*Nodosariæ* by its compressed form and broader outline, as well as by its marginal aperture, and from the elongate *Cristellariæ* by the absence of spiral arrangement in its very early segments.

No good end appears to be gained by the retention of Defrance's genus *Planularia*. The term, as employed by d'Orbigny, Cornuel, and others, included a number of complanate *Nodosarinæ*, differing from the more typical *Vaginulinæ* chiefly, if not solely, in their greater degree of lateral compression; together with a few forms with spiral commencement, more properly classed amongst *Cristellariæ*.

The genus *Vaginulina* is very widely distributed. In one form or other it is met with in all the great oceans, in the Mediterranean, and in the Adriatic; but it is only in the North Atlantic that it is a prevailing type. Its geological range extends as far back as the Upper Trias; it is common in the Lias and Oolite, and has been found in marine sedimentary rocks of almost every succeeding age to the present time.

*Vaginulina legumen*, Linné, sp. (Pl. LXVI. figs. 13–15).

*Nautilus legumen*, Linné, 1758, Syst. Nat., 10th ed., p. 711, No. 248;—1767, 12th ed., p. 1164, No. 288.
*Nautilus* (*Orthoceras*) *leguminiformis*, Batsch, 1791, Conchyl. des Seesandes, No. 8, pl. iii. fig. 8, *a*.
*Vaginulina legumen*, d'Orbigny, 1826, Ann. Sci. Nat., vol. vii. p. 257, No. 2.
*Vaginulina lævigata*, Roemer, 1838, Neues Jahrb. für Min. &c., p. 383, pl. iii. fig. 11.
*Dentalina legumen*, Williamson, 1858, Rec. For. Gt. Br., p. 21, pl. ii. fig. 45.
*Vaginulina legumen*, Jones, Parker, and Brady, 1866, Monogr. Foram. Crag., p. 64, pl. iv. fig. 9.

It appears best to accept the earliest specific appellation, that used by Linné in the "Systema Naturæ," for the typical smooth forms of the genus. It is employed in this sense by Williamson, and also apparently by d'Orbigny, who attributes to a distinct species, *Vaginulina elegans*, the varieties which have limbate sutures. With this limitation, *Vaginulina legumen* is characterised by the nearly straight, pod-like contour of the test, and the non-spiral arrangement of the segments. Individual specimens differ amongst themselves in their relative length, width, and degree of compression; in other respects they present tolerably uniform features. The septa are often thick and transparent, without being limbate externally. It is impossible to draw any definite line of separation between the smooth *Vaginulinæ* and the ensiform varieties of *Cristellaria*.

*Vaginulina legumen* is a cosmopolitan species, living at every depth down to 2000 fathoms or more. It is commonest in shallow water, the smooth forms being often associated with the limbate and costate varieties.

In the fossil condition it occurs as far back as the Trias; it is found also in the Lias, and, associated with other *Nodosarinæ*, in many later deposits of Secondary and Tertiary age.