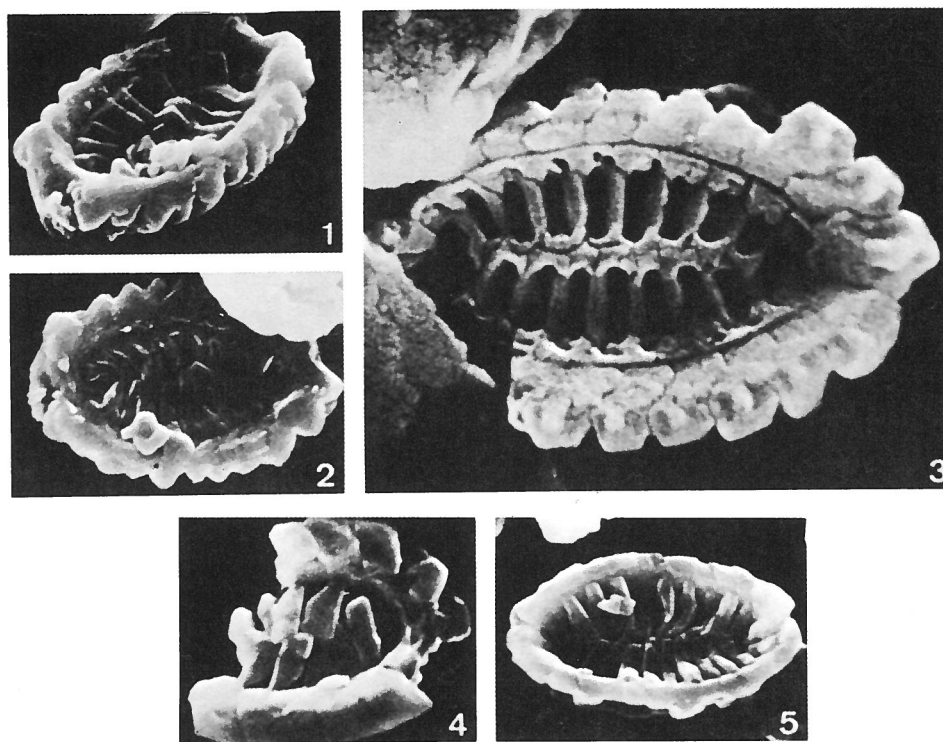


?*Nodosella elegans* PERCH-NIELSEN, 1981

1979a ?*Toweius* sp. 3, Perch-Nielsen, P1, 4, Fig. 22, 23 Cretaceous-Tertiary Boundary Events Symp. Copenhagen, vol. 1.



Figs. 1-5 - ?*Nodosella elegans* n. sp. Distal views. Holotype: Figure 3. 352/80A (Fig. 1, 2), 566 (Fig. 3), 630/LM22 (Fig. 4, 5); $\times 10,000$ (Fig. 1, 5), $\times 9,000$ (Fig. 2), $\times 20,000$ (Fig. 3), $\times 15,000$ (Fig. 4).

Description:

Diagnosis: A small, elongate-elliptical coccolith with a narrow distal « shield » or wall in the form of a steep, narrow band of elements surrounding the large central area, which is covered by more or less radially oriented elements. The proximal « shield » is smaller than the distal one.

Description: The distal « shield » consists of about 20 to 30 elements forming a steep, narrow band surrounding the central area. The latter is covered by more or less radially oriented elements often showing overgrowth, and meeting along the long axis without forming a prominent bar. No whole proximal view was found, but it can be seen from Plate 2, Figures 1 and 5, that the proximal « shield » must be smaller than the distal one. No light microscope observations could be made.

Remarks:

?*Nodosella elegans* is not easily assigned to an existing genus. The forms illustrated in Perch-Nielsen (1979a, P1.4, Fig. 21-23) as ?*Toweius* sp. 3 were tentatively called *Toweius*

mainly due to the lack of any more likely genus to which the forms could be assigned. The situation has changed a little since then, as a better preserved specimen has been found (the holotype) and seems to be related to the Jurassic genus *Nodosella* (see also ?*N. franzii*).

Another possibility for a generic assignment seemed *Hornibrookina*. But, as the illustration of a member of this genus (P1.2, Fig. 6) shows, this genus has a well developed distal shield, a structural element differing in ?*N. elegans*.

Type level:

Danian. Chiasmolithus danicus Zone NP3.

Occurrence: ?*Nodosella elegans* was found in a Danian sample from Tunisia (630/LM 22), in sample 352-80A from the boring through the Danian near Rold, Denmark, and in sample 566 from the Danian of South Africa.

Type locality:

Richards Bay, South Africa.

Depository:

ETH SEM Archive, Honggerberg, Zurich.

Holotype: Negative 6-3436/4, fig. 3.

Author:

Perch-Nielsen K., 1981, p. 840; pl. 2, figs. 1-5.

Reference:

New Maastrichtian and Paleocene calcareous nannofossils from Africa, Denmark, the USA and the Atlantic, and some Paleocene lineages. *Eclogae geol. Helv.*, vol. 74/3, pp. 831-863, 7 pls., 14 text-figs.