "Handbuch der Naturgeschichte der skelettlosen ungegliederten Thiere, Leipzig, 1820, 1 vol. 8vo." is chiefly based upon original investigations; wherefore I allude to it here, even though he has done nothing to improve the classification of the Acalephs: but he gives the best summary of their structure for that period. The animals now included in the type of Radiata are referred by him to three classes,—the Zoophytes, the Acalephs, and the Radiata; and under the last name the Echinoderms are combined with Actinia, Zoanthus, and Lucernaria. To the Zoophytes he refers the Hydroids and Polyps, with which he also associates Infusoria; but he judiciously removes from them the Ascidiæ, which he considers as Mollusks. The Crinoids he rightly regards as Echinoderms allied to Comatula, and the Corallinæ as Algæ.

The Acalephs are arranged nearly as in the system of Lamarck.

- I. Stephanomia — Physophora — Physalia, Velella, Porpita — Cestum, Callianira, Diphyes, Beroë, Noctiluca.
 II. *Medusa*, *Lin.*, and subdivided as in Péron and LeSueur.