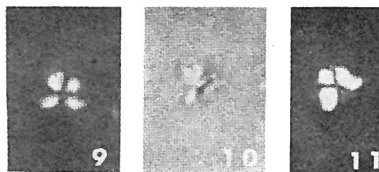


Sphenolithus neoabies BUKRY & BRAMLETTE, 1969



Figs. 9-11 — *Sphenolithus neoabies* BUKRY & BRAMLETTE n. sp.; 9) holotype USNM 651430, cross-polarized, 0°, V16-21, 475 cm; 10) phase-contrast, 45°; 11) cross-polarized, 45°. x 2000.

Description:

This small species lacks the prominent apical spine typical of most species of the genus; however it does possess the radial array of tiny spines typical of the basal structure of *Sphenolithus*. Owing to its small size, this species is clearly visible only in cross-polarized illumination.

Size: 2-4 μ .

Remarks:

Sphenolithus neoabies is distinguished by its lack of a prominent apical spine and by its very small size (2 to 4 microns). The only other species without a prominent apical spine, *S. moriformis* (BRÖNNIMANN & STRADNER), appears to be similar in cross-polarized illumination, but is much larger. *S. neoabies* is distinguished from equally small circular coccoliths, as seen under crossed polarizers, by having a digitate, instead of a smooth, margin. It is similar to the closely related *S. abies*, but is smaller and less conical because the apical spines are less extended.

Type level:

Pliocene.

Distribution: *S. neoabies* is commonly associated with *S. abies* in the upper Tertiary of many regions, but either dominates or becomes the only species of *Sphenolithus* in the latest occurrences near the middle of the Pliocene.

Type locality:

Atlantic Ocean; Lamont core V16-21, 475 cm.

Depository:

U. S. National Museum. Holotype: USNM 651430 (figs. 9-11).

Author:

Bukry D. and Bramlette M.N., 1969, p. 140; pl. 3, figs. 9-11.

Reference:

Some new and stratigraphically useful calcareous nannofossils of the Cenozoic. *Tulane Studies in Geology and Paleontology*, vol. 7, n° 3, pp. 131-142, pls. 1-3.