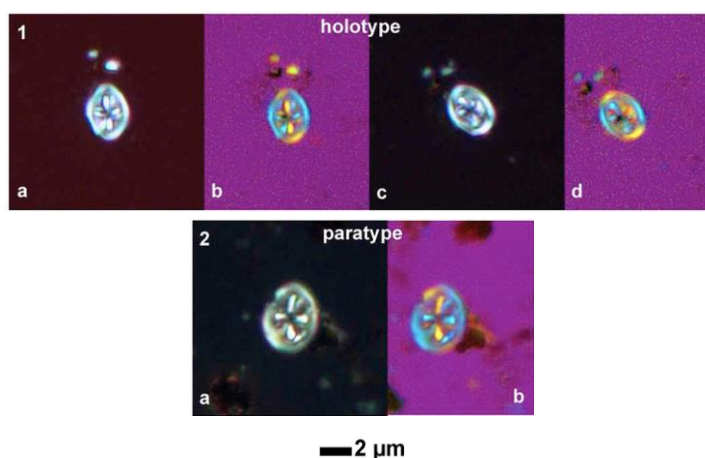


Ahmuellerella frankiae Lees, Schueth & Howe in Schueth & Lees (2019)



Pl. 1, figs 1, 2

Pl. 1, figs 1–2. *Ahmuellerella frankiae* sp. nov. Lees, Schueth & Howe, Fig. 1, 7260.15' (2212.89m), Fig. 2, 7250.2' (2209.86m). Figs. 1a, c, 2a cross-polarized light [XPL], 1b, d, 2b XPL + gypsum plate [GP]

Derivation of name: After Prof Tracy Frank (geochemist and department chair, U. Nebraska – Lincoln), undergraduate research mentor to JS and co-author of JAL, in recognition of her contribution to the study of marine carbonates.

Diagnosis: A relatively small species of *Ahmuellerella* in which one arm of each pair of axially-aligned arms appears to lie in a plane slightly behind the other, causing this arm to go into extinction upon rotation of the specimen, when the other arm does not.

Differentiation: The new species is somewhat similar to *A. octoradiata*, insofar as the arms are arranged axially, in pairs (indeed, JAL has previously logged this as *A. cf. A. octoradiata* in sections in other geographical locations); however, it differs in the orientation of the arms – those in *octoradiata* being positioned in the same plane – and in generally being smaller than *octoradiata*, with proportionally less openness in the central area due to the arms almost completely filling that space.

Holotype: Pl. 1, fig. 1a–d.

Holotype dimensions: 3.8 μm long, 3.0 μm wide.

Paratype: Pl. 1, fig. 2a, b.

Type locality: Rio Arriba County, San Juan Basin, New Mexico, USA (36°16'27.8"N, 107°28'1"W).

Type level: San Juan 28-6 UT 148M core, 7260.15' (2212.89 m); UC8, Turonian.

Occurrence: San Juan 28-6 UT 148M core, Turonian–Santonian (UC8–UC12).

Schueth, J.D. & Lees, J.A., 2019. Pioneer nannofossil assemblages from the initial transgression of the Niobrara seaway in the Turonian, San Juan Basin, New Mexico, USA. *Marine Micropaleontology*, **151**.