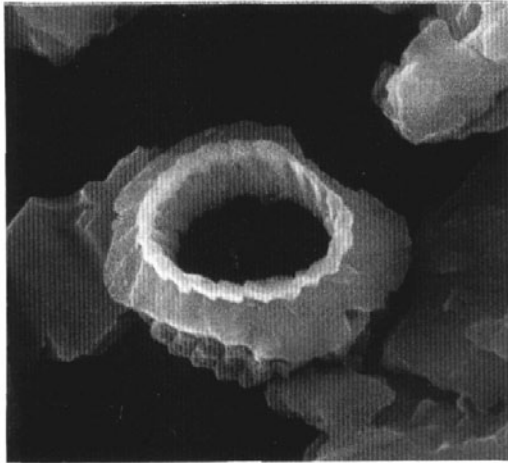
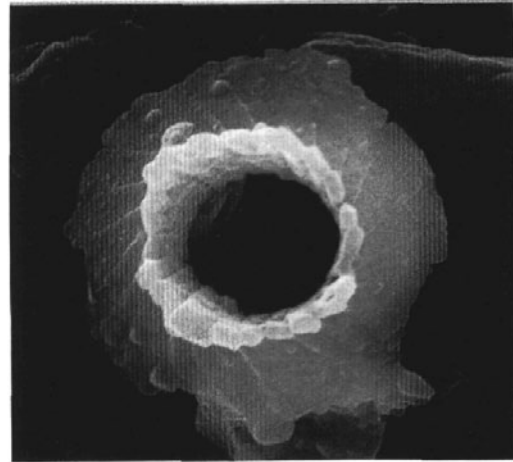


3. *Ansulasphaera covingtonii* de Kaenel & Bergen (1996)



