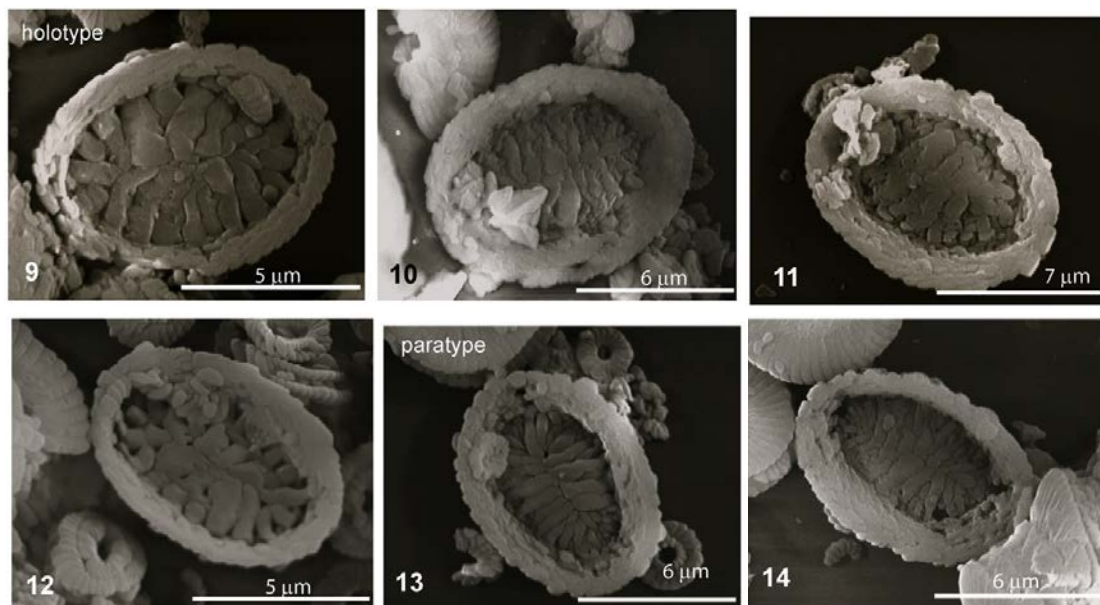
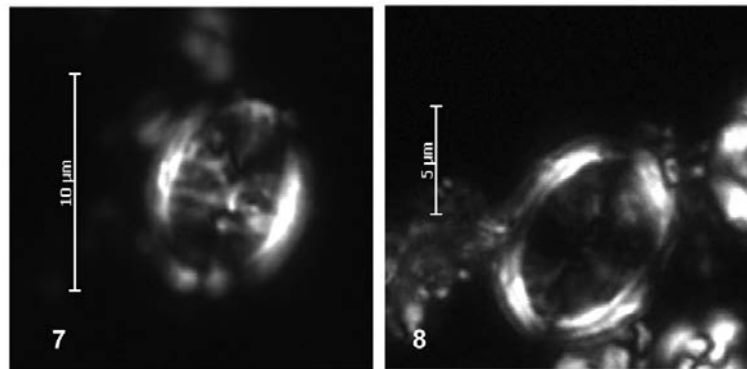
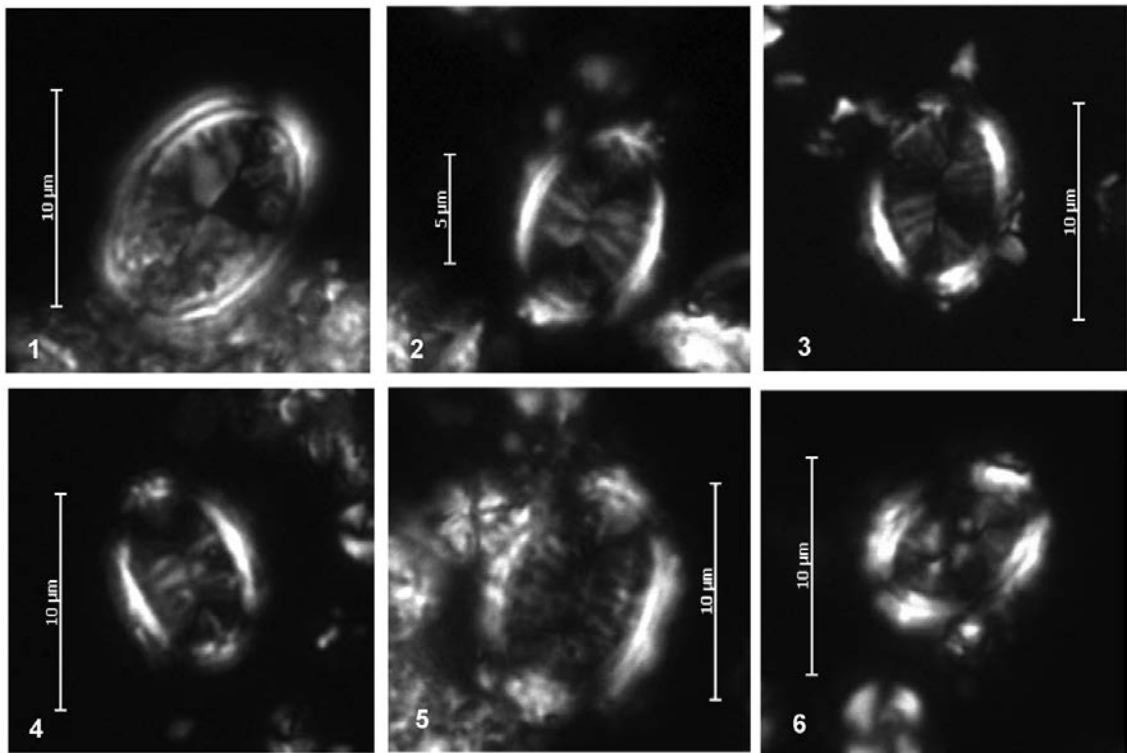


