
**Pl. 1, figs 1–5**

**Description:** This holococcolith has a narrow, high wall and a central area composed of two semicircular blocks separated by a transverse suture. It lacks a central stem. The wall averages 0.25 μm in width.

**Holotype:** Plate 1, Figs. 1–3

**Holotype size:** length: 2.7 μm; width: 2.0 μm

**Holotype material:** Chalk from Locality 13 of the Smoky Hill Member type area (northwestern Kansas)

**Etymology:** *phenax*-, Greek for imposter, cheat

**Occurrence:** *Bifidalithus phenax* is more abundant in the upper 12 meters of the Smoky Hill Member, comprising up to 1.3% of the nannofossil assemblage. This species composes as much as 0.9% in Ten Mile Creek sediments.

**Discussion:** *Bifidalithus phenax* averages 3.52 μm in length and 2.24 μm in width (Table 1). *Bifidalithus phenax* also differs from *I. compactus* because it lacks a central spine.
Bifidalithus phenax differs from Isocrystallithus compactus and Bifidalithus geminicatillus by its small size (distal view measurements generally between 2.5 – 4 μm in length and 1.8 – 2.4 μm in width). Isocrystallithus compactus varies between 6.0–10.0 μm in length and 3.5–6.5 μm in width and B. geminicatillus holotype dimensions measure 6.2 μm in length and 3.7 μm in width. This small form occurs in the uppermost Coniacian and lower Santonian of the Ten Mile Creek and Smoky Hill type area sections. Bifidalithus phenax is mostly likely a cavate form. Thus far, this species has been documented only from the distal view. Its name was given because of its resemblance to I. compactus.