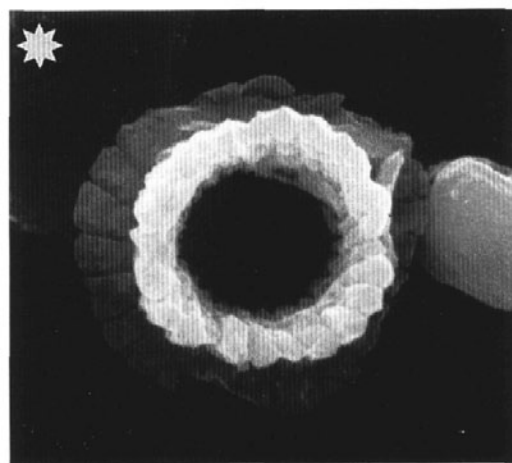
1



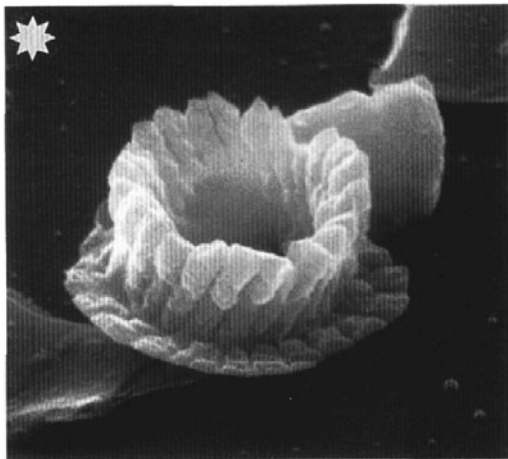
2



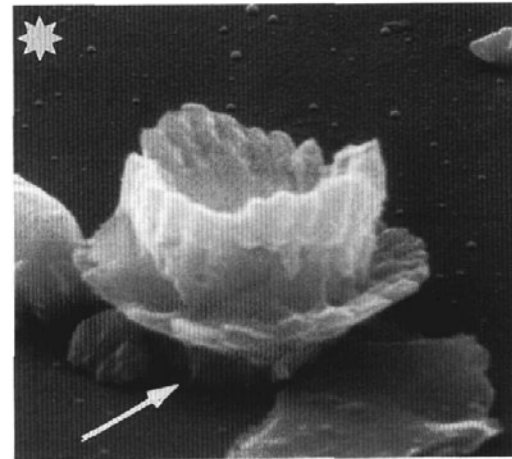
3



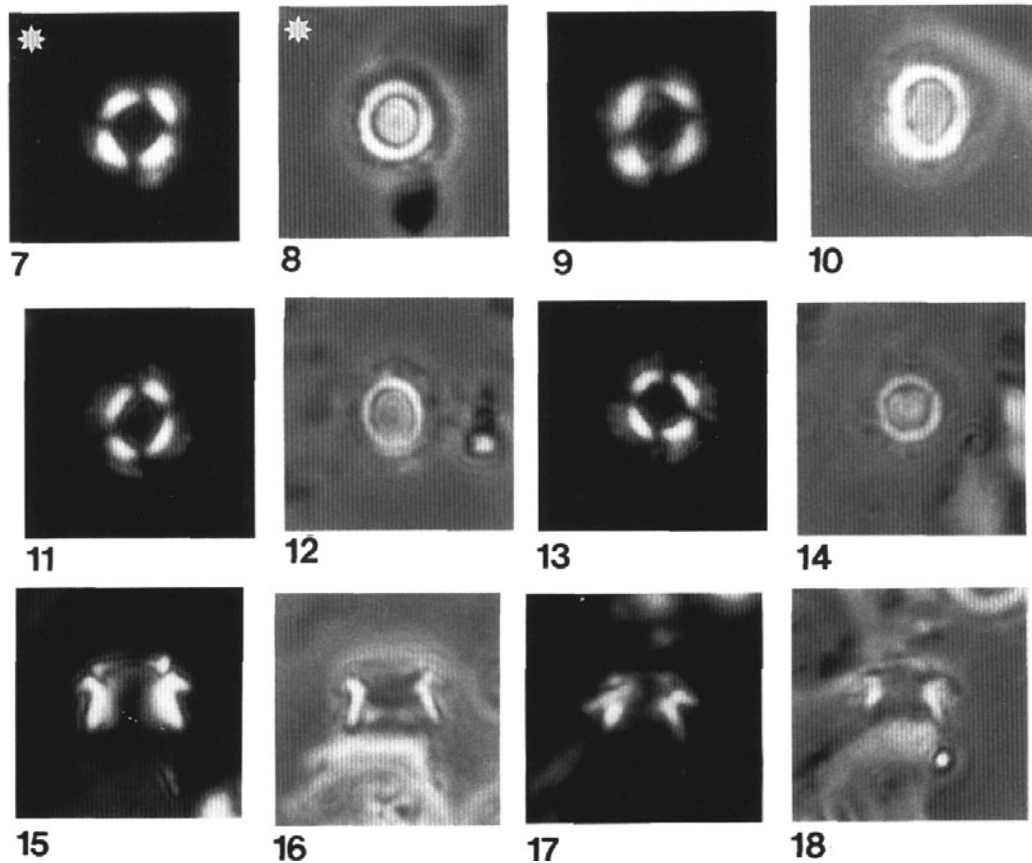
4



5



6



Pl. 1. figs 1-18

**Diagnosis:** A small- to medium-sized, circular to elliptical species of *Ansulasphaera* with a distally extended element cycle.

**Description:** The circular to elliptical placolith is constructed of three shields. A narrow distal shield is constructed of a single cycle of vertical to subvertical elements. The broad, subhorizontal median shield is constructed of imbricated elements having nonradial sutures. The proximal shield is formed by a single cycle of subvertical, blocky elements. The distal shield height is approximately one-third of the proximal shield height. The central area is open. In cross-polarized light, this species is easily distinguished in lateral view. In plan view, both the proximal and distal cycles exhibit a first-order white birefringence, whereas the median cycle is faintly birefringent to dark. The proximal element cycle can be distinguished from the distal element cycle by its greater thickness and height.

**Size:** 4.0 to 6.0  $\mu\text{m}$  (holotype: 4.6  $\mu\text{m}$ ).

**Remarks:** *Ansulasphaera covingtonii* differs from *Ansulasphaera Helvetica* by its distally extended element cycle and younger stratigraphic occurrence. *A. covingtonii* is described herein from the Tithonian and may range into the Cretaceous, whereas *A. helvetica* is not known to have survived the Callovian.

**Derivation of name:** In honor of the nannofossil paleontologist James Mitchener Covington.

**Holotype:** Plate 1, Figures 4-8, specimen transferred from the LM to the SEM.

**Type locality:** ODP Site 901, Iberia Abyssal Plain.

**Type level:** ODP Sample 149-901A-5R-1, 31 cm; Tithonian.

**Occurrence:** Rare to common in Tithonian sediments from ODP Hole 901A.

de Kaenel, E. & Bergen, J.A. 1996: Mesozoic calcareous nannofossil biostratigraphy from sites 897, 899, and 901, Iberia Abyssal Plain: New biostratigraphic evidence. Whitmarsh, R.B., Sawyer, D.S., Klaus, A., and Masson, D.G. (Eds.), 1996, *Proceedings of the Ocean Drilling Program, Scientific Results*, **149**: 27-59.