

Broinsonia lacunosa FORCHHEIMER, 1972

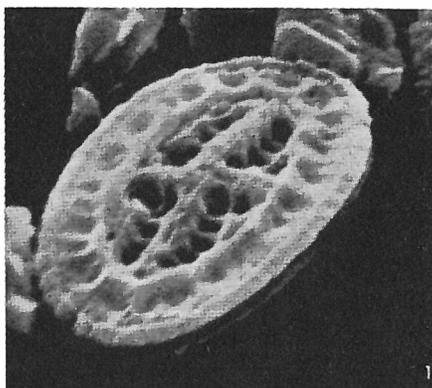


Fig. 1 — *Broinsonia lacunosa* n. sp. 45°, distal view, Köpingsberg 1, Aptian. Coll. no.: S Kp 211 40a/24, x 7,700.

Description:

Diagnosis: A species of *Broinsonia* with a large central area. A cross consisting of double rows of elements divides the central area into four quadrants, each with 6 perforations aligned with the crossbars.

Description: The outer rim of the two cycles in distal view is composed of about 42 elements. The broad inner cycle of elements surrounding the central area shows deep depressions. The central area occupies 33 percent of the coccolith area.

Dimensions: Average length 6.8 μ ; average width 4.7 μ .

Remarks:

Broinsonia lacunosa n. sp. looks similar to *B. parca* (STRADNER, 1963), Bukry 1969 from the Campanian but the latter has transverse bars in some pores (Bukry, 1969, pl. 3, fig. 7). The forms described by Bukry have from 2 to 112 perforations.

Stradner (1963) originally described the species *Arkhangelskiella parca* STRADNER, 1963. The drawings on pl. 1, fig. 3 show a Campanian coccolith with a narrow central plate divided by crossbars into sectors, each perforated by a few pores less than in *B. lacunosa* n. sp.

Gartner (1968) described *Arkhangelskiella parca* STRADNER, 1963 (p. 38, pl. 8, figs. 4-5; pl. 11, fig. 2) from the Campanian - Maastrichtian with a diamond-shaped central area, transversed by sutures aligned with the major and minor axes of the ellipse. The sutures are bordered by circular perforations on each side, but the number of perforations is not given.

Perch-Nielsen (1968) illustrated *Arkhangelskiella parca* STRADNER, 1963 from the Maastrichtian with a drawing (p. 61, fig. 27) and micrographs (pl. 21, figs. 1-4) made by means of a transmission electron microscope. The structure of these forms has the generic characteristic of forms belonging to the genus *Arkhangelskiella* VEKSHINA, 1959. They also lack perforations in the central area, a characteristic of *Arkhangelskiella parca* STRADNER, 1963.

Noël (1970) recorded *B. parca* (STRADNER, 1963) Bukry, 1969 (p. 78, text-fig. 18; pl. 23, fig. 3) from the Campanian which seems to have affinity with forms reported by Perch-Nielsen (1968).

B. lacunosa n. sp. differs also in size from *A. parca* STRADNER, 1963 which has a maximum diameter of about 9 μ .

Type level:

Aptian.

Occurrence: Köpingsberg Borehole No. 1: Hauterivian - Albian.

Type locality:

Köpingsberg Borehole No. 1, 936.9 m, Sweden.

Depository:

Museum of the Geological Survey of Sweden, Stockholm.

Holotype: Specimen No.: S Kp 211 40a/24.

Author:

Forchheimer S., 1972, p. 25; pl. 2, fig. 1.

Reference:

Scanning electron microscope studies of Cretaceous Coccoliths from the Köpingsberg borehole n° 1, SE Sweden. Sver. Geol. Undersök. Ser. C, n° 688, Arsb. 65, n° 14, pp. 1-141, pls. 1-27, text-figs. 1-12.