

ture, normally a transverse fissure, sometimes takes the form of a bordered lateral orifice, a rounded central perforation, or a number of pores on the distal face of the last segment; so in *Bigenerina*, though represented typically by a central rounded opening, it frequently assumes the character of an oval, elongate, or fissurine orifice, or of a number of terminal pores.

Many of these characters will be referred to again in the description of the species by which they are exemplified. The importance of some of them has been exaggerated, and in certain cases they have been treated as distinctions of generic value; but amongst the typical *Textulariæ* in which their relative significance is more easily observed, such peculiarities are found in many instances insufficient for even specific diagnosis, and there can therefore be no good reason for making them a basis for the generic subdivision of a comparatively small subordinate group like the *Bigenerinæ*.

The geographical distribution of the genus *Bigenerina* presents somewhat marked features. It is very common in the North Atlantic, tolerably common in the Mediterranean and Adriatic, and much less frequent in the South Atlantic, whilst it is very rare in the North Pacific, and almost entirely wanting in the Southern Ocean and the South Pacific.

In the fossil condition it is met with in various Tertiary formations, making its first appearance in the Eocene period.

*Bigenerina nodosaria*, d'Orbigny (Pl. XLIV. figs. 14–18).

*Bigenerina nodosaria*, d'Orbigny, 1826, Ann. Sci. Nat., vol. vii. p. 261, No. 1, pl. xi. figs. 9–12.

—Modèle No. 57.

„ *pusilla*, Roemer, 1838, Neues Jahrb. für Min. &c., p. 384, pl. iii. fig. 20.

„ *agglutinans*, d'Orbigny, 1846, For. Foss. Vien., p. 238, pl. xiv. figs. 8–10.

„ *torulosa*, Costa, 1856, Atti dell' Accad. Pont., vol. vii. p. 285, pl. xv. fig. 12.

„ *anulata*, Id. Ibid. p. 284, pl. xv. fig. 13.

„ *bifida*, Id. Ibid. p. 287, pl. xxiii. fig. 1.

*Clavulina elegans*, Karrer, 1864, Novara-Exped., geol. Theil, vol. i. p. 80, pl. xvi. fig. 11.

*Textularia agglutinans*, var. (*Bigenerina*) *nodosaria*, Parker and Jones, 1865, Phil. Trans., vol. clv p. 371, pl. xv. fig. 25; pl. xvii. fig. 80.

*Bigenerina nodosaria*, Terrigi, 1880, Atti dell' Accad. Pontif., ann. xxxiii. p. 192, pl. ii. fig. 28.

In *Bigenerina nodosaria* the Textularian portion of the test is much compressed, and tapers to a point at the aboral extremity. It is generally also a good deal broader than the adjoining segments of the linear series, and the alternate arrangement of the chambers is more or less distinctly marked externally. The uniserial portion in adult specimens consists of about four segments, each somewhat larger than its predecessor, usually gibbous or rounded in contour, and the sutures correspondingly sunken.

*Bigenerina nodosaria* is a common North Atlantic species. It has been met with as far north as the Hunde Islands, Davis Strait, 25 to 70 fathoms (Parker and Jones); and occurs in the Farøe Channel, 155 fathoms; off Shetland and amongst the Hebrides, 80 to