3. *Amithalithina Pospichal & Wise (1990)*

![Pl. 5, fig. 3](image)

Pl. 5, fig. 3. *Amithalithina sigmundii*, n. gen., n. sp., (a) Sample 113-690B-15H-1, 30-32 cm, SEM, X4500; (b) SEM, X4500, side view of specimen (a); (c) Sample 113-690B-15H-3, 30-32 cm, Pol, X3300; (d) Pol, X3300, side view.

**Type species:** *Amithalithina sigmundii* Pospichal and Wise, n.sp.

**Diagnosis:** Birefringent, elliptical to subround coccoliths comprised of two shields and a massive, high-standing central column nearly equal in width to the shields and composed of slightly inclined and imbricate lath-shaped elements.

**Description:** See characteristics of type species.

**Remarks:** Due to the high central column, specimens are frequently observed in side view. Due to the thick central column, specimens exhibit a high order (yellow) interference color in plan or side view. The name is from the Greek meaning "cake of stone."

**Differentiation:** The overall morphology of subround specimens superficially resembles some species of *Bomolithus* Roth (1973) and *Heliolithus* Bramlette and Sullivan (1961), but differs in that the outer cycle of elements of the central column of *Amithalithina* are distinctly inclined whereas those of the other genera rise vertically from the base. In addition, the shields of *Bomolithus* are not birefringent in plan view. In plan view, *Amithalithina* also resembles the genus *Pyrocyclus* Hay and Towe (1962), but the latter genus does not possess a very high central column and lacks the additional shield separating the central column from the proximal shield.