
1-2. *Acadialithus dennei* n. sp. Holotype
Ponther F-52 2780-90m

3-4. *A. dennei* n. sp. Paratype
Ponther F-52 2780-90m

5-6. *A. dennei* n.sp.
Ponther F-52 2780-90m

7-8. *A. dennei* n.sp.
Ponther F-52 2780-90m

9-10. *A. dennei* n.sp. side view
Ponther F-52 2780-90m

11-12. *A. dennei* n.sp. side view
Ponther F-52 2780-90m

13-14. *A. dennei* n.sp. side view
Ponther F-52 2780-90m

Pl. 1, figs 1–14
Brachiolithus? sp. “hexagonal form” Valentine (1980), plate 2, fig. 2
Genus et species indet. Sinnyovsky (2005), plate 2, figs 26–28

**Derivation of name:** In honor of nannofossil specialist Richard Denne, Texas Christian University, Dallas, Texas, USA, who has observed this species offshore in the eastern Gulf of Mexico.

**Diagnosis:** A species of Acadialithus having six elements in each cycle of the wall.

**Holotype:** Pl. 1, figs 1–2.

**Paratype:** Pl. 1, figs 3–4.

**Type Level:** Upper Tithonian.

**Type Locality:** Panther P-52 exploration well, cuttings sample at 2780–2790m, Jeanne d’Arc Basin, offshore east coast of Canada.

**Dimensions of holotype:** Maximum diameter (including lateral projections) = 8.8µm. Diameter of the central opening = 3.6µm. Width of the wall = 2.6µm.

**Remarks:** Acadialithus dennei n. gen., n. sp. differs from A. valentinei n. sp. by having six elements in each cycle of the wall, rather than the seven elements of A. valentinei. Valentine (1980) recorded both A. dennei and A. valentinei n. sp. as a “common constituent” (Valentine, 1980, p. 74) from samples (12,700 to 13,240’) that he regarded as Berriasian. This interval also contains Polycostella senaria, so it is here regarded as Upper
Tithonian. Unfortunately, Valentine (1980) did not present a detailed distribution chart for the COST B-3 well. Sinnyovsky (2005) records both *A. dennei* and *A. valentinei* n. sp. as common from sample Be 263, near the top of the Upper Tithonian.