

*Sphaeroidina*, d'Orbigny.

*Sphaeroidina*, d'Orbigny [1826], Bronn, Reuss, Ehrenberg, Costa, Egger, Parker and Jones, Karrer, Seguenza, Carpenter, Schwager, Pourtales, M. Sars, Hantken, Brady, &c.

*Sextoculina*, Czjzek [1847].

*Grammobotrys*, pars, Ehrenberg [1854].

*Globigerina*, pars, Schwager [1866].

*Bolbodium*, Ehrenberg [1873].

The genus *Sphaeroidina* was originally described by d'Orbigny in the "Tableau Méthodique," and a place was assigned to it at the end of the Family ENALLOSTEGIA, immediately following *Virgulina*. The author subsequently found reason to alter his opinion, and in the "Vienna Basin" memoir it appears amongst the AGATHISTEGIA, between the Milioline genera *Triloculina* and *Quinqueloculina*. Prof. Reuss, in his classification of the Foraminifera, published in 1861, gives it a position in his Family POLYMORPHINIDEA, between *Robertina* and *Dimorphina*.

The near relationship of the genus to *Globigerina* was first suggested by Dr. Carpenter and his colleagues; and their view, as propounded in the Introduction to the Study of the Foraminifera, is supported not merely by structural analogy, but by many facts which have since been ascertained in connection with the distribution of the two recognised species. The diversity of opinion which has existed as to the affinity of the genus is mainly due to the somewhat obscure external characters of the test, and the slight indication they afford of its internal structure.

The test of *Sphaeroidina* is globular or subglobular in contour, and consists of a small number of extremely convex segments, arranged as a short spire. Owing to the embracing character of the chambers and their rapid increase in size, only the final convolution, which is generally composed of three or four segments, is visible externally. Sometimes, however, by a slight obliquity, or one-sided development of the spire, a larger number of chambers are discernible, but even in such cases the plan of growth is not always apparent. The texture of the shell and its condition with respect to perforation are variable features. The aperture is an arched or nearly semicircular opening, often partially closed by a shelly tongue so as to form a crescentic fissure, and is situated close to the inner margin of the final segment.

The geographical distribution of *Sphaeroidina* is almost world-wide. It is found at every latitude from the middle of the west coast of Norway to the shores of Prince Edward Island in the Southern Ocean; and its bathymetrical range includes every depth from 30 fathoms to 2600 fathoms. The genus has a pelagic representative in *Sphaeroidina dehiscens*, which is a frequent constituent of the surface-fauna of mid-ocean. The earliest appearance of *Sphaeroidina*, geologically speaking, is in the Cretaceous period, but it does not become common or widely diffused until the middle of the Tertiary epoch. It is of frequent occurrence in marine deposits of Miocene and Pliocene age.