69. *Pontosphaera wallacei* Persico in Persico & Villa (2013)



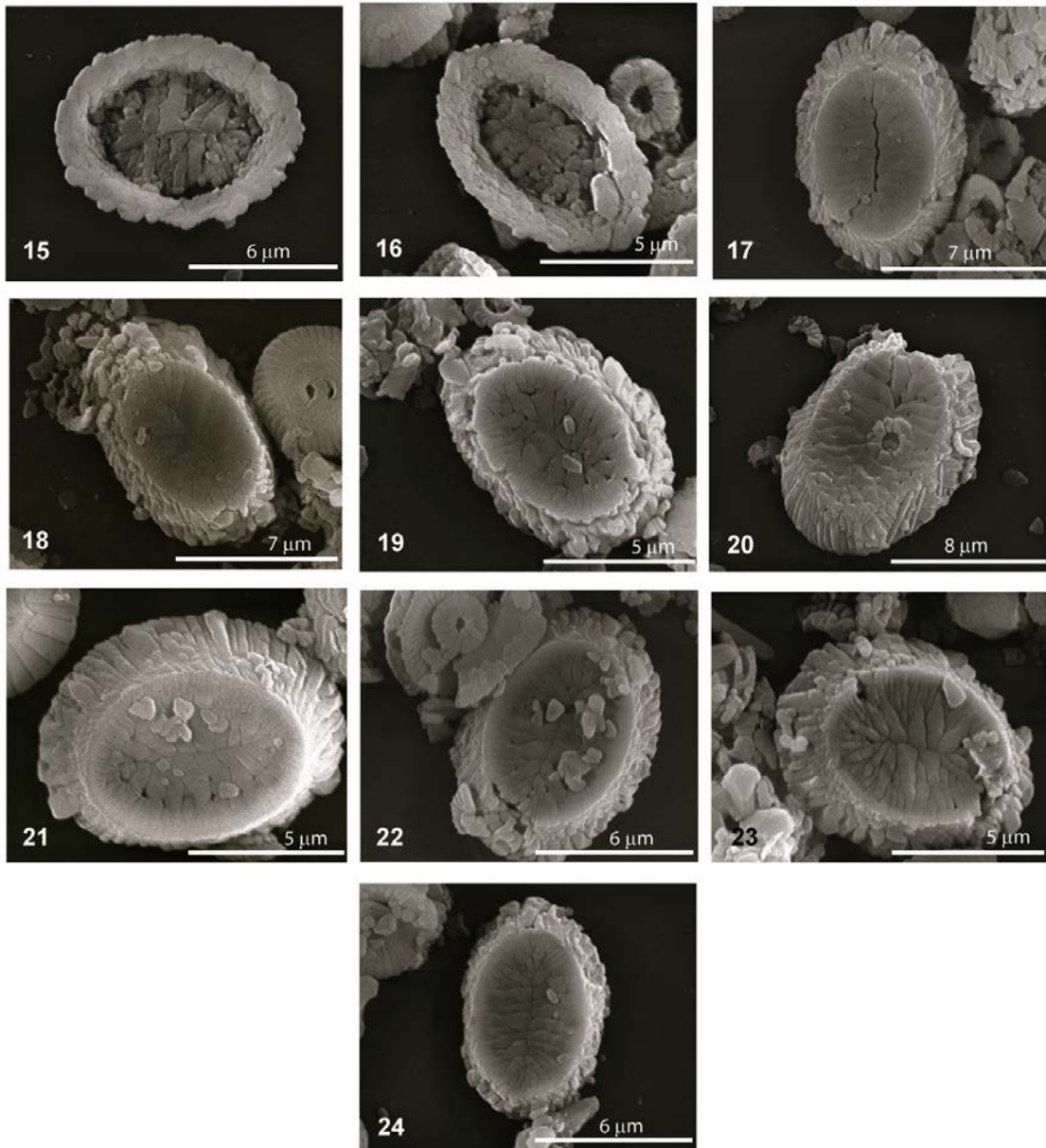


Plate 1, Figs. 1–24

**Diagnosis:** large, elliptical murolith with a closed central area, with very bright distal rim in cross-polarized light (XP).

**Description:** the central area is closed and composed by 19-20 flattened crystals, with variable shape, arranged radially to form a central longitudinal slit. Typically V-units form the narrow imbricate outer rim, and R-units form the inner rim and the central area (Young et al., 1997).

**Differentiation:** *P. wallacei* differs from *Pontosphaera versa* as the latter shows two longitudinal slits in the closed central area and a broader raised rim. The stratigraphic distribution of the two species suggests that *P. wallacei* could have originated from *P. versa*, that goes extinct stratigraphically in NP23.

At the LM, *P. wallacei* can be easily confused with *R. oamaruensis*. The central area, characterized by a longitudinal suture composed by flattened crystals radially arranged, is very similar, but in *Pontosphaera* two thin rims are visible, while in *R. oamaruensis* only one rim is birefringent in the LM. In addition, the stratigraphic distribution of the two species does not overlap.

**Remarks:** rare in Hole 516F; however, although severe carbonate dissolution affected this site, the main taxonomic features of this species are still recognizable.

**Derivatio nominis:** in honour of Alfred Russel Wallace, a British naturalist, in the centenary of his death (8 January 1823 – 7 November 1913). He is best known for independently conceiving the theory of evolution through natural selection, which prompted Charles R. Darwin to publish his own ideas in “On the Origin of Species”.

**Dimension:** Length (L) = 8.5  $\mu$ m (Paratype L = 9.4  $\mu$ m).

**Holotype:** Plate 1, Fig. 9.

**Paratype:** Plate 1, Fig. 13.

**Type locality:** DSDP 72 Site 516 Hole F, Atlantic Ocean (Coordinates: Latitude:  $-30.2765^{\circ}$ ; Longitude:  $-35.285^{\circ}$ ).

**Type level:** Oligocene, Sample DSDP 9R-2-20.5-22.5 cm (Zone NN1).

**Occurrence:** Zone NP24 to Zone NN2; present in sporadic occurrences; DSDP Hole 516F.

Persico, D. & Villa, G., 2013. A new Oligocene-Miocene calcareous nannofossil species: *Pontosphaera wallacei*. *Revue de Micropaléontologie*, **56**: 97–102.